

Architectural Affordances is a collection of drawings that trace transformations in thirty buildings over time. Organized into three categories based on time-periods and life cycles – centuries, over one hundred years, and less than a hundred years –, the atlas gathers consistent floor plans, sections, and elevations that facilitate the study of *Umbau* as major and minor transformations of buildings alongside yellow-red plans. These transformation, extension and redevelopment projects were compiled through a call for papers and drawn and assembled by international architects from both practice and academia. The resulting atlas not only depicts changes in the material composition but also presents the mediation of forms and functions as a temporally and socially conditioned appropriation of affordances offered by built spatial arrangements. What the constants of primary construction elements illustrate are a certain resistance to change, which can endure for centuries, while individual objects, non-load-bearing walls, surfaces, or furnishings, as well as the accommodation of specific uses, possess a more temporary character. The interplay among these different time-periods creates gaps that we, as architects, bridge creatively through drawing. Therefore, architectural drawing plays a central role in the book not only as a form of notation for architectural ideas, allowing us to forge new/old bridges towards a theory of transformation, but also as evidence and recognition of the generative potentials of architectural types. As *Typologies of Umbau*, the gathered projects illustrate a familiar tension. Historical buildings seemingly align with architectural types – as formal structures or concepts of organizing forms that give architectural elements a recognizable order, allowing for centuries of diverse uses and adaptations. The potential separation of the building envelope from the load-bearing structure in modern construction requires the designer to make a further effort and challenge, both in terms of interpretation and autonomy.

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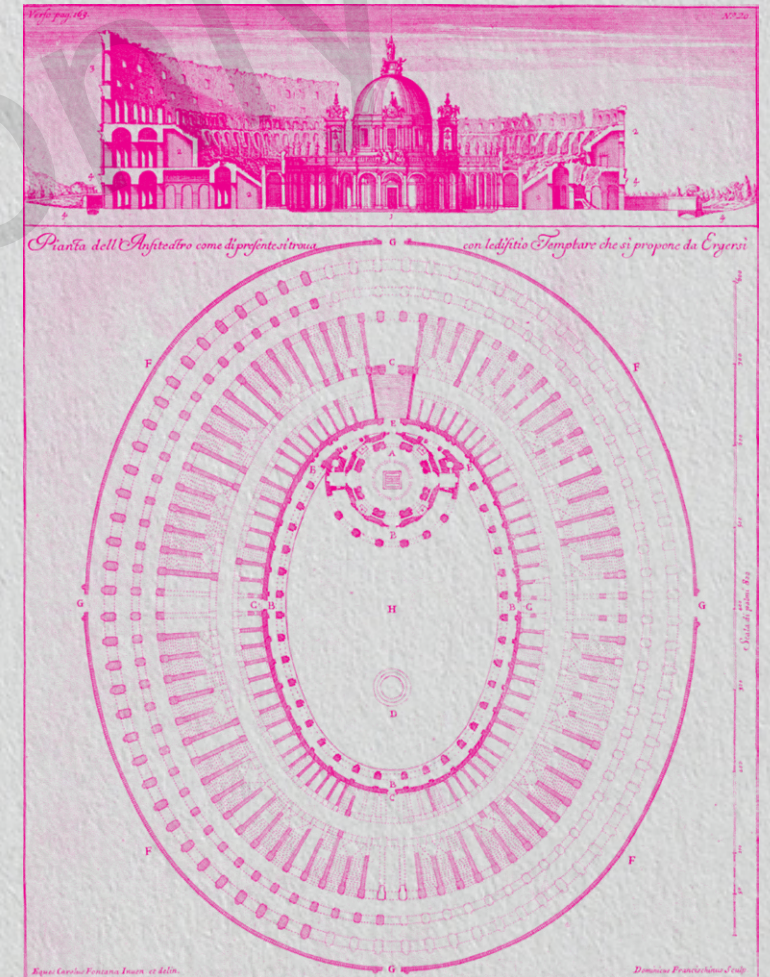
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Teaching Interiors

Architectural Affordances – Typologies of Umbau

Architectural Affordances Typologies of Umbau



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It was Henry Corbin’s gift to enable us to experience in this room thoughts that come from another language and culture, as if they were of our own hearts. He spoke from within his speech; he was his words. This rhetorical imaginative power is himma of which Corbin writes in his study of Ibn ‘Arabī. This power of the heart is what is specifically designated by the word himma, a word whose content is perhaps best suggested by the Greek word enthymesis, which signifies the act of meditating, conceiving. Imagining, projecting, ardently desiring – in other words, of having (something) present in the thymos, which is vital force, soul, heart, intention, thought, desire.

