Detailed Transformations

Preservation, transformation and detail in Spanish adaptive reuse architecture.

William John Maynard

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William John Maynard was awarded the Byera Hadley Travelling Scholarship in 2016

Cover image: Nave 8b, Matadero Madrid, Arturo Franco.
Photo by William John Maynard

History Under Construction: Preservation, transformation and detail in Spanish adaptive reuse architecture.

Contents

The goal of this research was to explore differing approaches to intervention and detail in recent adaptive reuse projects in Spain.

Image: The New Sala Beckett
Architect: Flores & Prats, Barcelona.
Photo by William John Maynard

Image: Santa Caterina Pathway, David Closes, Manresa.
Photo by William John Maynard

1

Executive Summary

This Byera Hadley Travelling Scholarship (BHTS) examines adaptive reuse in selected contemporary Spanish architectural projects. The travel was conducted between June 2017 and August 2017. The report is structured around six primary case studies visited during this period. Historically, Spain presents a series of unique conditions that allows for such a radical intervention into historic fabric. However, adapting forgotten or abandoned buildings is a lesser-explored opportunity, which is often overlooked in adaptive reuse practice and scholarship. These projects are not necessarily interventions into monuments or high heritage value buildings, but rather explorations in the potential of adapting low 'architectural value' buildings.

One way to begin a discussion about the changing use of older buildings is through the lens of detailing. Detailing in adaptive reuse projects commonly involves the weaving of standard and bespoke details, creating an ancillary level of technological contrast, which by necessity is often atypical and idiosyncratic. To a certain extent the buildings discussed in this report resist technological compulsion and address junctions in pragmatic or primary ways. This however is not an impediment but rather the key to the projects' success. In a time with infinite possibilities available, we see that rigid constraints were applied to detailing, reflecting both the economic realities of a post-GFC context as well as the architectural prerogatives. These projects operate on the fringes of mainstream adaptive reuse, and potentially stand as models for how to proceed sustainably when adapting buildings on low budgets.

The following six case studies of buildings visited during the BHTS exemplify the three major themes of the paper: working within constrained means, adaptive reuse of buildings considered of lesser importance, and subdued detailing that is in dialogue with the existing architecture. The complexity and historically layered nature of the projects triggers a reading of architecture as the evolving act of re-inhabiting space, as opposed to recalling a static architectural representation of a 'finished' building. Although detail often denotes an absolute solution, this paper demonstrates that buildings can have the sense of being incomplete whilst still create a compelling and resolved architecture.

As a counterpoint to the continuing tradition of rarefied, high cost bespoke detailing in Australia, this report presents a series of public buildings and urban spaces that employ detailing at various scales and within an economy of means, to produce cogent architectural expressions that amplify the existing historical qualities of the projects.

Image: Archaeological Museum At
The Castle Of São Jorge, João Luís
Carrilho Arquitectos, Lisbon
Photo by William John Maynard

2

Preface

This report examines adaptive reuse in selected contemporary Spanish architectural projects. It begins with the premise that buildings can rarely, if ever, be understood as finished. If so, then each act of architecture represents but a moment in the life of a building. This Byera Hadley Travelling Scholarship report also looks at moments in the lifespan of these selected buildings in Spain, where the architects have transformed existing spaces for new programmatic uses. Importantly, these projects are not interventions into monuments or high heritage value buildings. These projects all began with adapting neglected, typically low 'architectural value' spaces.

The act of adding, subtracting and altering existing buildings is commonly referred to as 'adaptive reuse'. The act predates the term, having occurred since time immemorial. In fact, it has been argued that reuse of caves as domiciles are the first examples of human adaptive reuse.[1] Adaptive reuse practised today has developed over centuries in tandem and tension with, the preservation of ancient monuments, planning policies, religious conquests, fiscal periods, material shortages and, more recently, environmental objectives.

When looking at a building over time within this framework, we can understand a project to be a story started, altered and continued by others. The opportunity to continue a story begun by someone else is a powerful notion. Yet a notion nonetheless imbued with the potential to respect, revere, rebel or re-order the site. Adaptive reuse presents the architect with a series of opportunities and complications distinct to designing new buildings. Detailing is an important part of this distinction. Tectonics in adaptive reuse reflects the presence of the existing structure, and by necessity details often interact with old and new in idiosyncratic, site-specific ways.

Through a series of thematic chapters focused on site visits, this report explores the ideas behind a select group of radical adaptive reuse projects. Using the buildings visited as arguments; this report considers how existing sites can be transformed with an economy of means and simplicity of detail resolution.

3

Review of Proposal

Prior to travel, this research initially proposed the study of construction detailing in ten exemplary adaptive reuse projects built between 2004-2016 in Spain and Portugal. The aim was to present a report that positioned construction detailing as a generator of architectural invention in adaptive re-use projects. All of the proposed projects were visited, and many more were discovered during the course of travel. Detailing remains an important lens of analysis post-travel, however as a result of site visits and interviews, additional criteria for understanding the buildings became equally, if not more, central to the understanding of these buildings.

The scope of travel was extended to visit canonical examples of adaptive reuse in other European countries, which contributed to a background understanding of precedent buildings in the field of practice. A list of visited projects is available at the end of the report, many of which are discussed in the following sections.

Image: Intermediae Matadero, Arturo Franco, Madrid
Photo by William John Maynard

4

Introduction

Spain presents a series of unique conditions that allows for radical intervention into historic fabric. Spanish architects continue to have an experimental approach to heritage and preservation. Regulatory frameworks have enabled architects to intervene interpretatively in existing stock. For instance, Barcelona has seen urban interventions ranging from large-scale demolition of entire blocks in the historic Raval neighbourhood, to micro-scale demolitions in the Santa Caterina & Sant Pere areas. Since the 1980s, Barcelona has implemented PERIs (Special Plans of Interior Reform).[3] In 2000 the city launched an ambitious multifaceted rehabilitation project called 22@Barcelona,[4] and in 2004 Catalonia introduced The Neighbourhoods' Law aimed at stimulating historic urban regeneration.[5] Barcelona has also taken an active role in encouraging large-scale private developments, commissioning major international architects such as Jean Nouvel, Dominique Perrault, Richard Rogers and others.

This aggressive stimulation of urban development is in many respects a reflection of the trajectory of Spain since it joined the European Union. Strategic investment into infrastructure, public architecture, urban renewal cultural facilities and social housing has also given private developers market confidence when investing in adaptive reuse. In 2004, the Spanish Ministry of Development budgeted 17 billion euros in infrastructure investments.[6] However, after a prolonged period of economic expansion, the Spanish economy suffered its worst economic crisis in fifty years. Beginning in 2006, Spain endured an aggravated level of damage from the GFC due to the existing internal fiscal imbalances that had accumulated during the previous decade. Unemployment, an over-supply of labour, sovereign debt, insecurity, austerity, stimulus packages and 'junk' credit ratings ensued.[7][8] The financial crisis resulted from a similar contagion as experienced in many other parts of Europe and the US. Disruptive free-market forces and negligent risks did not threaten the speculative housing market in Australia to the same degree. Due to a matrix of situational and precautionary measures applied to an already healthy economy, and underwritten by a resource boom, the GFC's effects in Australia were minor in comparison to southern Europe. Thus, these factors substantiate the necessity to examine a context outside of Australia for this report. Iñaqui Carnicero notes that "Spain is probably one of the countries where the impact of the economic crises has affected most deeply the practice of architecture."[9]

Since 2007, Spanish practices have resourcefully reacted to this economic situation. This is evidenced by an increase in small-scale urban rehabilitation projects, with the re-emergence of adaptive reuse defining Spanish and Portuguese architecture in the last decade. There has also been an increased interest in these emergent southern European practitioners within mainstream architectural media. This is substantiated by four major architectural exhibitions concerning the practice of Spanish and Portuguese practices post-GFC: Overlappings (2009, RIBA London), Young Architects of Spain (YAS) (2012, Cooper Union, NYC), Grafting Architecture (2014, Venice Biennale, Catalonian Pavilion) and Unfinished (2016 Venice Biennale, Spanish Pavilion). These exhibitions represent key moments in recent history, highlighting the emergence of Spanish architects and adaptive reuse.

As an example, YAS charts selected projects from Spanish architects under forty. The exhibition presents contemporary projects, many of which deal with interventions in existing fabric. The curators examine how construction, as an industrial mechanism, has acted as a mirror to various stages of political devolution, predating Franco.[10] In the catalogue, Kenneth Frampton and Juhani Pallasmaa reflect on the history of Spanish architectural education as one being enmeshed in the study of construction and material technology. Jorge

Finishing ends construction, weathering constructs finishes.

-David Leatherbarrow,
On Weathering

Image: Mercat del Born, Barcelona
Photo by William John Maynard

Otero-Pailos, Professor of Historic Preservation GSAPP Columbia University, notes that:

> "...the emergence of a new understanding of the relationship between architecture and building cannot be separated from the economic reality of the Spanish construction industry".[11]

This substantiates a tacit recognition amongst architects and scholars that "Spanish Architecture" is a valid identity. Often cited as a reason for this shared identity is the categorically Spanish way of teaching architecture. David Cohen argues that one reason much Spanish architecture a shares common formal characteristic is because architectural education in Spain is more technically focused than in the United States.[12] In fact, until very recently, Spanish architects routinely did in-house structural calculations.[13] As a result, they create buildings grounded with structural principles as well as tectonic finesse. Cohen argues this is evident in the "highly expressionistic work of the late Enric Miralles".[14] Although no categorisation could ever reflect the heterogeneity of approaches, theories and production, there is a priori tectonic identity that links the practices and buildings visited for the report.

Ultimately, these formative exhibitions indicate the contemporaneity of this research in the field of architectural discourse. Yet a literature review identified a noticeable lack of discussion about construction of adaptive reuse post GFC. An exception was the AV Monograph annual yearbook of 2012, which summarizes the effect of the crisis on the architectural community:

> "The field of construction continued on its spiralling descent: the number of housing units started in the country plummeted, and the cement consumption slumped by 34%, ... a drop that has only been exceeded by that of 1936 when the Spanish Civil war broke out."[15]

Josep Torents I Alegre, contends that adaptive reuse in Catalonia has had parallels with the horticultural act of grafting. This idea, he argues, combines the strength of the original component (trunk) with the vitality of the new element (branch), making them both stronger and more varied than was possible as separate entities. This, as an analogy, is easily applicable to urban renewal and changing qualities of historic centres.

Image: Abandoned heritage construction site Madrid.
Photo by William John Maynard

4

FRAMEWORK AND THEMES

Adaptive Reuse

The history of architecture, and prevailing education of architecture, continues to be the study of finished buildings. The alteration of existing buildings is not new. Examples from Baroque Rome to Napoleonic France reveal a long history of buildings, monuments and ruins with structural integrity have been repurposed for new functions. Historically, notions of 'heritage' and 'cultural value' were not considerations; rather all architectural decisions were subservient to pragmatic financial agendas. In fact, traditions of reusing construction materials attest to the inherent value of raw materials. The waste of buildings and building materials was, until recently, a luxury.

Throughout the nineteenth century Eugene Emmanuel Viollet-Le-Duc (1814-1879) practised restoration with a sense of modernity and experimentation. The first great proponent of adaptive reuse, Viollet-Le-Duc reflected on his approach to restoration, stating "the best of all ways of preserving a building is to find a use for it, and then to satisfy it".[16] [17] He also believed that "to restore an edifice means...to re-establish it in a finished state".[18] His notion of the 'complete building' was contradictory, as he repeatedly reviewed and updated projects in his time as chief inspector.[19] Yet architectural revisions have an equally storied past. Viollet-Le-Duc's fabricated notion of 'finished' is testament to the fact that important buildings have the potential to repeatedly see new beginnings. To this point, historian Neil Levine claims that unfinished architecture is a paradox, citing the potential for architecture to be incomplete, yet fulfill its function.[20]

Preservation and experimentation are generally terms used in separate architectural contexts. The notion of preservation can carry with it a blind deference for the past, which in urban contexts tends to subjugate the potential for change, thus the programmatic reuse of buildings. Lost in a quagmire of legal and policy barriers, architects often find that preservation prevents anything but the status quo from remaining.[21] Experimentation can be equally problematic, suggesting that the possibility of failure is equally as imminent as a successful outcome. James Stirling, aware of the issues with intervening in heritage fabric noted that it (adaptive reuse) "is a dangerous tightrope to walk, with compromise and sentimentality on either side". [22]

The term adaptive reuse is a contemporary addition to the architectural lexicon. Noted for the first time in 1973, the term's use coincided with the global oil crisis, which engendered a wider awareness of the finite nature of resources.[23] Today, adaptive reuse is a widely used term referring to the mainstream architectural issue of repurposing existing buildings and sites for continued use and updated programmed. Theorist Liliane Wong notes that there are four destinies for existing buildings – ruin, demolition, preservation and adaptive reuse.[24] The latter describes a sense of possibility, continuum, change, growth and rediscovery. Arguably, language plays a large part in the use of the phrase 'adaptive reuse'. Affirmative connotations of recycling, regrowth and reinterpretation aid the positive use of the term, as does the absence of a negative prefix such as 'un-', 'dis-' or 'non-'.

As noted, adaptive reuse by necessity includes a sense of ruin, demolition and preservation. All of the projects visited for this report exploit this exact tension between preservation and experimentation to highlight the importance of continuing use. As a result, the complexity and layered nature of adaptive reuse triggers a reading of architecture as the evolving act of re-inhabiting space, as opposed to recalling a static architectural representation of a 'finished' building. This paper argues that 'resolved' buildings do not necessarily create compelling architecture.

The term adaptive reuse is a contemporary addition to the architectural lexicon. Noted for the first time in 1973, the term's use coincided with the global oil crisis, which engendered a wider awareness of the finite nature of resources

Image: Archaeological Museum At The Castle Of São Jorge, João Luís Carrilho Arquitectos, Lisbon
Photo by William John Maynard

Detail

In essence, a detail is the meeting of two or more elements. Design detailing involves an inseparable consideration of assembly, structure and aesthetics. At best, detailing enables an alchemical moment where materials transform into something else, something greater than their parts. Tectonics in adaptive reuse could be described as the practice of establishing relationships between elements of form, which in turn relate to the whole, so as to achieve a system of order, balance and unification within an existing composition.[25] In his seminal essay The Tell Tale Detail[26] Marco Frascari argues that the joint is the generator of construction design. A tectonic understanding of detail, he continues, is therefore the basis from which invention in architecture may occur.[27] Edward Ford, a preeminent construction and detailing scholar, has argued that there are five types of detailing[28]: [1] There are no details, [2] The detail as a motif, [3] The detail as a representation of construction, [4] The detail as a joint and [5] The autonomous detail. Ford's writings on detailing, which are drawn upon throughout the report, point toward a key fact that the notion of detailing was not a concern of pre-modern architectural theory and writing. Terms such as decoration and ornamentation have been replaced by the concept of detailing.[29] This he argues is a result of the complexity of construction processes in the modern era.[30] Thus, in the buildings visited for this BHTS report there is an intriguing confluence of construction methods and theories. In other words, architects aware of detailing, its positions and anxieties built the contemporary addition alongside host buildings that were constructed in a time or context almost void of theories on detailing.

At odds with tectonics in rehabilitation, the typical construction detail has come to define modern design processes - an authorless diagram applied at varying scales, with production and labor central to execution. The curtain wall, for example, has come to represent contemporary cities. It is widely applied, yet the base detail, expertly tweaked for individual facades, remains the same in principle worldwide. The future of tectonics and the discipline of detailing were questioned by Dennis Shelden, who asked, "Will limitless freedom of materiality result in the same loss of direction and recourse to decoration that the modern steel frame and curtain wall did for the last generation?"[31] Complete standardisation in architecture is generally reserved for the construction of new projects, whilst detailing in adaptive reuse projects commonly involves the weaving of standard and bespoke details, creating an additional level of technological contrast necessarily atypical and idiosyncratic. One could argue that the buildings visited, to a certain extent, resist technological progress. This is not a handicap, rather the key to the projects' success. In a time with infinite possibilities available, rigid constraints were applied to detailing – this reflects economic realities as well architectural prerogatives.

The details that follow could be generally classified as 'articulated details'[32], a term coined by Edward Ford. Ford argues that the articulated detail is the manifestation of visible and tectonic junction in the building. Ford notes that:

> "Detailing, as an act of design, requires the selective presentation of information. In any building a myriad of technical problems must be solved. In most cases there are multiple solutions. Some details solve the problem in a way that leaves no visible result, inside or out. These details are abstract. Others will solve the problem in a way that is visible, creating an architectural element in the process. These are articulated details. Given the overwhelming number of such conditions in the modern building, most detailing is abstract and involves the suppression and not the expression of

> information. Only a small number of details can be articulated, and only a small fraction of solutions can be demonstrated."[33]

However, the buildings discussed in this paper err to privileging the articulated detail. In some cases highlighting the act of building is still visible in the detailing, as if it were still under construction. Ford notes that both conditions are forms of a narrative device, just as fictitious and subjective as the concealment of details. Ford posits, "...although the process of deciding to abstract or to articulate may be largely subconscious, it is not arbitrary. In the well-designed building, it is done in the service of the creation of a larger narrative, a unity of vision. As a result the typical modern building is a constructional reality wrapped with a constructional narrative that simplifies, omits, exaggerates and often deceives."[34]

In conclusion, the following six case studies of buildings visited during the BHTS exemplify the three major themes of the paper: working within constrained means, adaptive reuse of buildings considered of lesser importance, and subdued detailing that is in dialogue with the existing architecture. Potentially, these following projects, which operate on the fringes of mainstream adaptive reuse practice, will in fact become models for how to proceed sustainably when adapting buildings on low budgets.

Image: Reader's House. Ensemble Studio, Madrid.
Photo by William John Maynard

5

CASE STUDY #1

The New Sala Beckett

Project: The New Sala Beckett

Architect: Flores & Prats

Client: Sala Beckett

Project Address: Carrer de Pere IV, 228-232, 08005

Barcelona, Spain

Date: 2011 – 2016 (opening)

Budget: €2,500,000 / €855m2

Area: 2.923 m2

Poets and playwrights acknowledge dilemmas without solutions.... A building can also be more or less incomplete in the expression of its program and its form.

- Robert Venturi, Complexity and Contradiction in Architecture

Image: Internal staircase, New Sala Beckett.
Courtesy of Flores & Prats

Image: The New Sala Beckett, Flores & Prats
Photo by William John Maynard

Image: The original Cooperativa Paz y Justica'
Courtesy of Flores & Prats

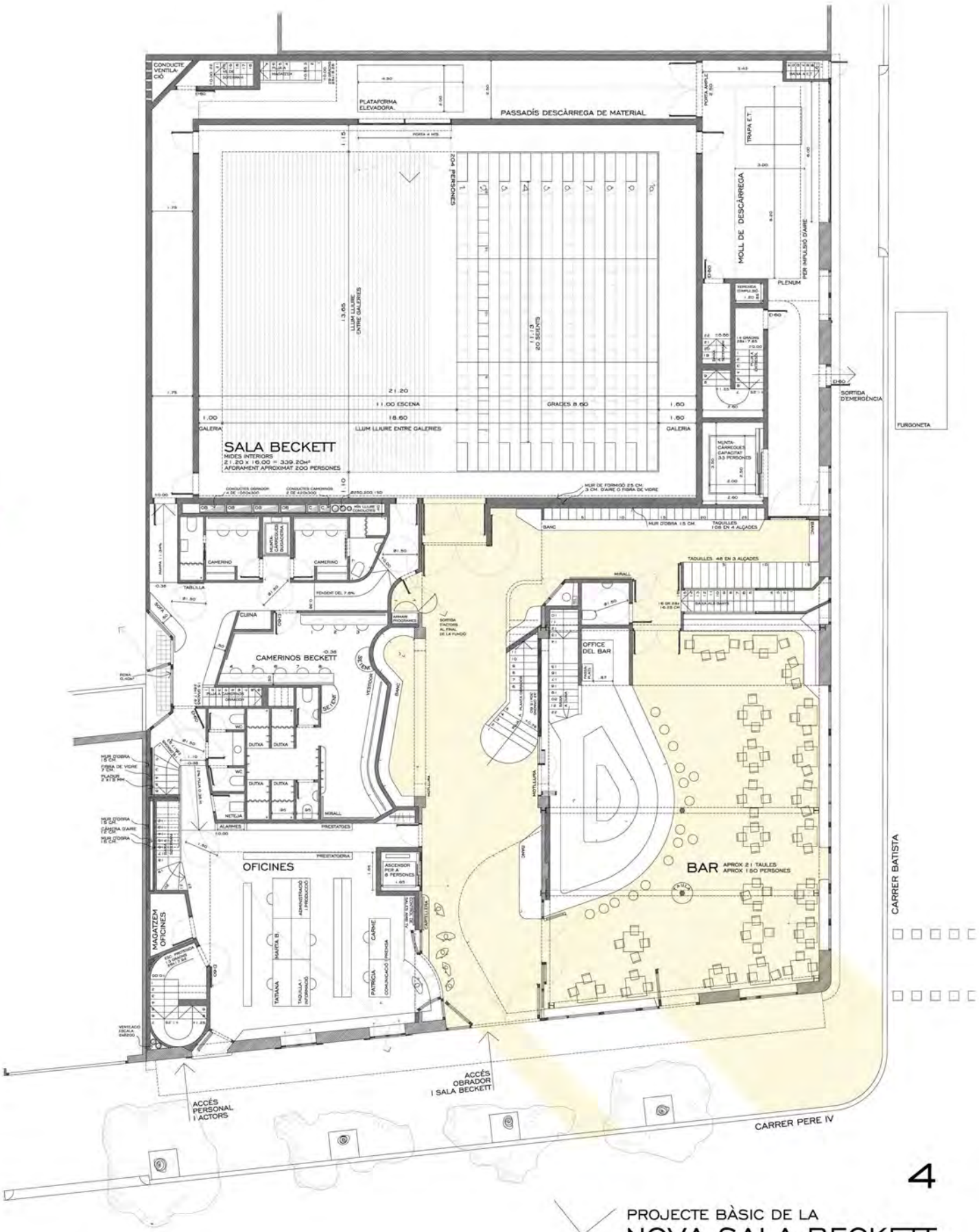
The New Sala Becket Theatre is a comprehensive renovation and intervention into the 'Cooperativa Paz y Justica', a 1920s workers club in the Barcelona suburb of Poblenou. The new program accommodates Sala Beckett, an avant-garde theatre group, who for the first time since their inception have the funding required to acquire a larger space. Architect Eva Prats describes the troupe's move to a permanent location as a doubled edged sword, with members of the group expressing their doubts at becoming an 'established' theatre company, as opposed to continuing with their radical transient roots.[36] Prior to occupying the new permanent space, the group had used numerous locations throughout the city for over twenty years, creating a reputation for radical productions. Herein lies the clue to many of the architectural moves in the building. Primarily, the planning and detailing fosters the sense of anarchy and spontaneity that Sala Beckett are known for in their performances. Prats says that their projects have the potential to "let us in again, to participate in their development."[37] She continues, "For that very reason, the unfinished character of our work allows us to continue thinking out the projects..."[38]

The 'Cooperativa Paz y Justica' workers club was in decay. A competition was run, with the majority of entries proposing to demolish the site. Flores & Prats proposed to keep the existing building, and as much of its contents as possible. It is important to note that the Sala Beckett was not listed as a protected heritage item. The architects could have demolished and begun with a carte blanche site. In addition, the architects and management were not obliged to conserve any elements of the building if kept. This raises an important question – should historic preservation apply to ordinary buildings? This building is important to the neighborhood for social reasons. Correspondingly, the architects say "the challenge of the project is therefore to adapt the building to its new use without banishing the ghosts of the past".[39]

The building façade is contextually appropriate, and acts as a hinge that mediates commercial and residential scales. The building is a corner site, bounded by the larger Carrer de Pere IV and the quieter small street of Carrer de Batista. The scale from ground to parapet has been kept, paint has been stripped and in parts added, and a new sign wraps around the north east corner, the majority of text facing the busier street (Carrer de Pere IV). A series of casement and sash windows painted a burgundy red echo the coloured tiles on the adjacent housing façade, whilst animating the exterior. On the same side of the road, looking back towards the south, from where I arrived, looms Pritzker winner Dominique Perrault's Hotel ME, a striking form of offset curtain wall volumes towering at 120m tall. Categorically the antithesis of the Sala Beckett building, when asked about this neighbor Eva Prats said that she thought it was an important urban addition to the previously working class neighborhood, as if it were a place-making beacon exclaiming 'we are here!'.

Faced with the existing crumbling structure, Flores & Prats elected to take complementary paths - one for the whole and one for the parts. The first path, or the whole, implies the structural and schematic clarification of the existing building. Originally a two-story building, construction was of a masonry cavity with load-bearing external walls. Essentially two gabled shed roofs existed beyond the parapet. Hardwood fink trusses with kingpost members created the half bay spans to the first floor, whilst a typical Catalan vaulted ceiling was expressed on the underside creating the ceiling on the ground floor. Both expressions are still visible in the updated building sections.

Image: The New Sala Beckett, Flores & Prats
Photo by William John Maynard



4

PROJECTE BÀSIC DE LA
NOVA SALA BECKETT
C/ PERE IV 228-232, BARCELONA.

PLANTA BAIXA (+0.00/-0.38)

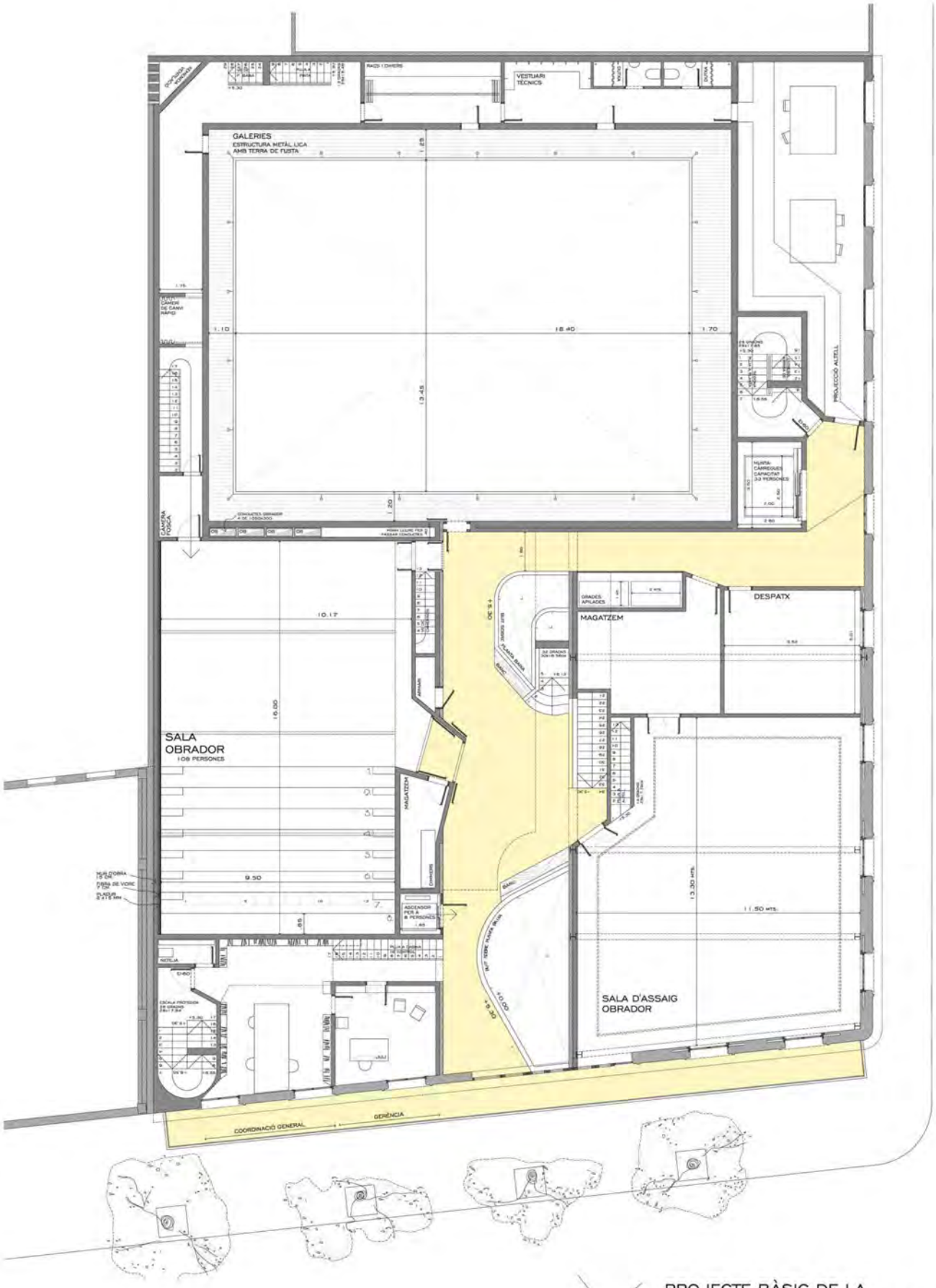
E.1/100 1 CENTÍMETRE = 1 METRE

FLORES & PRATS ARQUITECTES.
OCTUBRE 2011

QUADRE DE SUPERFÍCIES

ESPAI	SUP. ÚTIL	UTS.
ESPAI D'OFICINES	89.65	1
SANITARIS OFICINES	8.45	1
NETEJA	1.40	1
SUBTOTAL	99.50	
CAMERINO COMUNITARI	32.25	1
BANY DEL CAMERINO COM.	14.60	1
CAMERINOS PRIVATS	7.80	2
CUINA	3.70	1
ZONA COMÚ CAMERINOS	21.30	1
SORTIDA D'ACTORS	7.65	1
SUBTOTAL	95.10	

VESTÍBUL	103.60	1
BAR	165.55	1
CUINA	4.85	1
SANITARIS PÚBLIC FEMENÍ	15.05	1
SANITARIS PÚBLIC MASCULÍ	14.55	1
SANITARI ADAPTAT	4.05	1
GUARDARROPIA	31.75	1
SUBTOTAL	339.40	
SALA BECKETT	339.20	1
MOLL DE DESCÀRREGA	70.95	1
PASSADÍS DE DESCÀRREGA	73.30	1
SUBTOTAL	483.45	
TOTAL SUPERFÍCIE ÚTIL	1017.45	
TOTAL SUPERFÍCIE CONSTRUIDA	1208.40	



PROJECTE BÀSIC DE LA

NOVA SALA BECKETT

C/ PERE IV 228-232, BARCELONA.

PLANTA PRIMERA (+5.30)

E.1/100 1 CENTÍMETRE = 1 METRE

FLORES & PRATS ARQUITECTES.
OCTUBRE 2011

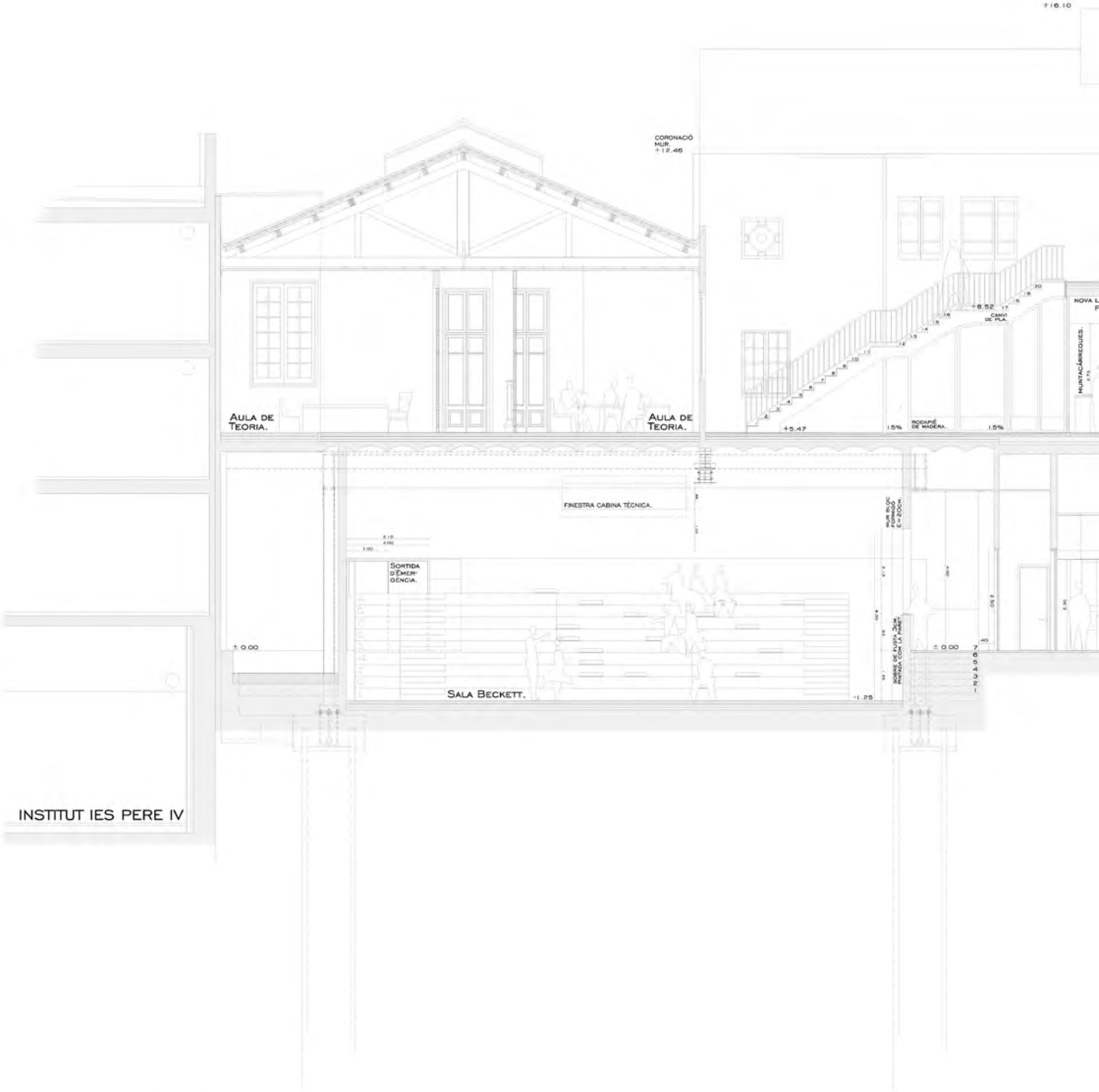
Amidst the ruin, many original decorative elements are still visible – railings, mouldings, encaustic mosaics, coloured glass, rosettes and cornices. Flores notes these were some of the first things the architects noticed upon entering the site. To these items, Flores & Prats have assigned new scenographic values, yet they retain the purpose they were originally intended – decoration. For instance ceiling roses have been displaced from the original pendant mounting position on the ceiling, to an adjacent wall. Here decoration is still decoration, yet it also becomes an artefact of memory given the location typically ascribed for hanging art and objects.

The ground floor plan is experienced as circuitous and spatially complex. The adjacent programs are porous – administration, ticketing, bar, foyer have views into each. There is no one way in or out. Multiple open doors to the street find visitors, actors and staff entering at all points. On this day, mid-rehearsal, cigarettes have just finished and there is a series of young actors wandering through a door off Carrer de Batista past the wall of lockers. Flores described their general aversion to corridor schemes, citing the boredom of retracing a linear path of entry; this is not the architecture they aspire towards. This position is clearly inscribed in the planning, especially the treatment of the café bar and staircase as objects, or an island within the public area of the ground floor. Together the café bar forms a D-shaped spatial mediator that pushes visitors through, and suggests perambulation as central to the operation of the foyer.

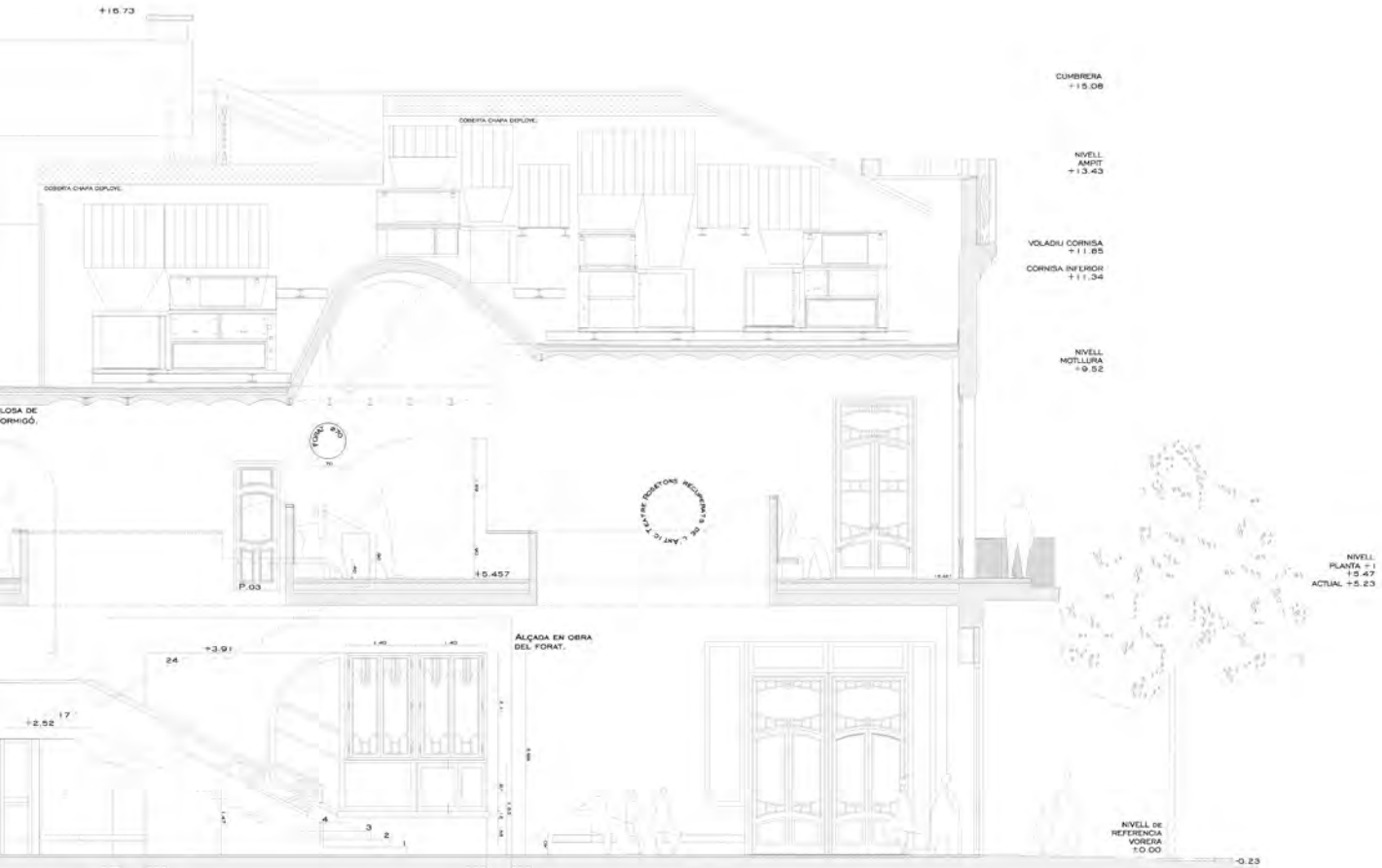
The ground floor houses the main theatre space with flexible seating, with a second smaller performance space upstairs. To the northwest end of the building, there are several practice rooms, with doors that open onto a common entrance area. Ricardo Flores describes this space as a campo or public square within the building, where actors and writers can have chance meetings outside their respective rooms.

The interior is a rich layered tapestry of reused elements adjacent to new insertions. The line is blurred between new and old, and the distinction is not always clear. The main staircase takes cues from grand European Opera Houses. It continues the idea of a grand central stair as a sumptuous and eventful place were social scenes are enacted and where entrances are made, albeit the analogy is made on a smaller scale. The first few marble risers taper and curl, further highlighting the tradition from which it references. Yet the raw timber carpentry, so geometrically composed, reads as a radical insertion into this formal space. It is a sort of prosthesis architecture that, perhaps had developed in tandem with Flores and Prats' use of working models, where they test iterative elements. In these models they can pull objects out or exchange elements that are not working. This method or working echoes Edward Ford's definition of autonomous details,[40] as it suggest that a stair, for example, can be a compositional object in and of itself. As previously noted, Ford posits that of the five primary definitions of detailing, the autonomous detail is the most significant.[41] He suggests that even if functionally possible, a consistency of detailing is aesthetically undesirable, creating rigidity in the space. Ford argues that what autonomous details or elements offer is "the vital in the inert",[42] meaning the role of detail is not to resolve contradictions, but to articulate them, to give them form and to make this conflict an aesthetic sensibility in and of itself. This, it could be said is the modus operandi of 'autonomous elements' in the Sala Beckett. The architects create conflicts within the spatial and material hierarchies in order to foster an exacting incongruity that is often sometimes experienced within the details. Another way to describe these particular moments, like the grand staircase, is as if abstracted furniture has been

Image: Skylight sequence. The New Sala Beckett, Flores & Prats
Photo by William John Maynard



Longitudinal section, Sala Becket,
Flores & Prats
Photo by William John Maynard



11

PROJECTE EXECUTIU DE LA

NOVA SALA BECKETT

C/ PERE IV 228-232, BARCELONA.