James Hillman, The Captive Heart

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Architectural Affordances. Typologies of Umbau
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Architectural Affordances Typologies of Umbau

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Introduction

This book is the culmination of a design-driven research initiative aimed at exploring sustainable design strategies for resilient building structures that are fundamentally architectural in nature. The research is illustrated through a curated collection of drawings that documents the transformations of 30 buildings over time. These transformations are categorized into three distinct time periods, and the resulting atlas compiles consistent floor plans, sections, and elevations that facilitate the study of *Umbau* – a term encapsulating both major and minor modifications of buildings, highlighted through yellow-red drawings.

The German term *Umbau* conveys a range of meanings, encompassing transformations, adaptations, extensions, and redevelopments that refer to the variety of projects included in this study. The projects were gathered via a call for papers and were drawn and compiled by international architects from both practice and academia. The objective was to depict changes in the material composition of proposed structures, showcasing the mediation of forms and functions as a temporally and socially conditioned appropriation of affordances offered by the generative potentials of architectural types. The dynamic interplay between primary construction elements and individual objects, such as non-load-bearing walls, creates gaps that architects creatively bridge through drawings. These drawings were thus at the center of our call for papers «through drawings». After receiving almost a hundred project abstracts, together with our scientific board, we started to narrow the projects down to a promising selection that – in the end – led to the 30 transformation projects that you now find featured in this book. The call, selection, and drawing criteria are further explained in our first two essays.

This research explores the affordances of architectural typologies in two interrelated directions. First, affordances are redefined as an extension of the concept of type. The reuse projects featured in this atlas demonstrate that beyond meeting specific functional needs, achieving typological clarity is essential for ensuring architectural quality and integrity, while also providing adaptability for future transformations. Second, fostering resilient architectural design requires revisiting the post-functional critique of typology. This involves perceiving type as an epistemological framework within the architectural discipline – one that renews, reuses, and recycles both the knowledge and materiality of buildings. It thus supports the ongoing transformation of the urban landscape, a perspective that aligns with Hermann Czech's 1989 essay *Transformation*, which concludes the architectural theory of transformation presented in this book.

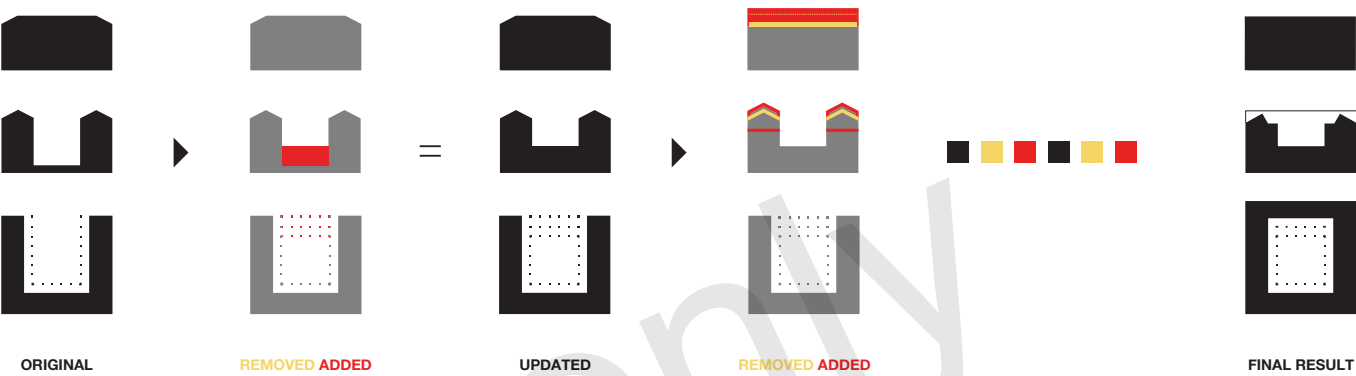
The English translation of the title of Czech's essay as *Transformation* differs from the more expansive meaning of the original German *Umbau*. As a verb, *Umbau* can refer to both transforming an existing structure and building something new around something not necessarily structural. This subtle linguistic difference hints at the subjective nature of architecture and design, which are captured through drawing and mapping, as illustrated on the book's cover.