SECCIÓ LONGITUDINAL C

E.1/100

1 CENTÍMETRE = 1 METRE

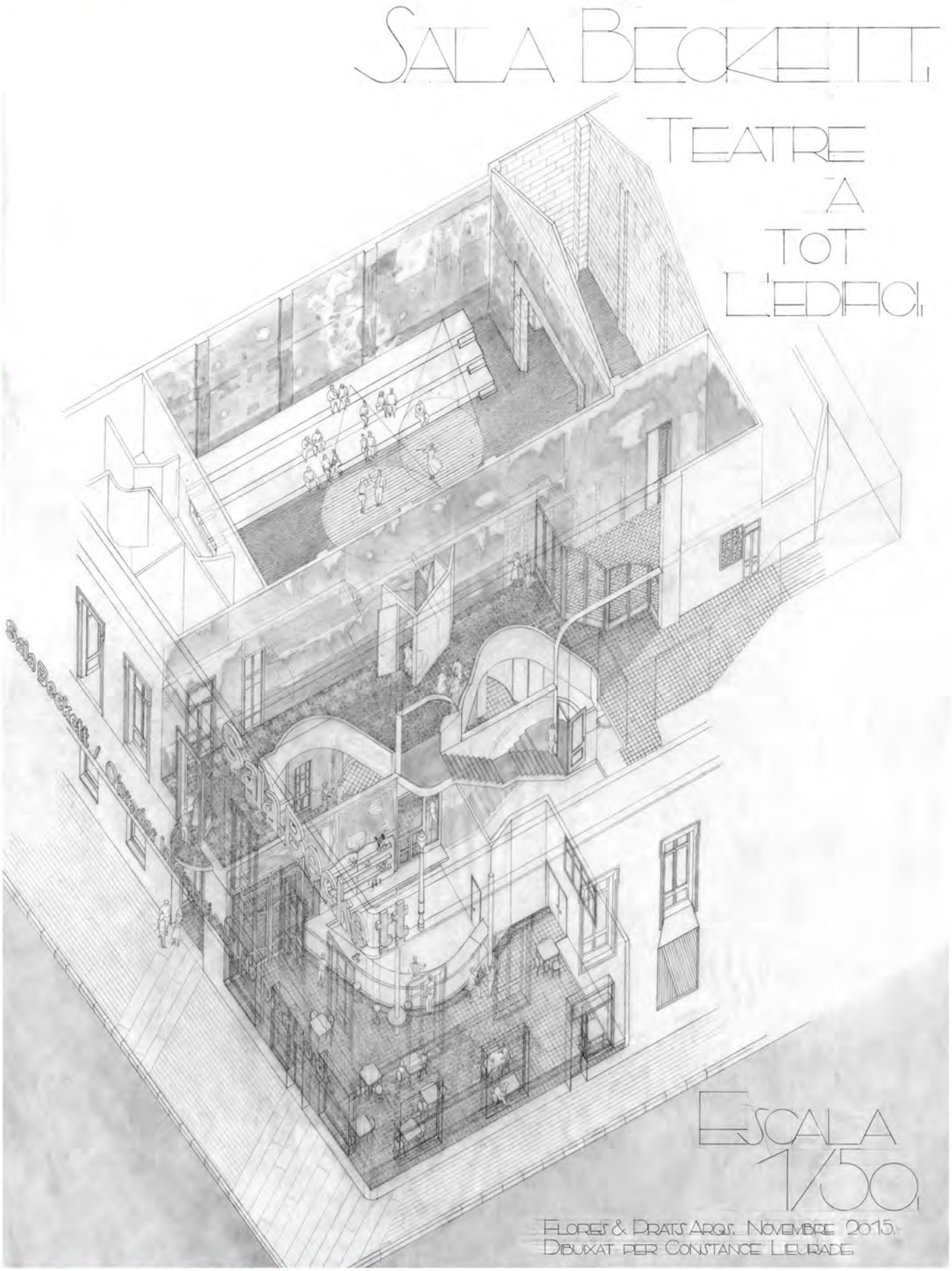
FLORES & PRATS ARQUITECTES.

GENER 2015

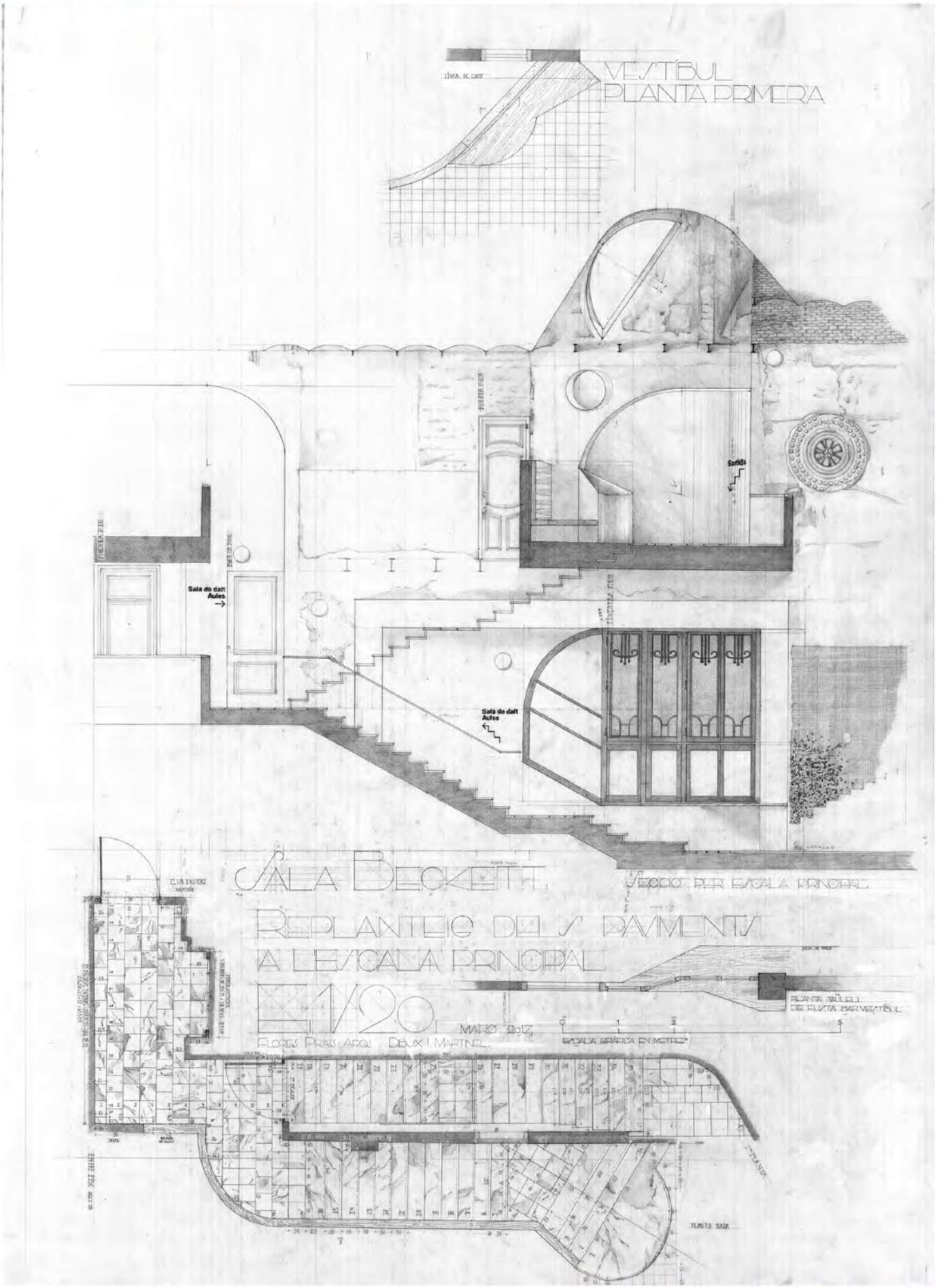
0 1 2 5 10 15

ESCALA GRÀFICA EN METRES

Axonometric drawing, Sala Becket,
Flores & Prats.
Photo by William John Maynard



Staircase section and plan, Sala Becket, Flores & Prats
Photo by William John Maynard



inserted into the place of a building element – a side cabinet moonlighting as a handrail.

Detail and its relationship to the whole is less of a concern. Rather, a strong plan is the structure supporting dozens of captivating autonomous details. Easily the most alchemical moment in the building is the peeling of the vaulted Catalan ceiling, revealing a double skylight above the grand staircase. As one walks up the staircase, light pours through a white set plaster atrium. The source of this light is concealed and the quality is of luminous indirect light. When on the first floor, the vaulted plenum is peeled back revealing the 150mm universal beams carrying the vaulted brick structure. 'Making good' of the hole created to the transverse side, the architects sculpted a spherical face, creating the sense of a subtracted volume. Above which is a half circle, next to a smaller full circle – both apertures within the face vertical of a stud wall. The handrail, which carries up the staircase, becomes a solid conical mass, below an arching entrance to the stairs. It is a difficult space to describe, but one that Flores says draws inspiration from Baroque cathedrals, where the light from the cupola is concealed to the congregation, bestowing a sense of wonder. These ideas have since been elaborated on in their contribution to the Vatican Chapel exhibition in the Venice Biennale 2018. This is a detail of thought and theoretical engagement. Firstly, by revealing and contradicting the structural logic of a Catalan vault, the architects use this moment to subvert culturally specific construction. Secondly, the beams are revealed to show a tectonic logic, which the architects critique by creating a junction with an abstracted volume – created with complex hidden framing.

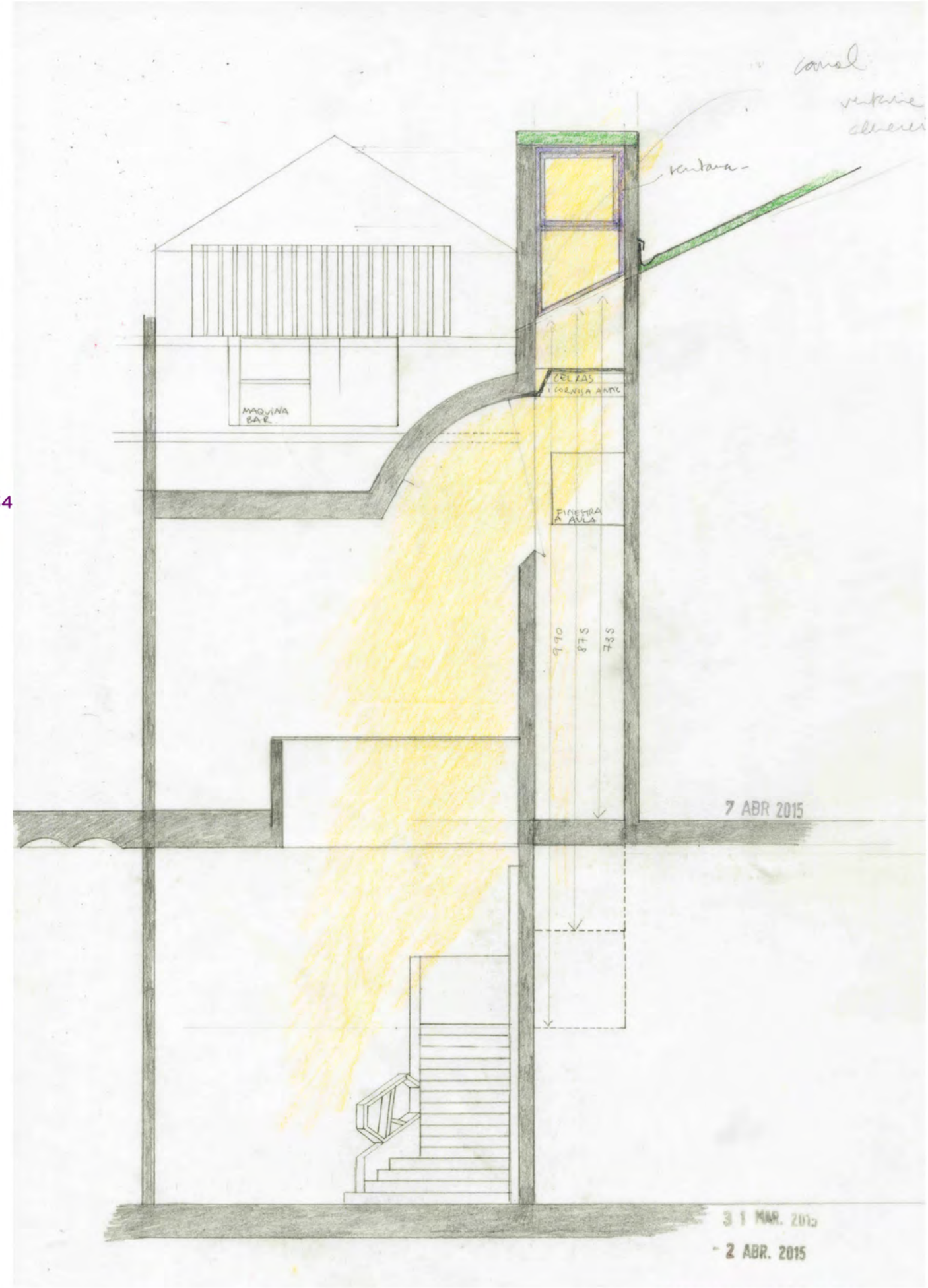
Marco Frascari argues that the joint as a detail is the begging of the architect's power to manipulate meaning.[43] Frascari's second point is that detail can be used a design generator. He posits that Carlo Scarpa wraps rooms around details. [44] Flores and Prats have not gone as far as to wrap a room around a detail, but the exuberance and joy of their detailing at times makes one feel as if the spatial experience is inseparable from detail. These moments foreground the architects' skill in creating a celebratory aesthetic of an 'in progress' architecture.

Detail and Drawing

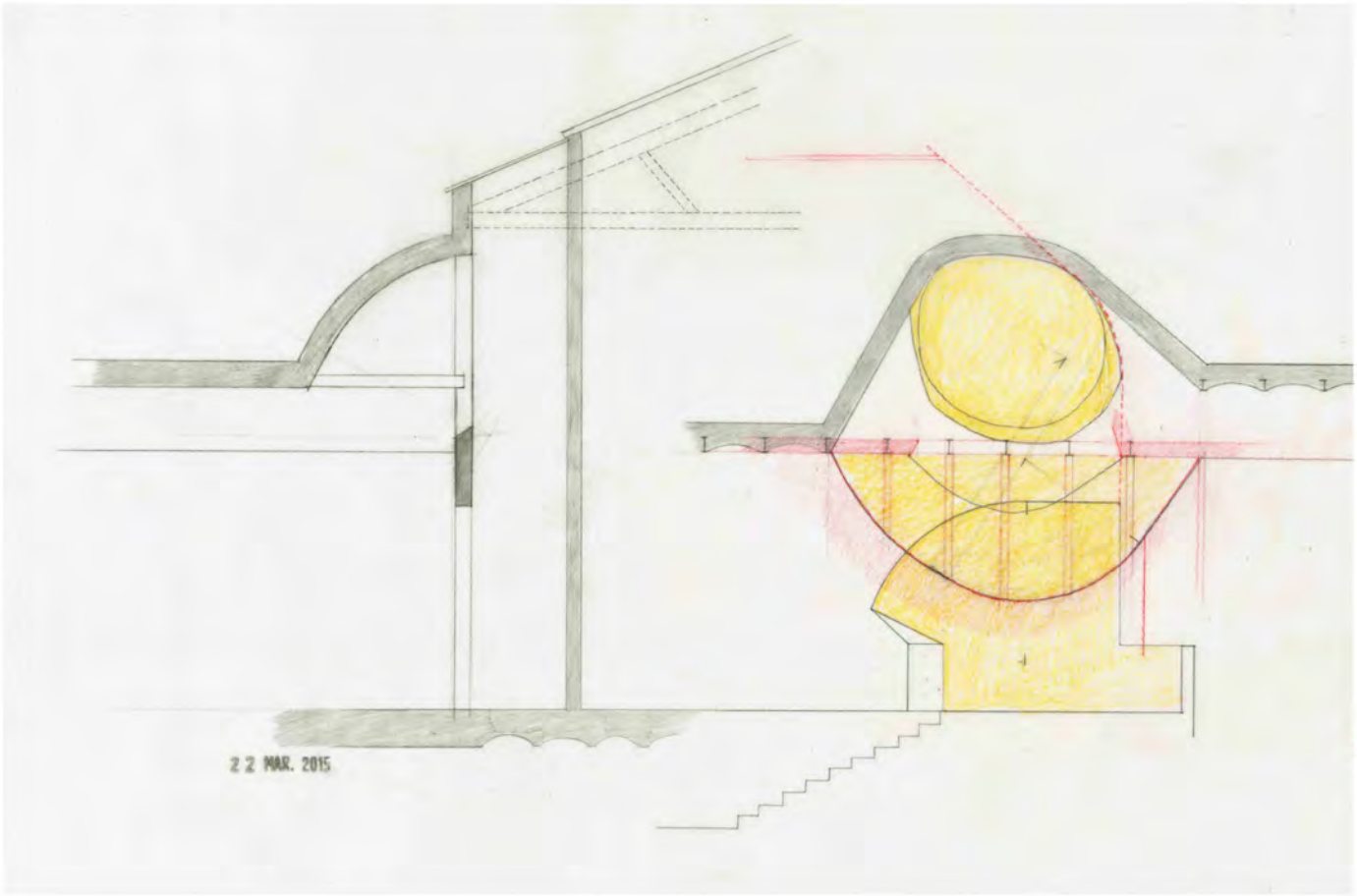
The architects' process was to create a detailed inventory of all the materials building elements found it the rubble – glass, wood, ceramic, etc. After which an in situ office was established where detailed measured drawings were made of every door, windows, cladding element, etc. Presented on the same sheet in sequence, one begins to understand the method of archiving and understanding the typological quantities of what remained. It is a pragmatic way of dealing with the resultant chaos, but also a stylistic approach to planning and ordering the reuse of these elements.

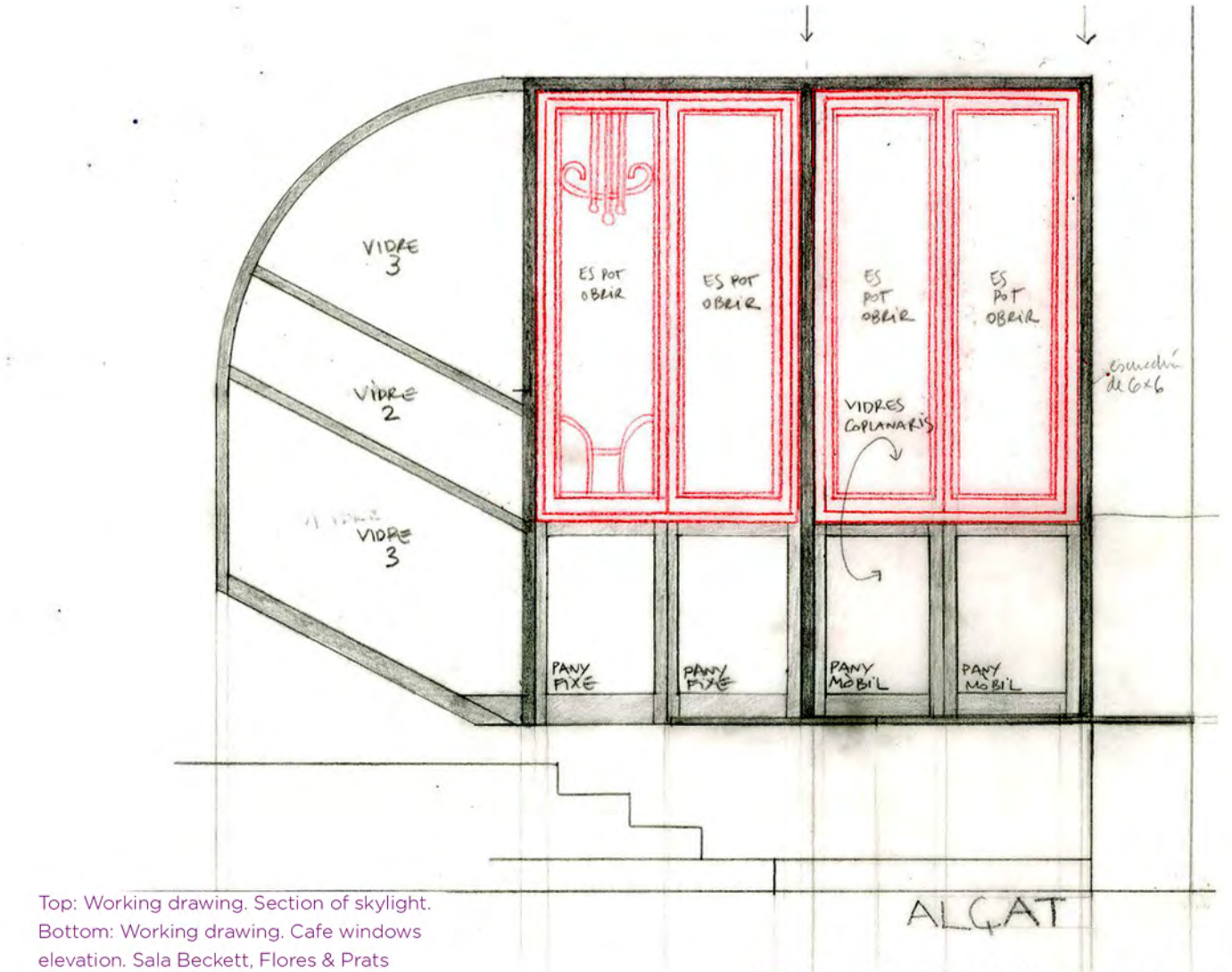
This is a result of the architects' choice to treat every period of the building's history as equal. Flores says that "the 1920s, the 1950s, then it was abandoned, the 198's and the squatters, the pigeons, the construction - everything was a sum of life..." Eva interjects "except the gym!". This small exchange highlights the building's subjective narrative as a wholly inclusive aesthetic, but to an extent. Juan José Lahuerta argues that the architects use collage as a method of addressing detailing, in order to reveal affinities between old and new, as opposed to juxtaposing them.[45] Lahuerta continues, noting that the architects have catalogued:

Image: Skylight sequence. The New Sala Beckett, Flores & Prats
Photo by William John Maynard



Working drawing. Section of Staircase/skylight.
Sala Beckett, Flores & Prats
Photo by William John Maynard





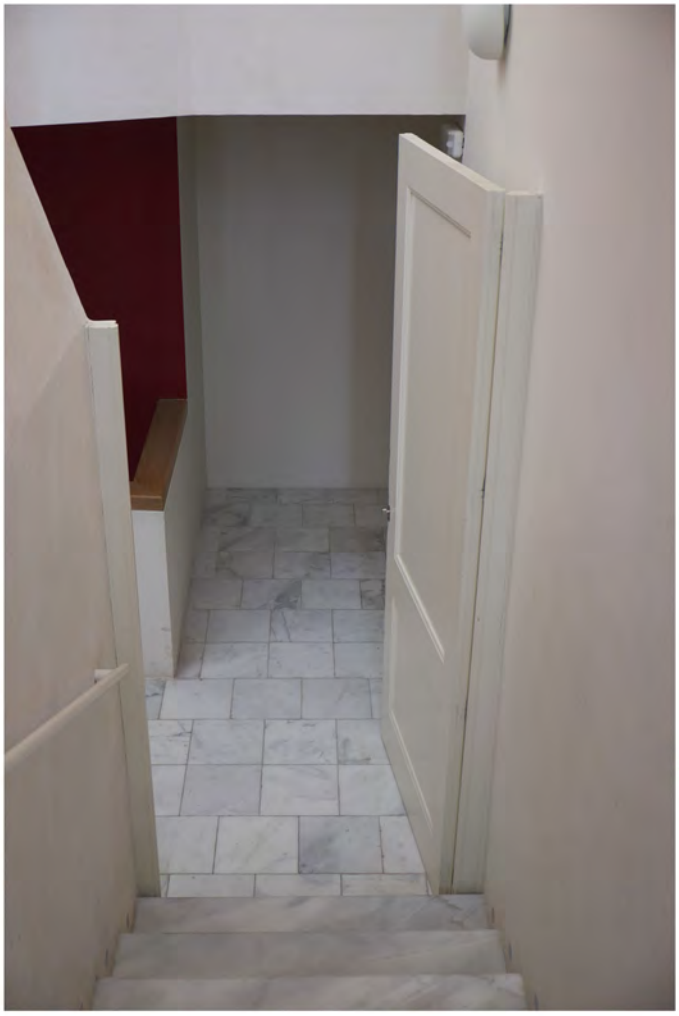
Top: Working drawing. Section of skylight.
Bottom: Working drawing. Cafe windows elevation. Sala Beckett, Flores & Prats
Photo by William John Maynard

> "... all the elements of the old building, from the doors to the floors to the handles, not because they had already thought about the place these things would occupy in a rational process of design of the already known; they have done so for the elements themselves, to care for them, to conserve them, to be able to ask them: "What would you like to be in the new but old building, our building?" Doors and windows, glazings and screens, ceiling roses and plaster, tiles of all kinds, cheerfully respond to the query of the architects, immediately indicating the place they want to have in a building that is still theirs and therefore ours, of the neighborhood, of living memory and the theater." [46]

This is an interesting position that may hold a level of truth. But what may also explain this process is a persistence and attention to the detail of 'unremarkable' elements that elevates each original item to an equivalent status. As Flores puts it, there is a sense of equality in this building.

Top left: Skylight sequence
Top Right: Staircase to rehearsal rooms
Bottom Left: Conical handrail transition
Bottom Right: Re-purposed doors
Sala Beckett, Flores & Prats


Sortida



6

CASE STUDY #2

La Aquirias, Nuevos Ministerios

Project: La Aquirias

Architect: Héctor Fernández Elorza and Jesús Aparicio

Client: La Aquirias/ Nuevos Ministerios

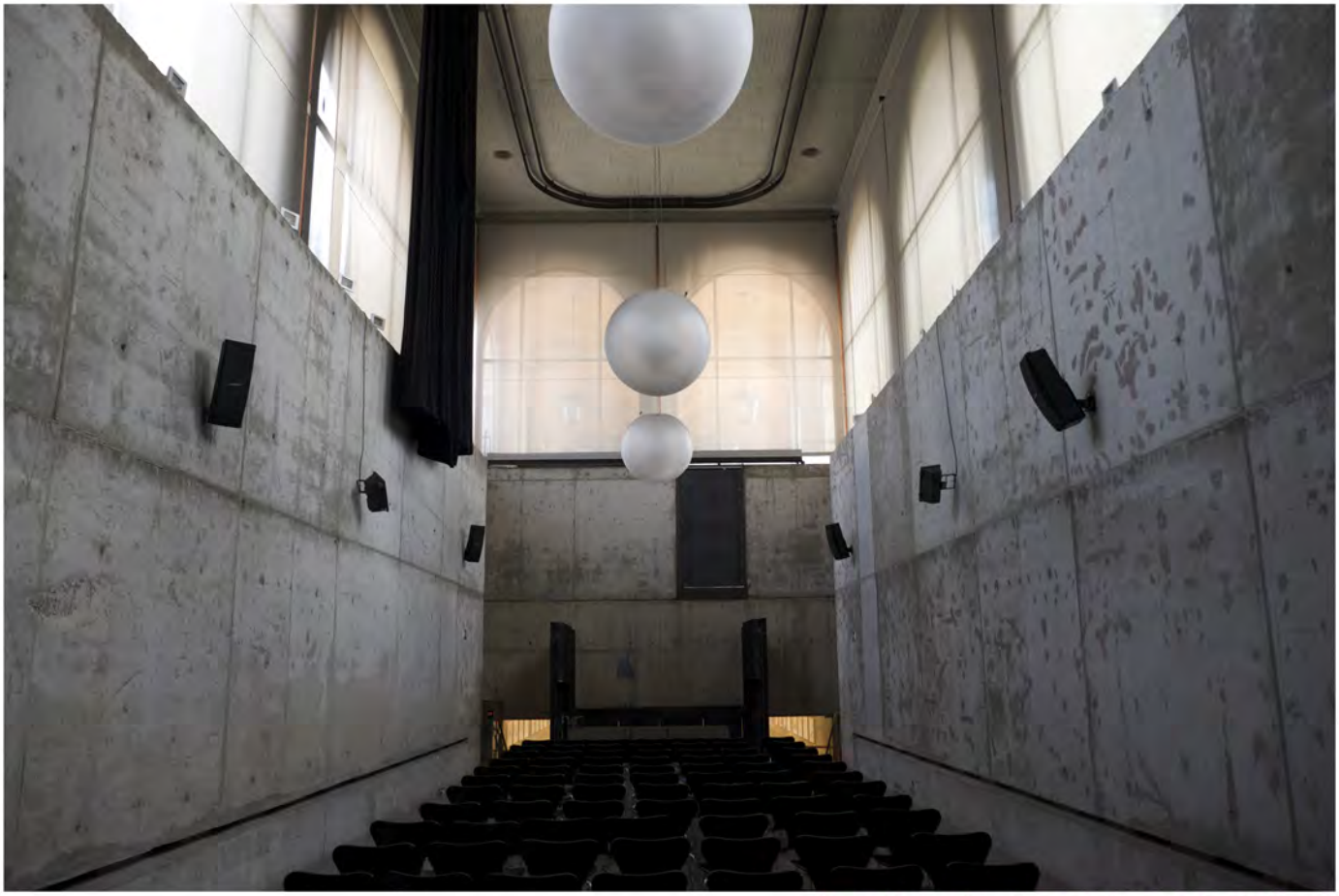
Project Address: Paseo de la Castellana, 67, 28046 Madrid, Spain

Date: 2003 – 2006

Layering is used as a deliberate device of esthetic expression – the visible accumulation of overlapping traces from successive periods, each trace modifying and being modified by the new additions, to produce something like a collage of time.

Kevin Lynch, What Time is This Place?

Auditorium, La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.



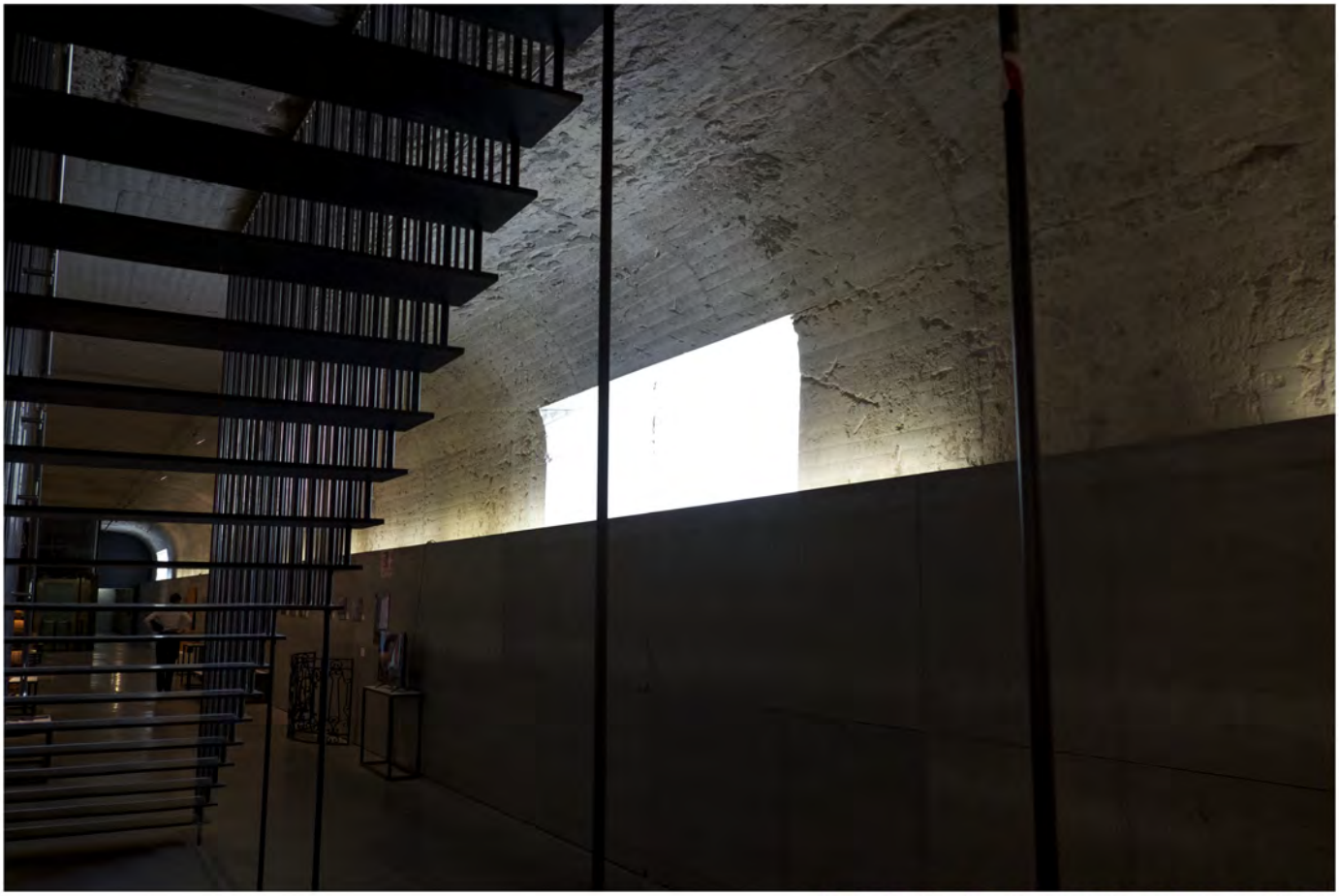
La Arquerias, a state-run architectural exhibition centre in Madrid is located in the Nuevos Ministerios (government) complex. The project tells a story of an atypical confluence of disused infrastructure, public heritage architecture and a radical modern addition.

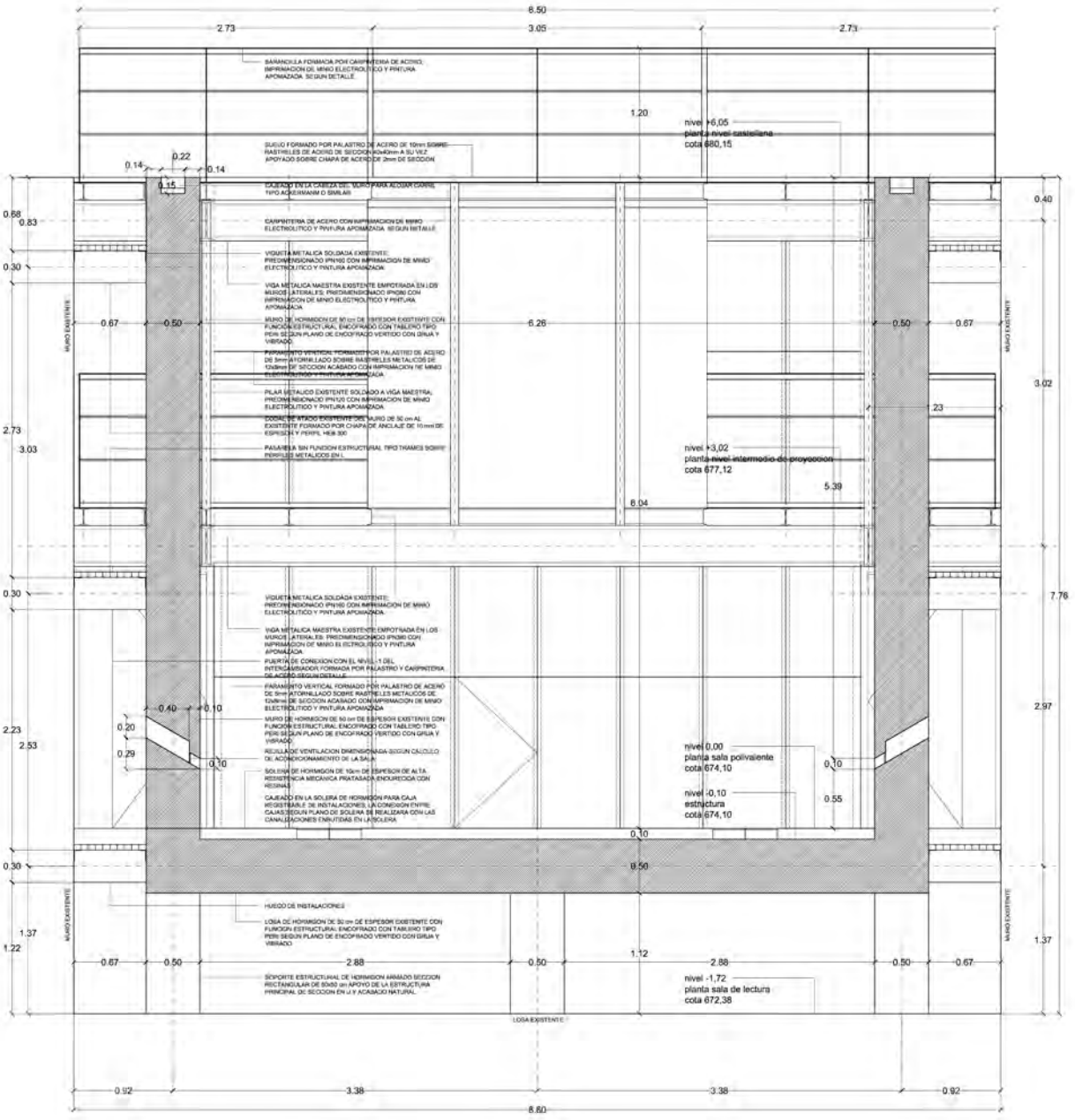
The architects Jesús Aparicio and Héctor Fernández Elorza were initially commissioned to design a new lecture theatre and exhibition space in the arcade facing onto Paseo de la Castellana (a major N/S arterial road) to the east and the Jardines de Nuevos Ministerios to the west. The arcade is an existing 1933 Nuevos Ministerios building designed by Secundino Zuazo Ugalde, a notable rationalist architect who completed major classical revival buildings for the Public Works Department prior to the Civil War. Clad in rusticated stone, its low profile is accentuated by the length of the building at 350 meters. A low profiled proportion, it reminds one of a cloister arcade without an upper storey or bounded perimeter. Essentially the building is an edge scheme, and as a street-forming gesture, it succeeds in making human-scaled spaces within what is a grand axial military boulevard. The arcade was a multi-bay open loggia up until the 1980s when the influential proto-Minimalist architect Alejandro de la Sota (teacher of Juan Navarre Baldeweg, Josep Llinàs and others) was commissioned to convert the southern part of the arcade into a large exhibition space.

Initially, as Aparicio and Fernández began drawing early concept sections of the existing building, they were soon to realise that a new building within the existing envelope would not provide sufficient height for tiered seating or back of stage requirements. In order to increase the floor to ceiling height, they began to sketch a new floor plan at a level lower than the pavement. Fernández explains that the idea was to excavate to a depth of approximately 1 meter, so that when inside, the street level would be at eye height. Initial geotechnical bore explorations into the substrate did not reveal strata, but rather an abandoned subway docking tunnel that was undocumented on official city surveys. To the architects' surprise, the planned excavation would now have to be a minimum of 12 meters below grade, or no excavation at all.

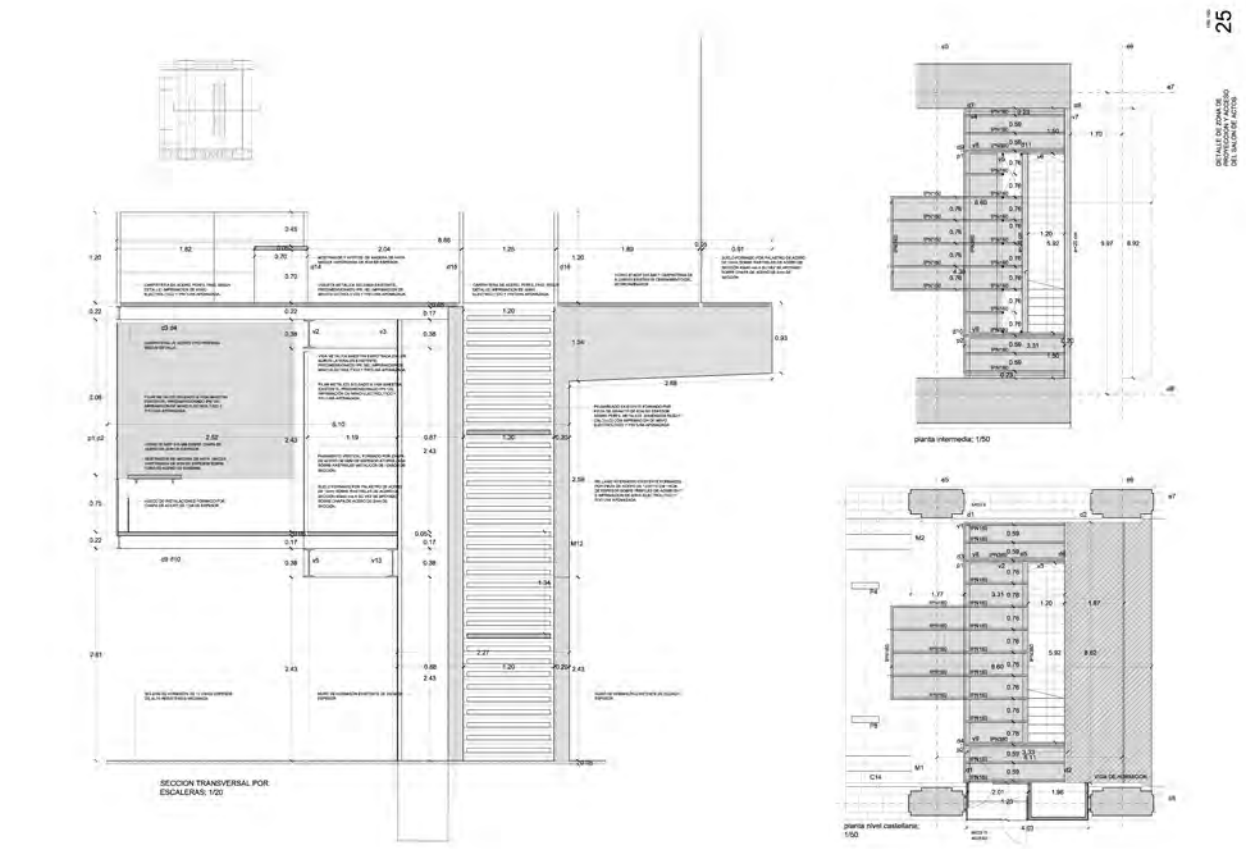
This subway line was to connect to multi-lined underground Nuevos Ministerios station. However, due to complications during the construction, the vault was left as an untouched concrete shell. This put into question the feasibility of the project, as the protected heritage item above could be compromised. The arcade was literally sitting on hollow, non-historical foundations. Did this finding render the 1933 Ugalde arcade historically inadequate? The tunnel was conventionally, in preservationist terms, a foible in the history of an otherwise significant building. Or is there a potential for subterranean space to become part of the Arcade's history? Arguably, the introduction of clerestory light would kill the very essence of what a tunnel is. If not, then surely the original intent and scale of the arcade would be distorted. These conflicts were the subject of contention for the architects, who sought advice from historians as to a suitable interpretation of the tunnel.[47] It was advised that the tunnel did not exist historically. The architects were told that this was the appropriate understanding of it - it was never used, there is no record of its drawing, and no transit authority knowledge. Otero-Pailos argues this is potentially a flawed and binary interpretation of the tunnel. However, it was an interpretation nonetheless that enabled an intervention which would have possibly been prohibited if it were defined heritage or otherwise. Otero-Pailos also describes this revelation as an "encounter with radical difference, with something external to history, [which]

Filligree staircase and 1800mm deep solid concrete window box, La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.





Auditorium section, La Aquirias,
Héctor Fernández Elorza and
Jesús Aparicio.



Auditorium staircase details , La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.
Courtesy of Héctor Fernández Elorza

both made the limiting horizon of history clear and set historical interpretation in motion." [48] This tunnel was underneath the existing building, arguably a part of it, and yet it remained outside what would be understood as 'historic'.[49]

Ultimately the architects distilled their intervention scheme to an essential quality, in spite of the numerous complications with the site, which were embraced as part of the project's qualities. Anne Lacaton has called this approach to adaptive reuse Superposition. This describes the additive nature of pampliset architecture, as to enrich the lived experience, and historical complexity of the building as each layer is added. Strongly linked to Lacaton and Vassal's renovation of the Palais de Tokyo, Lacaton describes her theory,

> The project invents then a new situation, enriched by all the previous stories and of all the existing layers. In architecture and in urbanism, we believe in the importance of superposition, the more a space generates combine multiple imaginative worlds, the more stimulating to live in it seems to be, and the more new relationships are triggered.[50]

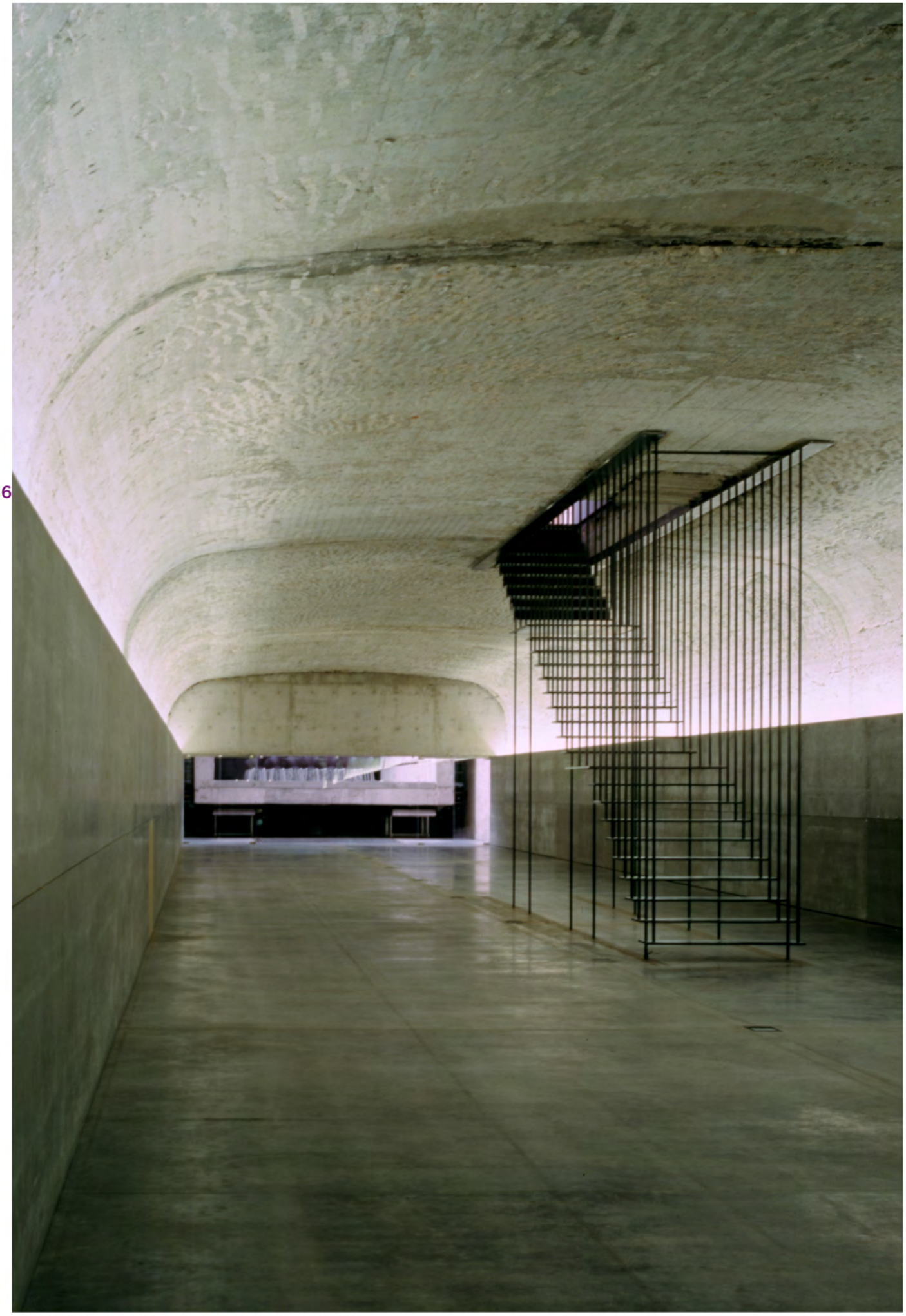
There are two points of access to the space. The first is to the new theatre direct from the Paseo de la Castellana, through heavy steel plate door left as raw with manufacturers stamps still visible. This 10mm mild steel sheet was produced in Macedonia. Revealing the origin, the architects engage in a historicity via the deployment of mini-narratives.[51] Here the architects use material and detail to highlight, if not critique the geopolitical nature of the construction industry. Macedonia was and is still a primary producer of steel for Spain. Thus, their commentary was astute, and this stamp acts as a reminder of many things, one of which is that Macedonia has been a candidate for accession to the European Union since 2005, but has yet entered into accession negotiations.

The stair leads you onto a suspended interstitial gallery with windows overlooking the theatre/auditorium. The staircase continues down from the gallery, past a steel-framed box projecting over the theatre. From here we pass a door to the interpretation booth, down the last flight of stairs, which change material to concrete and align with a strip skylight above. The sections show the sheer size beam members and the simplicity of their finish – undressed with connection details as per the engineer's specification.

The second point of access is through a more prosaic staircase (not designed by the architects), or by am elevator from the southern end of the building. This entry leads visitors to the vaulted tunnel that houses the main gallery for architecture exhibitions - the Biennale for Latin American Architecture was on display during the visit. Rough hammered concrete lines the vault. Scars of demolition and pneumatic hammers are the finish. In regards to the robustness of this space, it has been noted that, "the resulting raw aesthetics of incompleteness pervade both new and old, relate them together, and give the work its unity."[52] Correspondingly, a suspended filigree steel staircase pierces the barrel-vaulted ceiling, leading up to the ground-floor exhibition room in the arcades. Fabricated from 12mm OD rods and 10mm steel sheet, again this sculptural set piece is left uncoated with weld marks, grinding and stamps visible.

Now in the theatre, the heroic structural concrete gesture is examinable. The existing tunnel is a solid

Mezzanine connection detail, La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.
Photo by William John Maynard



Left: Filigree staircase in the exhibition tunnels
, La Aquirias, Héctor Fernández Elorza and
Jesús Aparicio.
Photo courtesy of Héctor Fernández Elorza

Auditorium , La Aquirias, Héctor Fernández
Elorza and Jesús Aparicio.
Photo courtesy of Héctor Fernández Elorza

concrete structure of retaining walls and patches of spray-crete. Board-formed patches and irregularities are left untouched. The insertion of the primary element - a solid U-shaped concrete channel cross-braces the building, replacing lateral sheer bracing the original floor preciously provided. The U-shaped liner is spaced off the existing floors and walls by over a 900mm, with all junctions concealed or set back from edges.

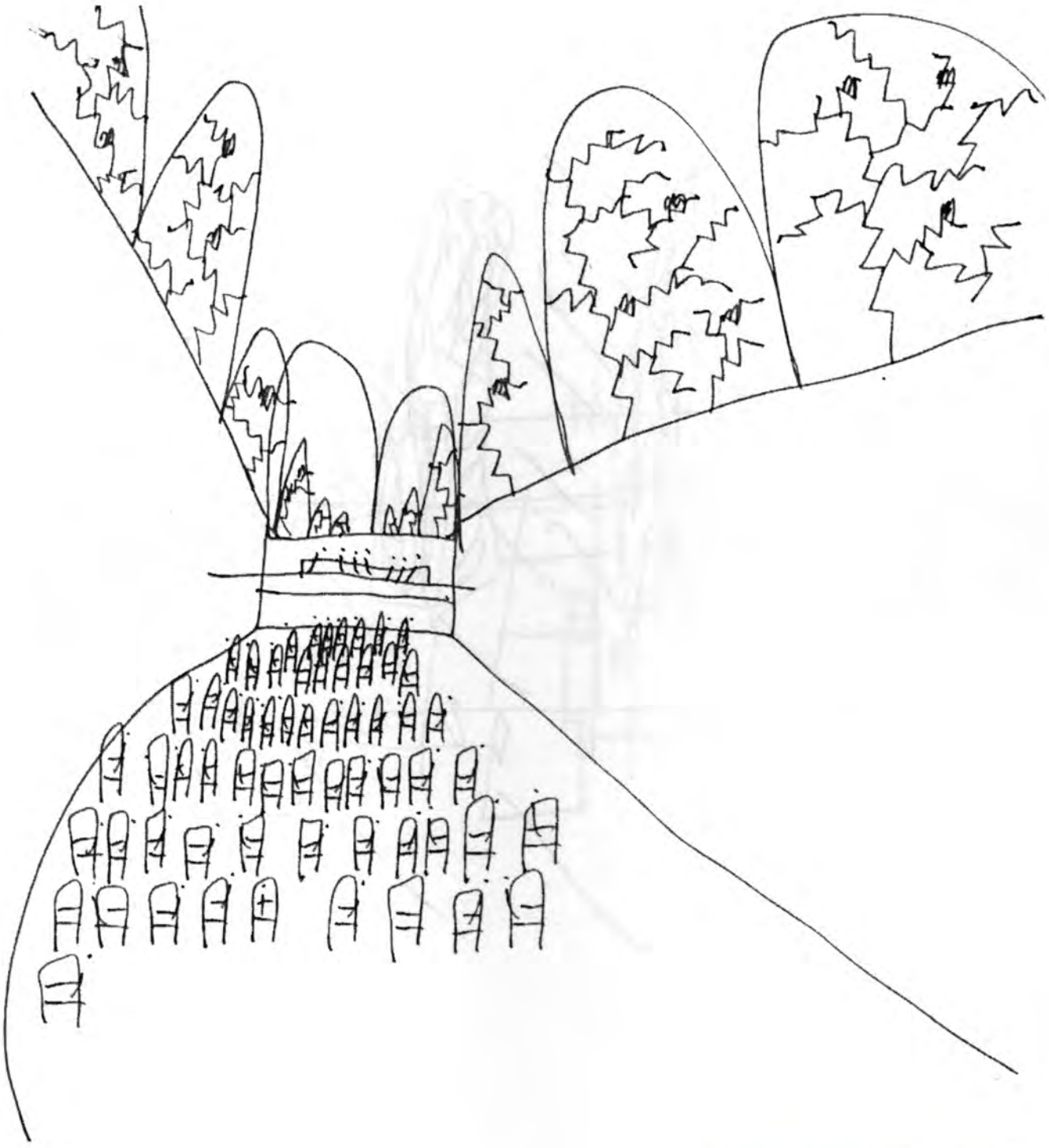
To the southern end a hydraulic platform is an adjustable stage, which allows speakers to be elevated above the audience, thus eliminating the need for a tiered bleacher seating system. Mediating the 1300mm level change, it also acts as a both a service lift and disabled access.

Clerestory light pours down from the street level. The arched infill windows of arcade above have the option to be screened with translucent blinds or block-out velvet curtains. The curtain hovers above into a track beautifully recessed into the board formed concrete soffit, which has received a white plaint finish.

Otero-Pailos makes the point that, "historians could no longer pretend that the subway was not significantly related to the historic building above. In sum, the whole project is a meditation on what the presence or absence of the vault makes available historically, namely different contexts for interpreting the 1933 structure."[53] Further to this point, the scheme generates new conditions, which invert the established categories of historical interpretation.

By attempting to integrate both the occupied and vacant phases of the site's building's history, the architects allow the subjective distinction between historical and forgotten to be question, leading to a richer, more complex narrative of memory and place.

Mezzanine view to the blockout curtains and arches facing street level, La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.



Auditorium Sketch , La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.
Photo courtesy of Héctor Fernández Elorza

Right: Auditorium view from mezzanine , La Aquirias, Héctor Fernández Elorza and Jesús Aparicio.
Photo courtesy of Héctor Fernández Elorza

7

Introduction to CASE STUDIES #3, #4 & #5

Matadero Madrid

The Matadero precinct is an ambitious multi-building complex in the walled grounds of the 'Old Slaughterhouse' located in the Arganzuela district of Madrid. It was initiated and is administered by the City of Madrid. Its cultural program is funded and promoted by the City, as well as through external institutional and private support. The complex comprises of over twenty masonry warehouses constructed by architect Luis Bellido circa 1907. The scale of the complex can be overwhelming, feeling akin to a university campus or an industrial estate. Internal access roads for stock delivery and transport now serve as wide pedestrian streets. The site accommodates cafes, a cinema, numerous exhibition spaces, start-ups, creative companies, a library and theatres. The intention of Matadero is to become a leading avant-garde cultural centre and arts precinct. Parallels with Carriageworks in Sydney can be found in the typologies, location and cultural leadership.

Many architects were involved in reimagining the Matadero at varying scales, from the master planning stage to interior design. Arguably, there are two practices that have been formative in the shaping of the institution as an architecturally important cultural destination. The first is the Ensemble Studio, a Spanish/US practice known for their application of monolithic concrete. The second is Arturo Franco, who is the subject of this chapter. Franco worked on four interventions within the complex. Each project different and highly responsive to the existing building, these works exhibit a restraint and boldness unparalleled in the precinct. These four buildings retain their slaughterhouse reference lot number.

" ...storytelling reveals meaning without committing the error of defining it...it brings about consent and reconciliation with things as they are..."

Hannah Arendt, The Human Condition

Matadero Madrid, c. 1930's.
Courtesy historic archive panel at the Matadero Madrid precinct.

8

CASE STUDY #3

Matadero Madrid
Nave 17c

Project: Nave 17c

Architect: Arturo Franco

Client: Intermediæ

Project Address: C/ Paseo de la Chopera, 14.
Matadero Madrid. 28045 Madrid

Date: 2005 – 2006

Budget: 785,000€

Area: 6000sqm

Plastic strip curtains left as remnant from abattoir, Nave 17c, Arturo Franco.
Photo by William John Maynard

Nave 17c is the main gateway to the precinct from the Legazpi subway station. Until a recent landscape project opened the western edge of the site by the river, this was the primary entrance for visitors.

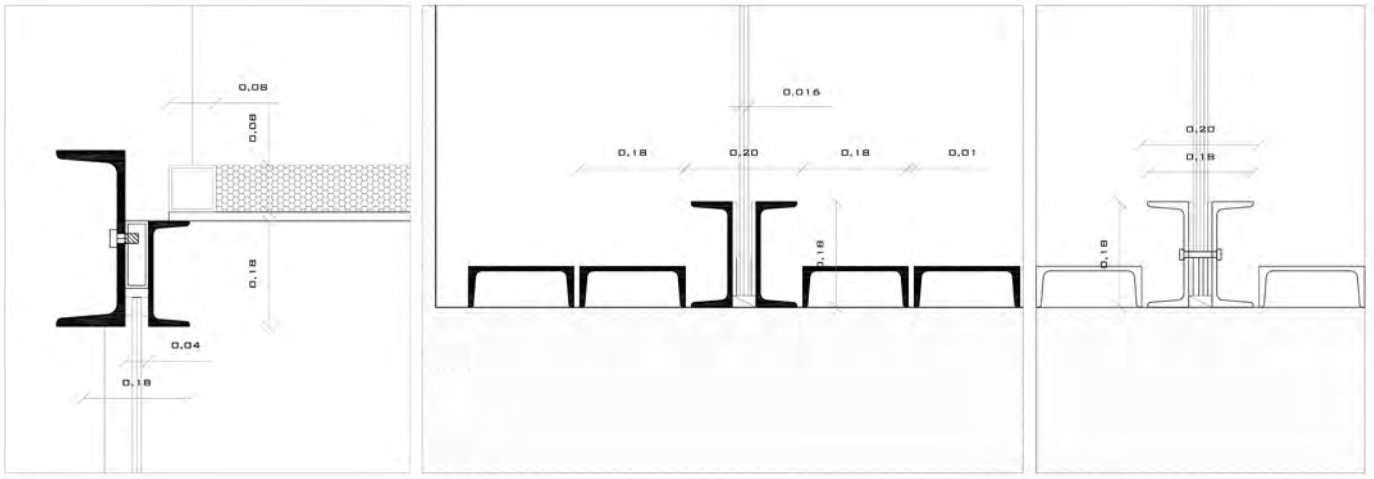
The warehouse conversion of 17c was the first intervention made in the Matadero complex and, as such, is considered by Franco as a trial of his relationship with the clients, and a test of the viability of the precinct. Franco describes the intervention as an opportunity to explore the possibilities of refurbishment, without engaging in restoration.

The host building is a one-storey masonry warehouse. Although the brickwork is precise and crafted to the street façade, the existing interior was found in an architecturally forgettable and decrepit state after several commercial retrofits. Franco describes the project's approach as a challenge to "historical patrimony",[55] meaning that he was not interested in restoring the building to its original state. He notes that this was the first project in his practice that pushed the limits of a "non-intervention", by reducing added architectural gestures to a bare minimum. Franco writes of the insecurities and theoretical vagueness that often afflicts historical interventions.[56] To avoid these insecurities, he made no concessions in respect of refurbishment - the ruin was left as it was found: scarred walls from years of use, and the stains of fire evident on the charred columns. Echoing its industrial past the materials used are also marred with telltale signs of manufacturing and industrial processes. No great structural transformation occurred; rather the approach was to use standard members to create a volume that could be 'inserted' into the existing space.

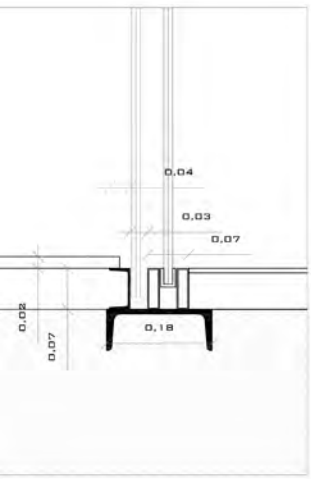
Putting aside the intention and rhetoric of the architect, the additions are in fact highly architectural. The reduction of detail is masterful. Junctions are clearly addressed and tightly resolved. There is a Miesian clarity to the placement of columns and beams. In fact, when looking through the drawings, the architect is almost conducting a history lesson in Mies Van Der Rohe's polemical placement of structural members – interior and exterior of curtain walls, structural and then non-structural. This precision can be overlooked, as the eye is equally drawn to the traces of demolition, especially around doors, revealing where bricks have been left in a broken state.

Although Franco claimed that doing nothing and avoiding detailing was the goal, he engaged in an atypical method of detailing. Franco brought a chalkboard to site, sketched the details with his staff and contractors. Once the detail was agreed upon, the architect photographed the sketches and the chalkboard was left on site for reference. All details were resolved on site and only later were they drawn by engineers and for publications.

Internally fixed window assembly,
Nave 17c, Arturo Franco.
Photo by William John Maynard



Structural steel junction details, Nave 17c, Arturo Franco.
Courtesy of Arturo Franco.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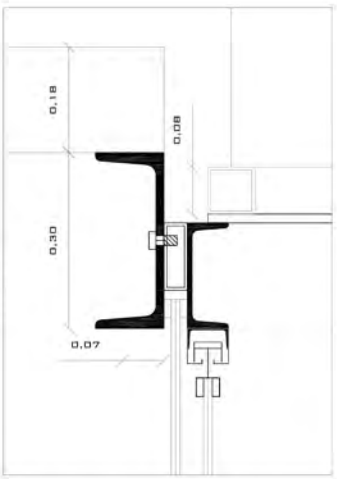
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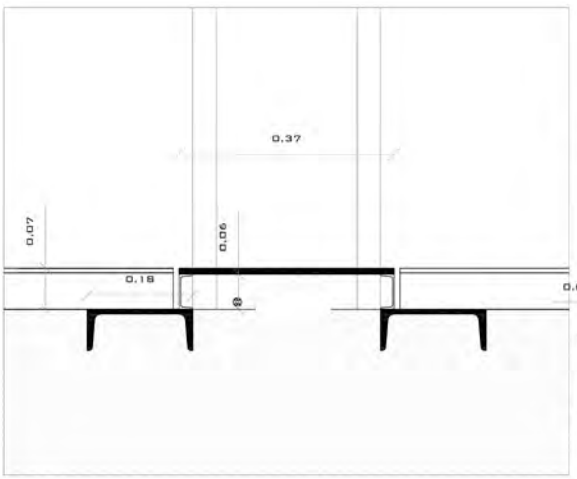
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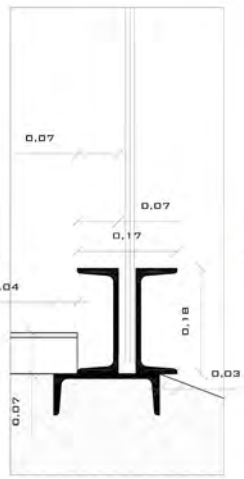
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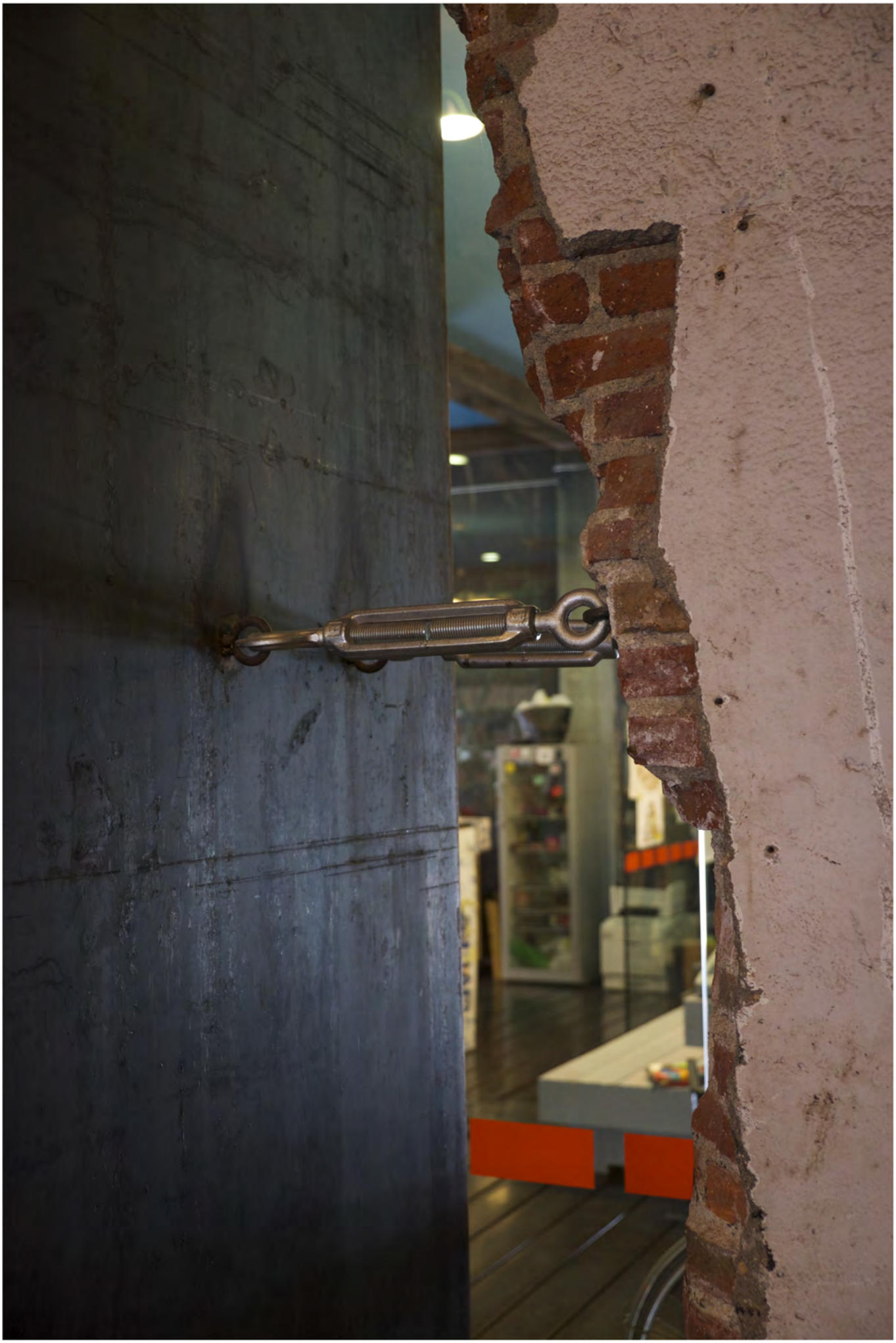
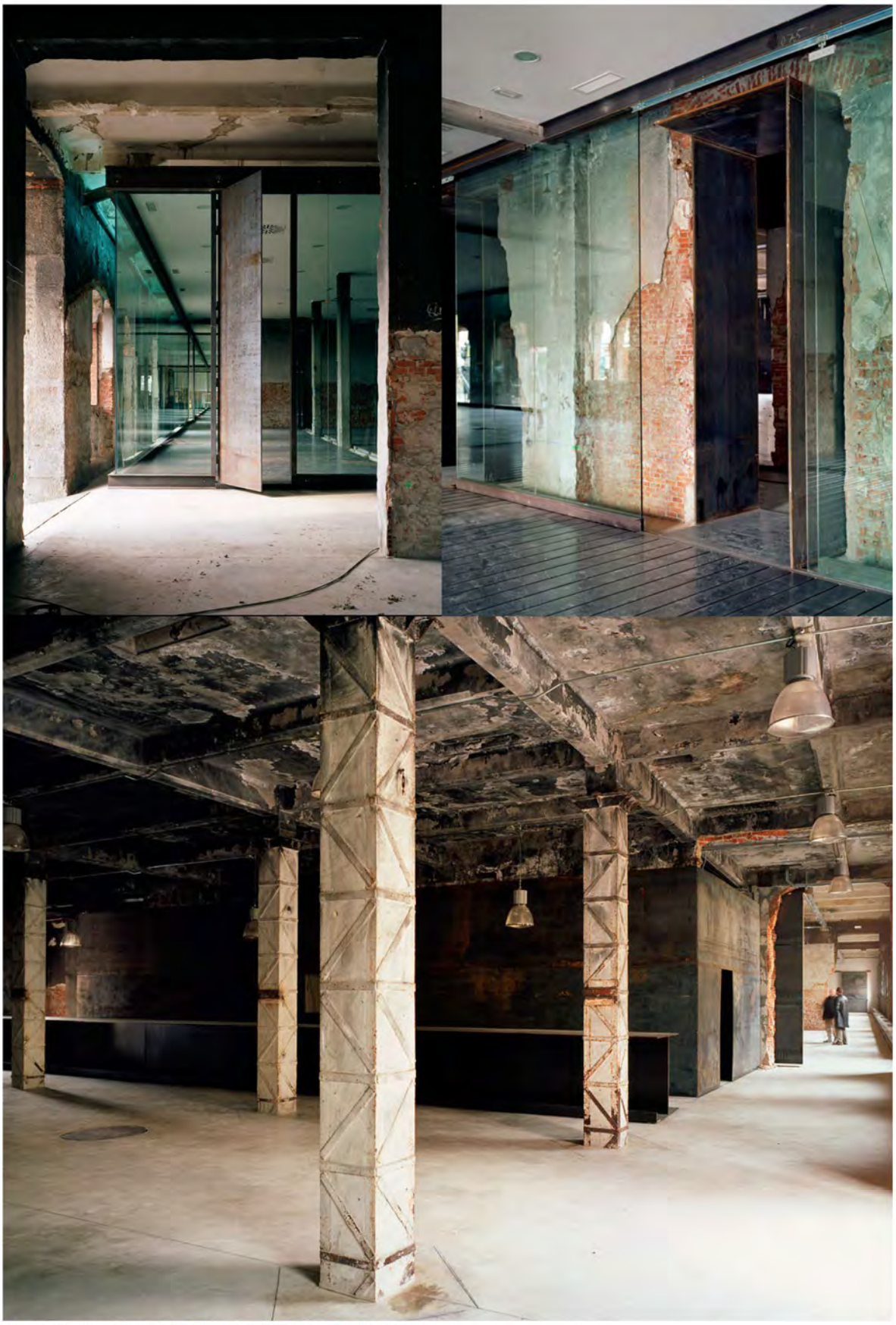
Left:
Structural steel junction sketches on chalkboard, Nave 17c, Arturo Franco. Courtesy of Arturo Franco.

Right:
Steel reveal tieback detail, Nave 17c, Arturo Franco. Image by William John Maynard





Nave 17c, interiors and entry ramp.
Courtesy of Arturo Franco.

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9

CASE STUDY #4

Matadero Madrid
Nave 8b

Project: Nave 8b

Architect: Arturo Franco

Client: Intermediæ

Project Address: C/ Paseo de la Chopera, 14.
Matadero Madrid. 28045 Madrid

Date: 2009 – 2009

Budget: 518,000€

Area: 1000sqm

Entrance room, Nave 8b
Arturo Franco.
Photo: Wiliam John Maynard

Building 8b holds one of the most sensuous, yet minimal rooms visited during the BHTS. The story of the building's concept and detailing is interwoven with the history of the existing ruined building, its materials and the development of a trusting relationship with the client after a positive experience on the Nave 17c development.

The brief for 8B was to convert the space in order to accommodate administration and management. Franco and the clients were in discussion for several months regarding a scheme. A previous scheme was decided upon and drawings had begun. However, during an early site visit, they discovered piles of discarded excess terracotta tiles to the rear of the building. Incorporating the remaining tiles on the roof, the architects proposed a new scheme. Again, Franco proposed a project has an absence of detailing at its core. Yet ironically, this absence requires a great deal of orchestration. Franco discussed with the tiler and bricklayer how they would prefer to lay these discarded tiles as a wall surface, in a running bond with a grout bed between, as if they were bricks. Some key questions were raised as to the essence of the material and how it could be used. Franco writes that key concerns were "How does the flat shingle tile work? How is it stacked? How is it bonded? What are its characteristics, its weight? How do they join?".[57] Typically these questions would be formulated, researched, detailed, reviewed and issued as documents to the contractor. Typical issues concerning masonry techniques arose – How are lintels fixed? What is the reveal detail? Will brick ties fit? How does one flash a tiled cavity? What happens to the bond on the corners? His method would seem to resist the most unavoidable commonplaces of architecture today – documentation and liability. The unpredictability of the processes was, in a sense, what made the building so singular. It was not a product of builder following a set of graphic instructions, rather a process more akin to the foreman/ master mason roles which predated institutional architectural training, wherein the designer has an intuitive site-based approach to details as they arise.

Originally the warehouse was used for salting and drying pelts and meat. The building has a level change for meat deliveries, meaning that dual-accessible entrances were possible without a lift. It is located to the south east of the precinct. Its modest scale in reinforced by the adjacent nave 8/9 building. The facade is untouched original clay brick. The roof is terracotta tile, the same material as the interior walls; timber barn doors mark the entry. For what is otherwise a nondescript building, it is the raw steel plate soffit that gives a clue to the potential of architecture inside.

Upon entering the building, one is struck first by the texture of the room, a manifesto realised in the terracotta tiles laid in bond to create soaring walls (Marseille tiles in Australia). Secondly, the quality of light is striklingly supressed. A highlight opening spills light in one direction only, illuminating the space. The result is akin to a Vermeer painting, like The Astronomer (circa 1668), where the chiaroscuro is created by a singular natural light source.

The rough surface treatment echoes another omnipresent tradition in modernism – often associated with the later years of Le Corbusier, which William Curtis labelled his 'Ancient Sense period' between 1945-46.[58] These projects include Maisons Jaoul, Villa Sarabhai or any of the Ahmedabad merchant buildings. In both Franco's - and Le Corbusier's later – work, there is a matrix of ideas that come together - of giving agency to craftsmen, embracing local materials, leaving surfaces without finishes, designing roughness and cultivating a sense of

Previous spread, Nave 8b during construction, Arturo Franco.
Courtesy of Arturo Franco.

Entrance room with steel plate ceiling, Nave 8b
Arturo Franco.
Photo: Wiliam John Maynard

Top: Gantry hook on ramp,
Nave 8b
Arturo Franco.
Photo: Wiliam John Maynard

Bottom: Steel plate ramp,
Nave 8b
Arturo Franco.
Photo: Wiliam John Maynard

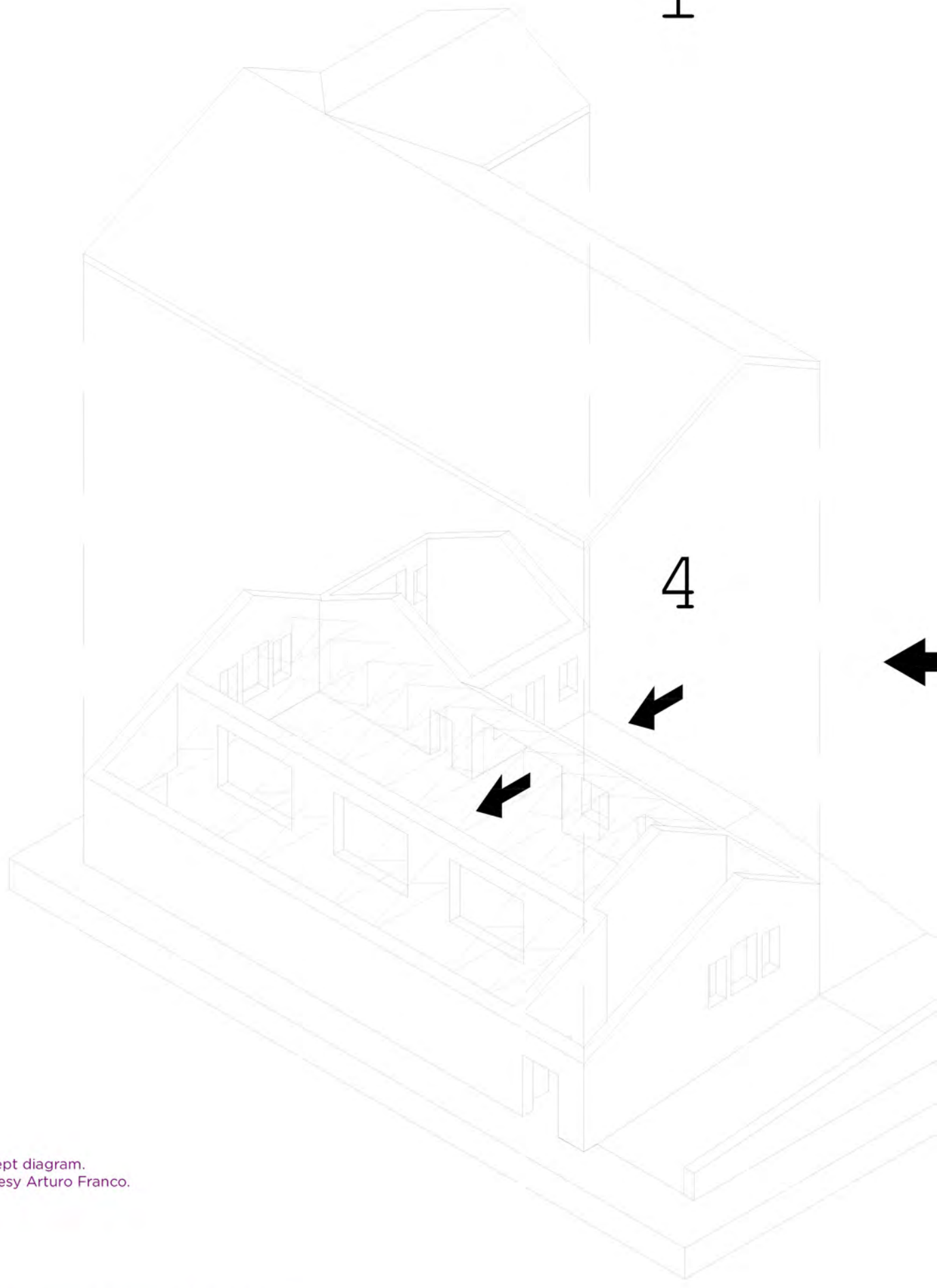
Vice clamps left on timber caprtenry, Nave 8b
Arturo Franco.
Courtesy Arturo Franco.

Vice clamps left on timber caprtenry, Nave 8b
Arturo Franco.
Courtesy Arturo Franco.

mass in section. For Franco, a sense of the vernacular and locally specific is embraced, and as a result the project pertains to both an historical architectural tradition as well as to the culture of construction in Madrid. This is augmented further by his insistence on abstaining from documentation conventions.

Next, a plate steel ramp is installed like a Richard Serra sculpture, an object within the room rather than a building element. Franco said that the installation of the ramp was in itself a triumph. Having been fabricated offsite, the ramp was ready to be installed once the external works were completed, and thus access becomes an issue. A long-armed mobile crane was weighted down to enable the arm to extend past the typical allowable cantilever of the machine. A singular hook was installed for the gantry arm to connect with. The horizontally extended arm hoisted the steel ramp inside, with the aid of stainless steel rollers. This hook has been left in situ and remains as a memory of the logistics of construction. Correspondingly, the timber revels around the windows have never been fixed or secured mechanically. Instead, carpenters' vice grip clamps hold the timber in place in perpetuity.

Entrance room with steel plate lintel, Nave 8b
Arturo Franco.
Photo: Wiliam John Maynard



Concept diagram.
Courtesy Arturo Franco.

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3

10

CASE STUDY #5

Matadero Madrid
Naves 8/9

Project: Nave 8/9

Architect: Arturo Franco

Client: Intermediæ

Project Address: C/ Paseo de la Chopera, 14.
Matadero Madrid. 28045 Madrid

Date: 2010 – 2011

Budget: 5,474,127 €

Area: 20,891 sqm

Naves 8/9.
Courtesy Arturo Franco.

The final project of Franco's on the Matadero site is the structural consolidation of Naves 8 and 9. These warehouses housed slaughter floors and preparation lines for the complex. A curved concrete floor falls to dish drain gutters on the perimeter of the space that once removed blood, water and excrement from the production line. The use of the space is currently under review and at the time of the visit there was no program occupying any of the 15,000 m2.

A study of the building by consultants revealed that the structural concrete columns were decaying and the building was unsafe to occupy. The decaying columns are among the first examples of structural concrete pillars in Madrid. The reinforcing was expanding due to water damage and Alkali-silica reactions (concrete cancer) was affecting the load-bearing capacity of the concrete.

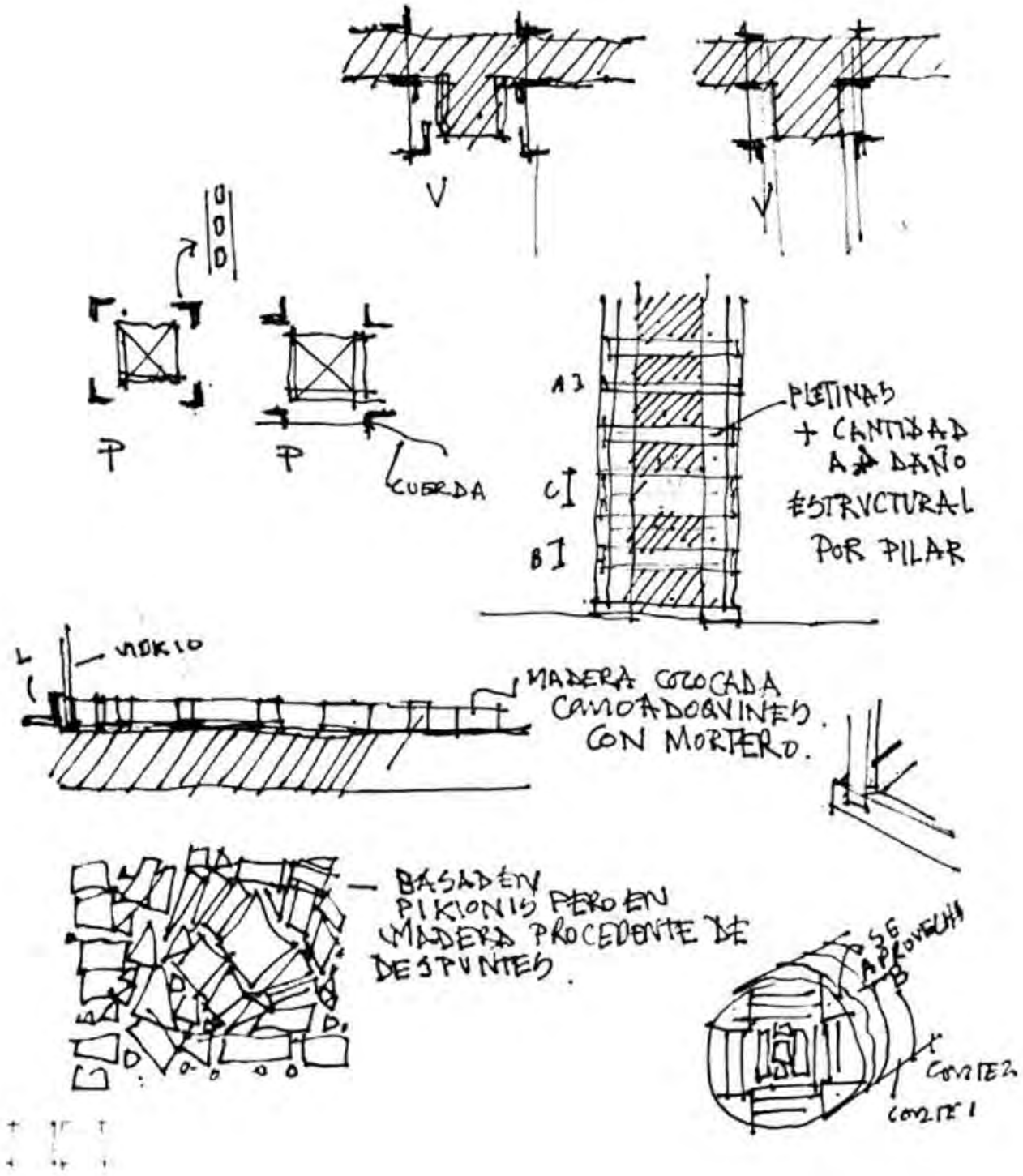
Franco's scheme proposed an alternative to the typical clamping of the failing structure with a "steel corset".[59] His argument against this was that it hides what are historically significant piers, which have obtained a beauty of material quality through use and decay. They decided to create a skeletal trussed section that supports the floors above, yet is separated from the columns by 200mm. The engineers agreed it was preferable for the new and old structures to work independently and they supported the idea. This choice also made scheduled structural inspections less complicated.

Four 120mmx10mm equal angles are offset 200mm from the corner of the existing concrete columns by 200mm. Bracing the angles is 100mmx8mm flat bar is welded at 1 meter centres. A network of trabeated universal beams of varying sizes transfer the loads from the existing concrete carrier beams. The details are uncomplicated and direct. The finish is again 'as it comes'. Here all the columns display the ex-factory red steel epoxy primer. No topcoat has been applied – an advantage of building in Madrid's low rainfall, low humidity, semi-arid inland location.

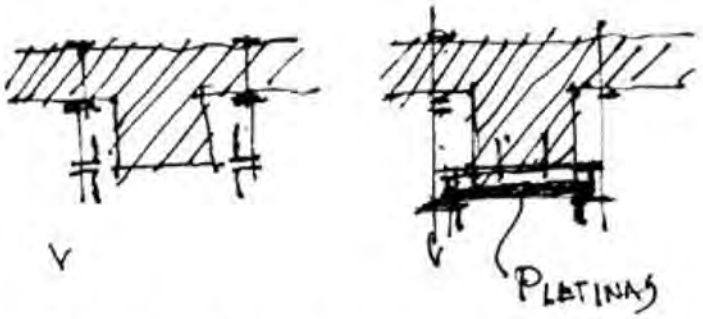
The space reads as a manifesto of anti-ornamentation, wherein the structural anti-decorative position created highly refined decorate rhythm. Franco writes that "The personality of the two structures that coexist at a distance, cooperate and multiply their capacity to transform spaces."[60]

There are future plans to wrap hessian rope between columns to define temporary spaces for workshops, exhibitions, markets or offices. Models have been made by his office illustrating the concept.

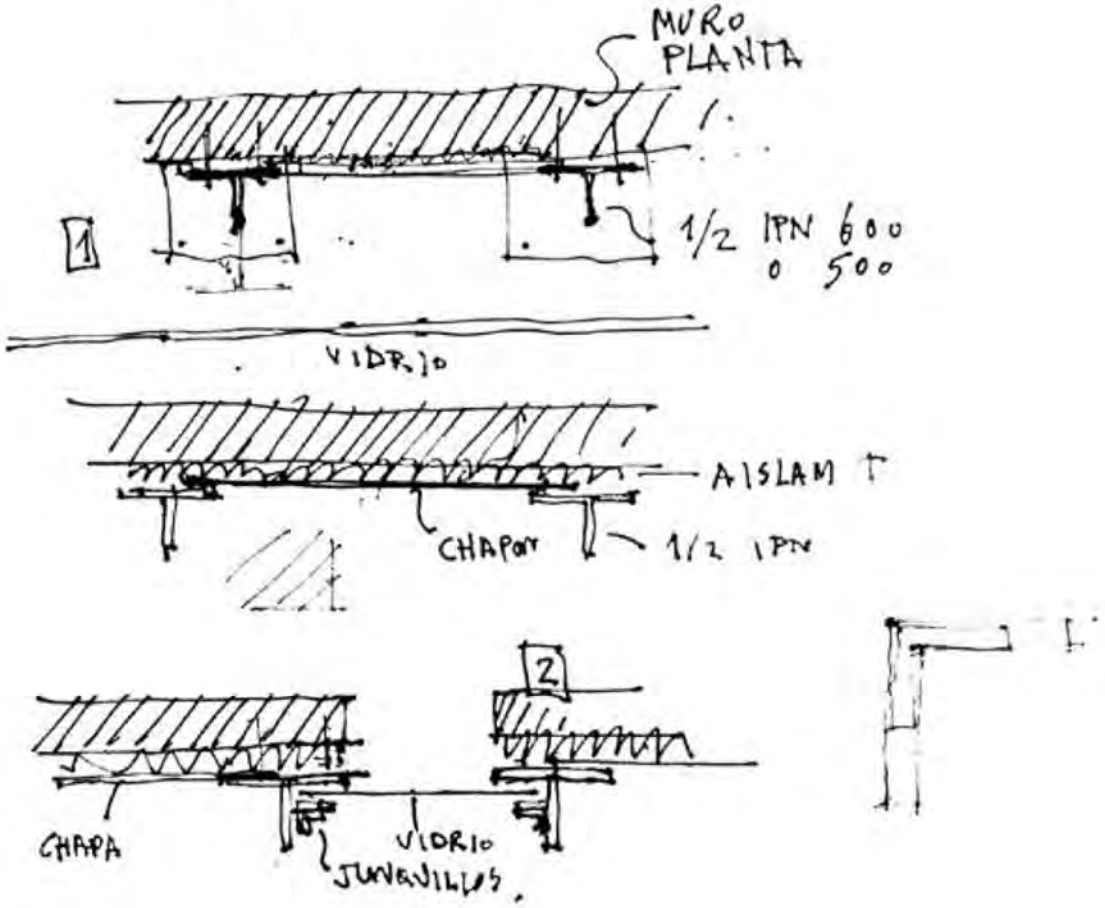
Engineering inspection of decayed column, Naves 8/9. Courtesy Arturo Franco.

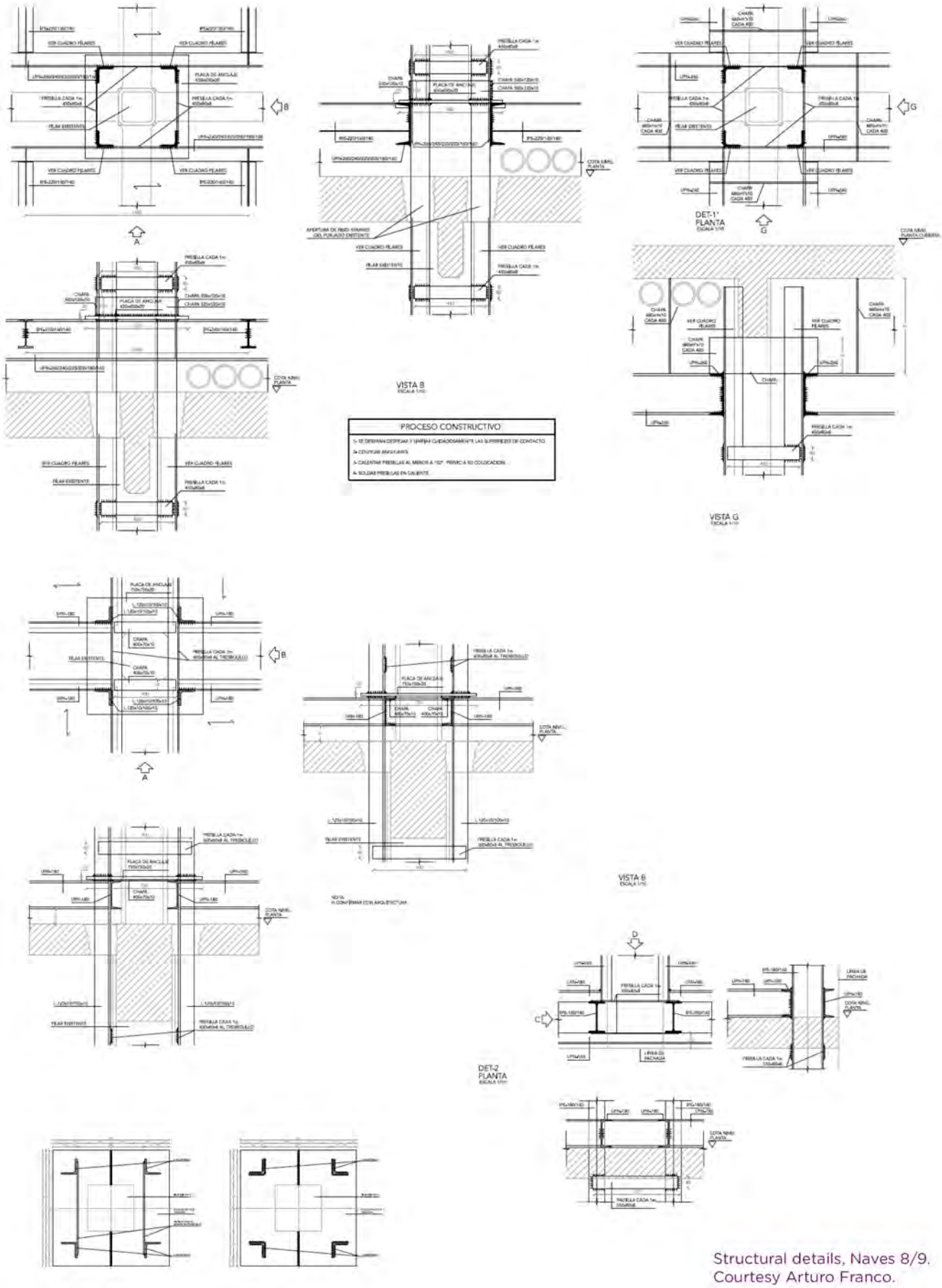


Structural concept diagrams,
Naves 8/9, Arturo Franco.
Courtesy Arturo Franco.

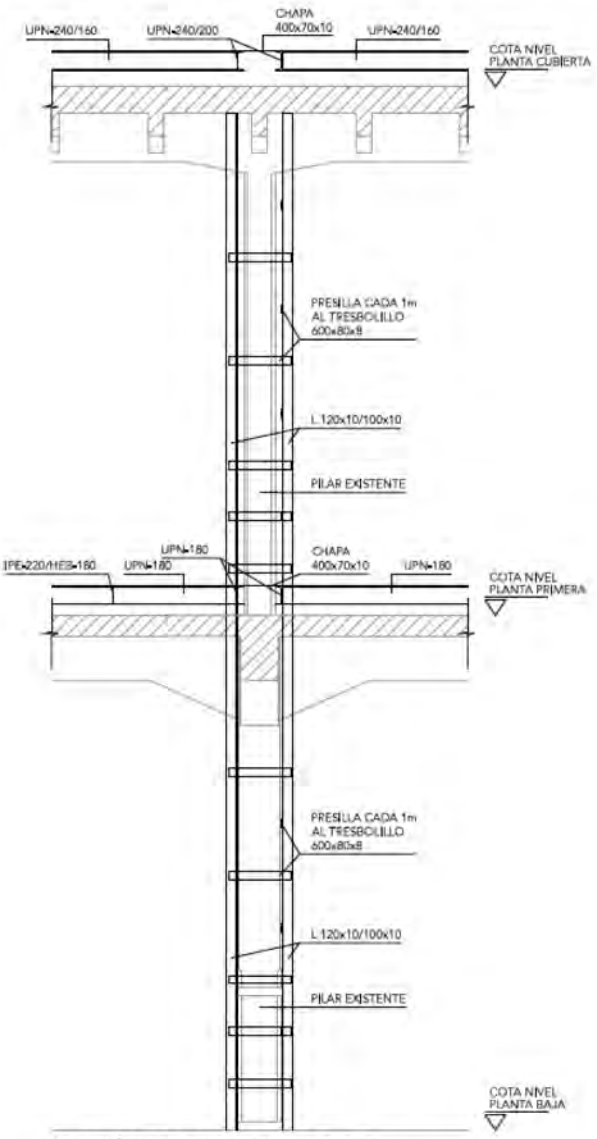


5 NIVELES DE DEBILIDAD ESTRUCTURAL
PARA 5 MODELOS DE REFUERZO
TANTO PARA VIGAS COMO PILARES

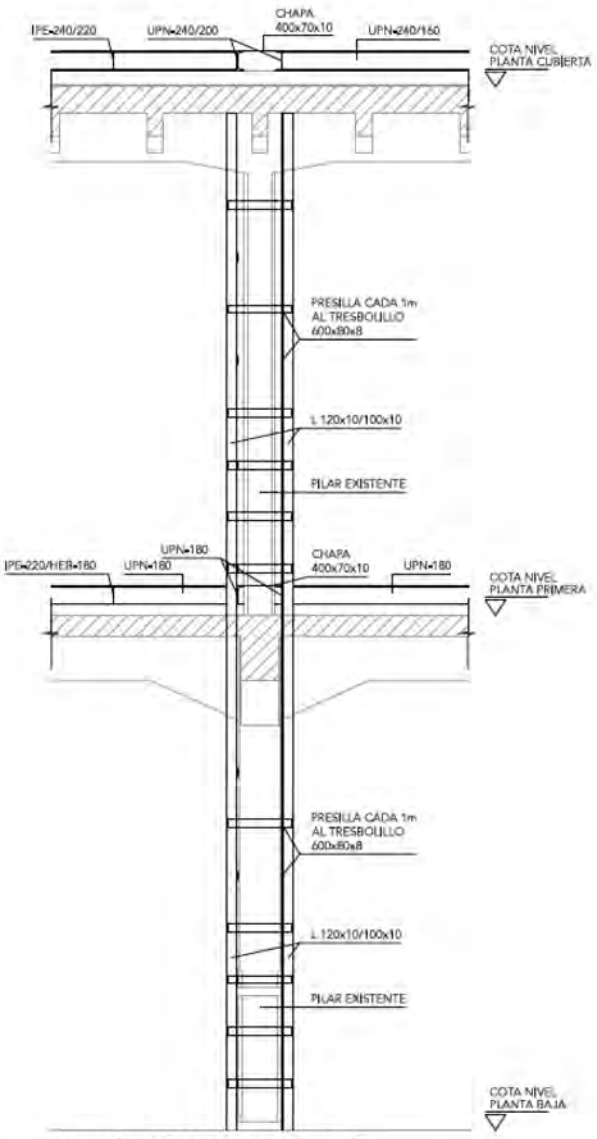




Structural details, Naves 8/9.
Courtesy Arturo Franco.



SECCIÓN LONGITUDINAL NAVE 9.
ESCALA 1/40

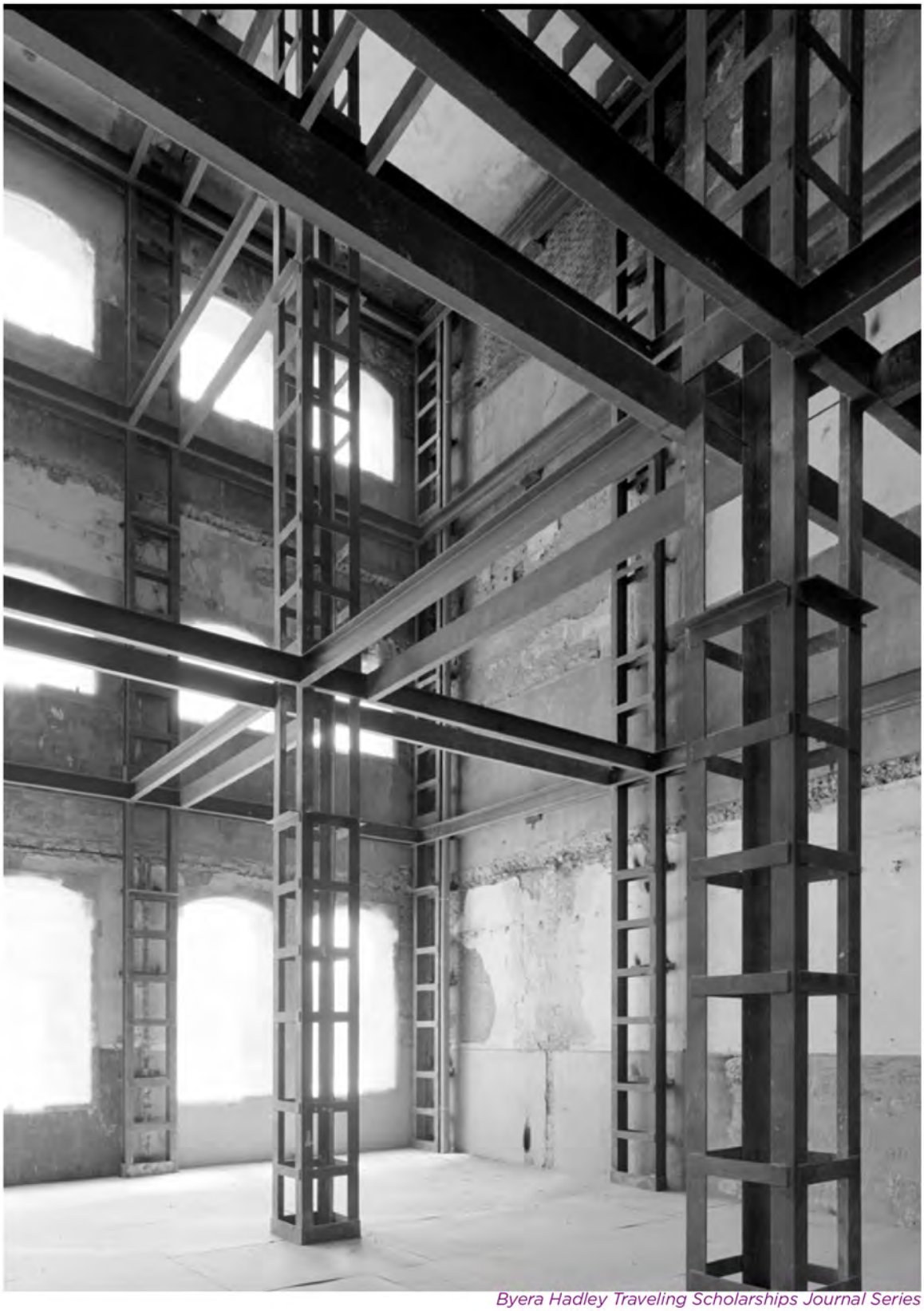


SECCIÓN TRANSVERSAL NAVE 9.
ESCALA 1/40

Structural details, Naves 8/9.
Courtesy Arturo Franco.

Naves 8/9.
Courtesy Arturo Franco.

Naves 8/9.
Courtesy Arturo Franco.



11

CASE STUDY #6

Turó de la Rovira

Project: Turó de la Rovira

Architects: Jansana del la Villa de Paauw, arquitectes SLP, Jordi AAUP. Jordi Romero i associats SLP

Client: Museu d'Historia de Barcelona (MUH-BA)

Developer: Agència de Promoció del Carmel i Entorns S.A

Project Address: Turó de la Rovira, Barcelona

Date: 2009-2011

Budget: 968,332 €

Area: 9,611 sqm

"The land, so heavily charged with traces and with past readings, seems very similar to a palimpsest.... Every land is unique, whence the need to "recycle", to scrape clean once more ...the ancient text where men have written across the irreplaceable surface of the soil, in order to make it available again so that it meets today's needs before being done away with in its turn."

André Corboz, The Land as a Palimpsest

Turó de la Rovira, eastern lookout side.
Photo: William John Maynard

The site is located in the north west of Barcelona. The hill on which the site is located acts as a pivot point for the suburbs of Can Barro and El Carmel.

The site has a palimpsest history of varying uses. Since its early occupation was as an Iberian Village, the site has seen vineyards, orchards, artillery bunkers, recreational public space, squatters, rave parties and informal settlements. Now it is a public space again, administered and owned by Museum of History of Barcelona (MUHBA). A team of architects - Jansana, de la Villa, de Paauw arquitectes SLP, AAUP Jordi Romero i associats SLP – lead the project between 2009-2014. Hydraulic design, landscaping and improved accessibility were key items that the architects addressed. Elevated at 262 meters, the Turó de la Rovira lookout is the highest peak in Barcelona. The rehabilitation of the lookout, located in a marginal area of Barcelona, was realised for less than 100€ p/sqm, and awarded the 2012 European Prize for Urban Public Space.

The design takes a restorative approach. Sensitive to the layered archaeological quality of the site, the interventions are minimal and come in the form of pure building elements. The detailing and placement of the additions read as if there were yet another layer of ruin. Fabricated from - weathering steel, the new items are sculptural and have a sense of finesse.

The application of detailed heritage surveys and scanning produced an understanding of the site that allowed for the surgical placement of the fine steel elements. Aiding the architects were a series of site plans, prepared for various uses, between 1935 and 2010. An inventory of new elements, all unique, have been fitted to particular parts of the ruinous site, often where access needed improving. Unique dimensions required highly accurate site measuring and inventory analysis of the existing structure. This insertion of elements echoes the treatment of the stone in Alvaro Siza and Roberto Collovà rehabilitation of the Sicilian town of Salemi. In Salemi, a massive earthquake left a marred landscape of rubble. Siza inserted select marble elements, rebuilding the form of the preexisting in a material distinct from the original materials used. The approach is referred to in Italian as dov'era e com'era, translating to 'where it was and how it was'. Neither project could be defined as a restoration project; rather in both projects there is a manifest desire to harness the sense of incompleteness.

As comparison, another project with an atypical conceptual approach is Eduardo Souto De Moura's Mercado Cultural Do Carandá, located in Braga, Portugal. The cultural center in Braga was initially built in 1984 as a food and livestock market. An exercise in reverse archeology, the architect selectively demolished and re-used the old building to create a cultural art center. In the first instance, this project revisits an early career work, yet through subsequent design iterations, critiques it. Originally designed as a bridging element between disparate neighborhoods, the building served for many years as both infrastructure (covered walkway) and a commercial/social hub. The functional obsolescence of the market was apparent as the city became denser and the surrounding areas gentrified. Demolishing the original roof and reconstructing a new plan adjacent to the old building allowed the creation of a central courtyard. The ruinous aesthetic created is a preconception. Stripping the structural columns of all finishes and arranging reinforcing like deciduous branches, the project could be mistaken for a construction site. Falsification has taken place and, yet one is led to believe that this truly is the site

Turó de la Rovira, reinforcing steel as handrail. Photo: William John Maynard

Turó de la Rovira, eastern
lookout side.
Photo: William John Maynard

Turó de la Rovira.
Photo: William John Maynard

of a mid-century modernist ruin. Deception here is purely tectonic - a system of order, balance and unification have been realized in an architectural composition that relies on the mythologies of material decay, development and abandonment. Methods of construction are manipulated to make the visitor feel as if they are on a 'traditional' adaptive reuse site, where ruins have been grafted with a new language. Here, construction methods are employed as an apparatus used to inference notions of time and impermanence. Unless the visitor can rely on a prior knowledge of structural assembly, they too may be susceptible to the architect's narrative. However, unlike the Braga Market, where the ruin is a narrative constructed and perpetuated by the architect, at the Turó de la Rovira the ruin is real, and has been foregrounded by the architect. The 'truth' of the two sites is different, yet both exalt a similar aesthetic output, albeit the former obtained and the latter inherited.

The Turó de la Rovira site is conditioned by the acknowledgment of its previous functions, and the inhabitants. In part, the project aims to preserve the remnants of a bastion from the Spanish Civil War. Military infrastructure, platforms, and bunker remains are left in a state of ruin. Records of the shantytown erected in the interim have been also left untouched. Correspondingly, the jury citation for the 2012 European Prize for Urban Public Space reads:

> "This was to be a space conserving history and in memory of a recent and highly relevant past with a lookout that would be accessible to the general public... The care put into renovating this once-marginal space has rid it of vandalism without stripping it of its magic. The residents of the Carmel neighbourhood and visitors from further away now have easier access to a site that offers both fine views and a delicate restoration of ruins. The latter project is educational in its highlighting of the historical value of the site. Some aspects are loaded with the epic nature and drama of war while others speak of the more prosaic but no less relevant drama of newcomers to the city, excluded people who lacked the basic right of housing."[62]

Site Visit

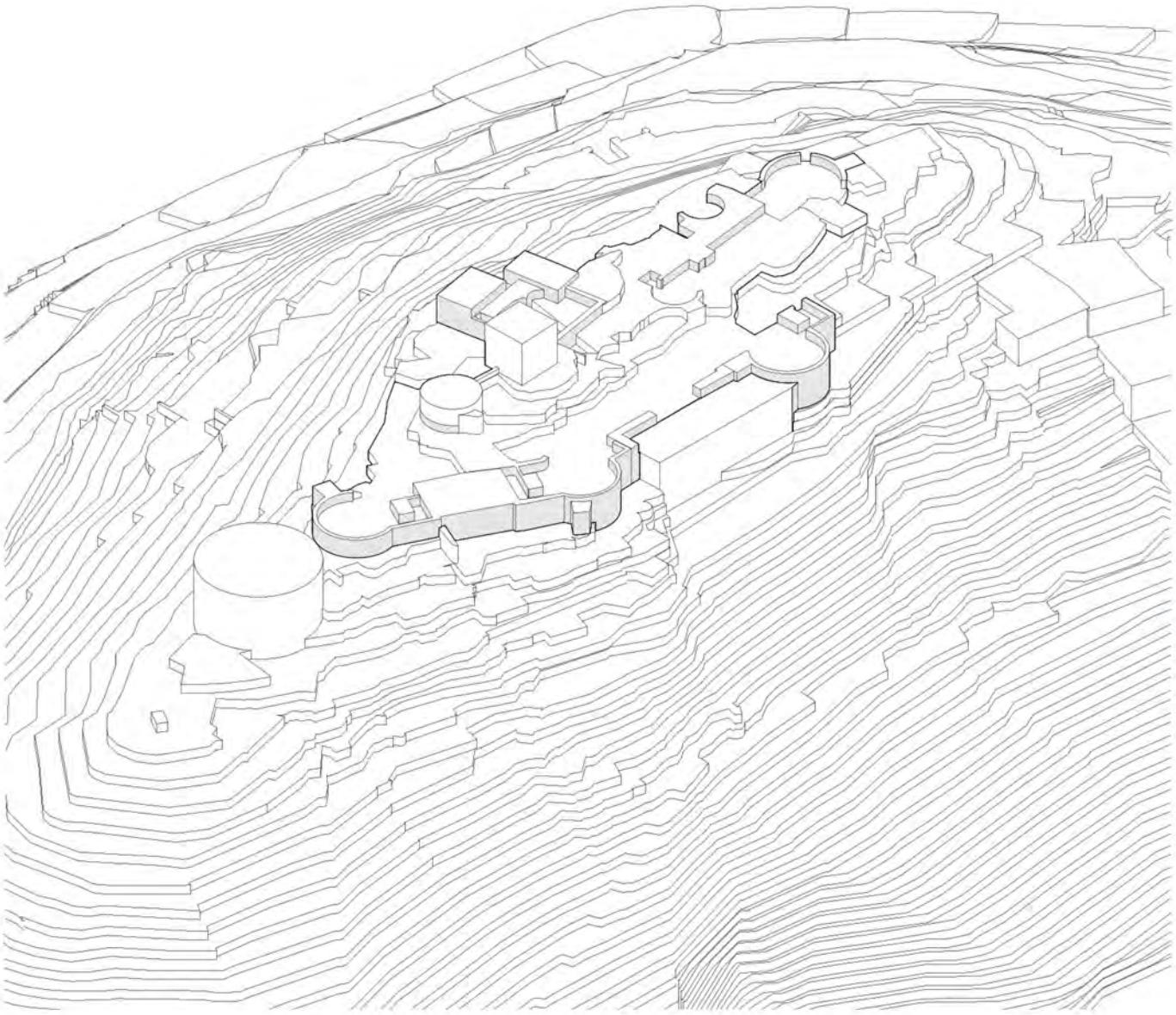
Approaching the Turó de la Rovira, one realises how porous the site is. Access is possible from almost every side. Occupying a citadel position of the hill of Turó de la Rovira, the ascent is steep. The less accessible side is to the northeast, where steep tracks lead through the shrubs, making the summit possible during daylight hours only. The greatest pedestrian flow was through the streets leading up the site. Getting closer, the site itself could be mistaken for a favela. The route takes you past several strips of self-built, yet well maintained houses on the road up, with footprints no bigger than 80m2. It is clear that the leafy residential area south of the hill is separated socio-economically. Mediating the levels changes and providing on-grade entries into the houses are a series of terraced platforms. The regeneration of the street leading to the site was a separate commission, designed by Bosch Capdeferro Arquitectura. Corten steel signs contribute to a clear way-finding strategy, letting visitors know they are on track to their destination.

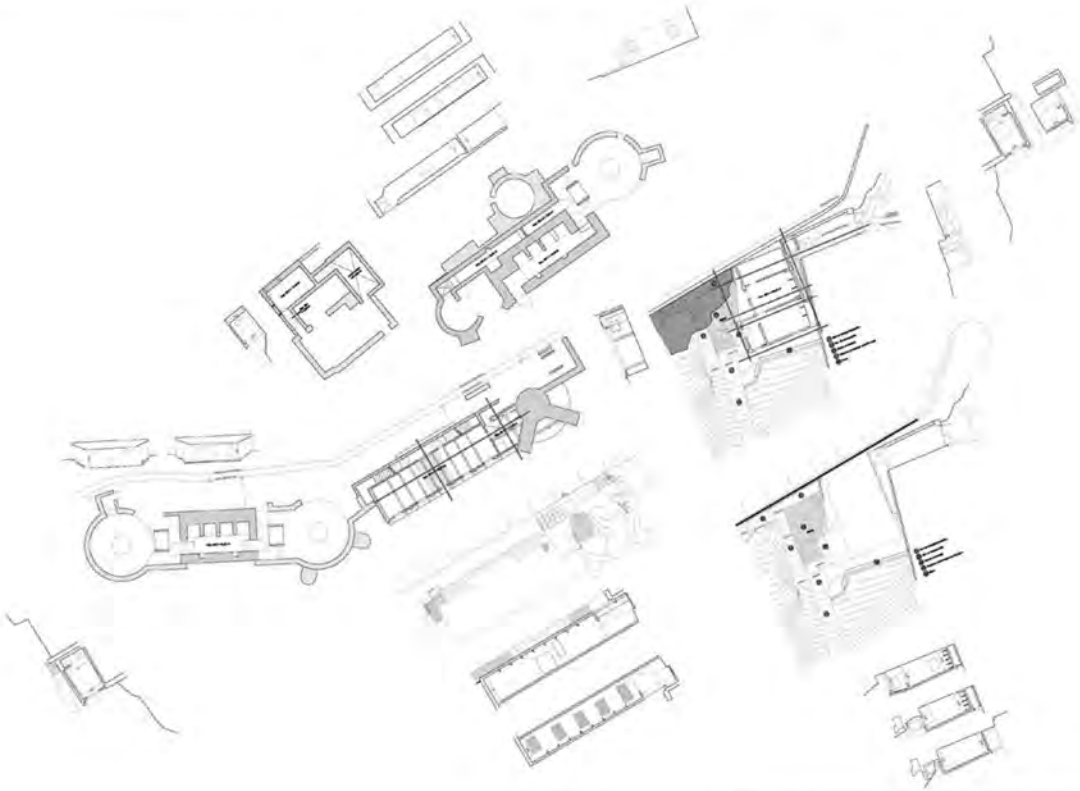
The hill is full of people. A long warm Barcelona evening is good enough reason to be on the hill. There is an expansive view back over the city towards the coast. The distinctive idiosyncrasies of Barcelona are laid out from the vantage point. The chamfered corners of the

Turó de la Rovira, reinforcing steel and flat bar handrails and balustrade details. Photo: William John Maynard

Turó de la Rovira, site plan.
Courtesy Jansana del la Villa de Paauw, arquitectes SLP, Jordi AAUP. Jordi Romero i associats SLP

Opposite:
Axonometric drawing,
Courtesy 'Uninished' website.





Barcelona city blocks set in a grid that is interrupted by a medieval quarter and diagonal avenues. The Sagrada Familia and the Torre Agbar stand above the sea of apartments. Smog hovers over the city limits; container vessels and cruise ships beyond.

Like favelas, the site has many level changes and staircases. These platforms can be understood as the extant remains of a kitchen floor, an artillery room or an agricultural tool shed to name a few. Crumbled walls suggest enclosure. Rows of tiles mark what was a bathroom, whilst anchor points indicate where the artillery guns were positioned.

There is a strong sense of social memory and of the history of habitation on the site. Overlaid on this sensibility the site offers a performative stimulus, in the form of stages and platforms to see and be seen. The public using the space vary from scenes of picnics and socialising, to more entropic alcohol -fuelled groups practising parkour and graffiti. Yet, notable is the variety of civic activity co-existing harmoniously.

The interaction of contemporary architecture and ruins typically involves the separation of conflicts between visitor and site/old and new. This enables protection of the ruin, whilst also magnifying its status as an object of history. This site however, does not in any way attempt to protect or cordon the existing elements. In fact, in OHS terms it is dangerous site with numerous unprotected level changes exceeding 1000mm.

Like many ruinous sites, landscape is encroaching and existing amongst the built form. However, the landscape is another more discreet manipulated reality of the site, existing as a regeneration project rather than a wild hillside. Architect David Bravo Bordas writes:

> "The slopes of the hill have been reforested with different species of Mediterranean pines, concentrated at the lower levels so as not to interfere with the views from the lookout. On the northern side, which overlooks Carmel there is also vegetation adapted to a certain degree of humidity, including carob, fig and olive trees. On the southern slope, facing the sea there are large numbers of prickly pears and Aleppo pines."[63]

> "The care put into renovating this once-marginal space has rid it of vandalism without stripping it of its magic. The residents of the Carmel neighbourhood and visitors from further away now have easier access to a site that offers both fine views and a delicate restoration of ruins. The latter project is educational in its highlighting of the historical value of the site. Some aspects are loaded with the epic nature and drama of war while others speak of the more prosaic but no less relevant drama of newcomers to the city, excluded people who lacked the basic right of housing."[64]

Reflecting on this space, it is hard to locate the genesis of its brilliance. It is both a rich landscape project and an architecturally-loaded urban space. Tectonically, it is deceivingly simple, however, it requires bespoke steelwork and erudite site preparation to create the insertions. It seems neglected, which adds to its freedom of use, yet it is administered by Barcelona's preeminent social history museum.

The hand of the architect is imperceptible, thus the space feels untouched by rigid 'place making'. A delicate archaeological method has been applied to the site, presenting heritage as something to live amongst. There

Turó de la Rovira, view over Barcelona. Courtesy Jansana del la Villa de Paauw, arquitectes SLP, Jordi AAUP. Jordi Romero i associats SLP

Turó de la Rovira.
Photo: William John Maynard

Turó de la Rovira, view over Barcelona. Courtesy Jansana del la Villa de Paauw, arquitectes SLP, Jordi AAUP. Jordi Romero i associats SLP

is a genuine perception of a non-designed space. The users reflect this in the spontaneous and uninhibited use of the precinct.

A major point to understand in this site is that through years of erudite research and collaboration with local stakeholders and consultants, the architects formulated an assiduous position regarding strategy. The strategy itself is so complex, yet the output so minimal. The designers have not taken the brief as an opportunity to overdesign landscape, benches, shading, paving or fountains – and the site is all the better for this astute restraint.

Detail and its articulation can be understood as a way to frame and amplify an 'undetailed' space, unifying disparate elements, and demarcating the site through a set of materials. The detail itself is structural, and often aids access. The material is unfinished, chosen for its low maintenance properties. The act of detailing takes a polemic position - that of not rarefying design, but letting the site dictate the limits of difference, thus creating a bespoke set of elements.

The development of this project over time will be an interesting phenomenon to follow, especially as tourism to the city grows and the site reaches regular capacity.

Turó de la Rovira hirotical photographs of occupation. Courtesy MUHBA.

12

Postcript

The projects discussed in this report have shared qualities. Typically, all of the existing buildings were not of conventional noteworthy architectural value, did not have heritage protection prior to intervention, and/or were not existing cultural or educational institutions. The buildings were in many ways outside of the realm of architecture.

The detailing employed in all of these projects is refined, yet utterly simple in its experience, if not its execution. This is in comparison to rarefied detailing which often accompanies adaptive reuse projects visited in Germany, and those located in Australia. There is also a sense of maintaining an incomplete state, leaving the building open for further interpretation and development. This is a key point, as the alternative could have been to design them as 'closed systems' – finished in the eyes of public and client. The architect's design choice to leave them open-ended is fundamental to the success of the project. Otero-Pailos again brings an astute reading of incompleteness in adaptive reuse, noting that:

> "...other architects have tried to put the aesthetics of incompleteness back in the service of old modernist ways of making and thinking. For instance, Rem Koolhaas has for some time now been aestheticizing unfinished construction. A prime example are the drywall panels in the basement of his Prada store in Manhattan, which were purposefully made to appear as though they lacked the last coat of paint, a gesture he has since repeated in other buildings. Clearly, this was not an invitation to complete the work, but rather an attempt to frustrate the possibility of historical closure. However feebly, the work resists being inscribed in some master narrative of historical evolution—a commendable direction. For how should we date the work if it is not complete?"[66]

Next, technology and its affects on detailing was key to the hypothesis of this report. It is true that rapid prototyping and the printing of components presents the potential for project-specific experimentation in adaptive reuse projects. In fact, the desktop research shows that GIS and data based technology is being widely used for heritage surveying. However, I found the practices I visited were not concerned with the use of integrated modeling software, BIM or parametric tools. In fact, several offices were still hand-drawing construction documents, and all of the practices maintained close relationships with trades on site. In many ways there is a low technological approach reflected in the preferred drawing methods, which varied between firms, but a commonality was a resistance to working from CAD-based software exclusively. It has been noted of Elorza that

> "his drawings carefully upturn the expectations of realism and objectivity in architectural representation. Elorza's soft-edged drawings pay no heed to scale or to the geometric exactitude of perspective. Buildings almost disappear into the ether of a page where people, pergolas, plants and trees take center stage. The pseudo naïve hand sketch, once the common currency of modernist architects made famous by Le Corbusier, now appears as a challenge to the hegemony of computer-aided representation in the name of individual creativity."[67]

When meeting with Hector Elorza in his Madrid apartment he also stressed that drawing by hand was his preferred method of communicating in competitions. Elorza transplants this technique into a contemporary practice, and in so doing, he makes it a radical act. In fact, Elorza has just won a 2nd stage competition for a public building in Madrid by submitting one large hand drawn pen sketch, in his recognisable style.

Correspondingly, the addition of layers and re-use of structure, posits these buildings within a larger cultural continuum, wherein architecture evolves in step with the citizen. Ongoing additions can become part of the rich and complex processes that created the building without erasing the existing fabric, or creating a scheme that disallows further interventions.

Ultimately, the renewal of old buildings has the potential to accelerate cultural growth in cities. Adaptive reuse can extend the life of inoperative buildings, thereby providing an opportunity for architectural production. While adaptive reuse is an established architectural practice, there are a limited number of practitioners working in the liminal zone where preservation is called into question by not adhering to established conventions of intervention in historic stock.

One way to continue the discussion about the changing use of historic buildings is to analyse further construction detailing. There is the potential for detail to be both an architectural generator and a design tool in adaptive reuse. Further research will in turn allow for a nuanced discussion of how and why construction has changed in adaptive reuse, specifically in contexts affected by extraneous economic and material shortages. Potentially, these examined architectural projects, which operate on the fringes of mainstream adaptive reuse, will in fact become models for how to proceed sustainably with adapting buildings on low budgets.

13

NOTES ON ITINERARY + TRAVEL

During the travel period of the scholarship, I visited numerous Spanish and Portuguese projects, as well as projects. Projects visited as a result of the scholarship are listed below. Then follows a small travel diary highlighting formative projects that contributed further to this research.

Spain:

- Santa Caterina Pathway, David Closes, Manresa, 2015
- Convent De Sant Francesc, David Closes, Santpedor, 2011
- New Beckett Theatre, Flores & Prats Arquitectos, Barcelona, 2016.
- Intermediae Matadero, Arturo Franco, Madrid, 2006
- Architectural Documentation Centre in Madrid, Aparicio + Fernández-Elorza, 2004
- Turó de la Rovira, Jansana, de la Villa, de Paauw arquitectes SLP, AAUP Jordi Romero i associats SLP, Barcelona, 2011
- Caixa Forum Barcelona, Arata Isozaki, Barcelona, 2002
- Caixa forum, Herzog & De Meuron, Madrid, 2008
- Reina Sofia Madrid, Jean Nouvel, 1999.
- Building 8b, Arturo Franco, Madrid, 2009
- Salvador Puig Memorial & Street Atop A Square, Nico Aparicio & Gerard Cuartero, Barcelona 2015
- Renewal And Extension Of Montserrat Square, David Closes, Manresa, 2010
- Plaza De Los Amantes De Teruel, José Ignacio Linazasoro, Teruel, 2013
- Teruel Urban Development, David Chipperfield And Fermin Vázquez Huarte-Mendicoa, Teruel, 2005.
- Banyoles Old Town Refurbishment, Josep Mias Architects, Banyoles, 2008
- Born Market, Vora Architects, Barcelona, 2013
- Vila Closes park, David Closes, Manresa, 2009
- Adaptation Of The Ancient Roman Deposit Of Can Tacó, Toni Gironès, Barcelona, 2012
- Jordi Badia, 2008
- Igualada Cemetery, Enric Miralles, 1994
- Olympic Archery Range, Enric Miralles & Carme Pinos, 1992
- Biblioteca Enric Miralles, Palafolls, 1998-2007
- La Barceloneta Antonio Coderch, 1951 – 1955
- Barcelona Pavilion Mies Van Der Rohe, 1929
- Biblioteca Jaume Fuster, Josep Llinas, 2001- 2005
- Torre Agbar, Jean Nouvel, 1999
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14

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15

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