Carlo Fontana's ambitious 18th-century project to build a church within the Colosseum aligns floor plan, elevation, and section – much like this book's atlas does. However, this formal alignment barely contains the speculative nature of architecture. On the contrary, the disconnection of the drawing from time and place invites the possibility of imagining and recording alternative futures, even if, as in Fontana's case, they remain unrealized – perhaps for the better.

Of course, with type we are also reminded of Aldo Rossi's reinterpretation of Rationalism, which critiques the naïve Functionalism of modernism. Rossi contends that architecture's character emerges not from technical, economic, or social conditions, but from timeless, permanent elements that reflect its essence. This view also aligns with Adolf Behne's mid-1920ies concept of Rationalism, which balances norms and creativity, contrasting with Functionalism's rigid adaptation to specific purposes. The (neo-)rationalist design process thus advocates for formal generalization in order to enable functional freedom for the future but suggests that form should be derived from the study of (existing) forms rather than directly from function.

This is what the drawings, the notes and descriptions in this book facilitate as an atlas. As they are sourced from various projects, they underscore that the “truth” of these typologies lies not in their timelessness but in their careful and timely negotiation. This negotiation is at the center of our attention and highlights the expertise of architecture as the art and science of building. It emphasizes the importance of rationally penetrable, viable, and verifiable facts in architecture drawings. Our quest for *typological clarity* is thereby unavoidably connected to drawings and formal study. This promotes a nuanced understanding of architecture that integrates – and transcends – sociological, technological, and functional aspects of sustainability. The first text, “Affordances of Architectural Typology”, by Andreas Lechner and Gennaro Postiglione, describes our motivations, literature and methodological considerations for this research further. Francesca Serrazanetti and Maike Gold then go on to explore the role of drawings in unpacking the temporal dimension of buildings, arguing that architectural transformation should be considered in terms of temporality rather than historicity, and emphasising the importance of future-oriented design. Their contribution, “Unpacking temporality through drawing”, leads up to the first suite of drawings of projects with the longest life cycles.

Victoria Easton – a member of our scientific board – follows with “Typology: An Emotional Rationalisation of the Existing”, describing typological studies in architecture as research on building types that later inform design. She refers to Giorgio Grassi's essay “Analysis and Design”, where he posits that there is no distinct break between analysis and design, as both processes are intertwined and involve the architect's decision-making. This continuous process relies on typology as a tool, requiring a subjective stance that is rationalized through a systematic approach. Due to the inherent inconsistency of types, there is room for creative reinterpretation. Easton sees the case studies in this book illustrating various



Research method developed and applied to the Atlas: yellow-red drawings diagram

typological strategies, such as functional shifts, spatial expansions, and formal transformations, demonstrating that typology's essence lies in its adaptability and capacity for renewal. Typological studies thus offer insights into creating buildings with lasting structural and formal qualities – a pre-requisite if we want to address today's ecological challenges that require a deep understanding of architectural precedents, allowing for logical analysis and deliberate criteria for preservation and adaptation. Balancing rationalization with emotional intuition, Easton refers to Oswald Mathias Ungers' advocacy for an «emotional rationalization» of existing structures to guide future architectural endeavours.

After the suite of mostly 19th century projects, Eva Kuss investigates Hermann Czech's *Umbau* as an architectural-theoretical concept. Czech penned the essay “Umbau” (Transformation) for an exhibition on Adolf Loos at Vienna's Albertina Museum. Czech explores the concept of *Umbau*, applying it to Loos' architectural philosophy and broader architectural practice, distinguishing it from mere renovations. By examining Loos's works, Czech highlights the nuanced understanding of *Umbau*, emphasizing its significance beyond simple physical changes to encompass broader cultural and societal shifts. His method involved creating a dialogue between old and new elements, resulting in entirely new works. His approach extended to new buildings, viewing architectural forms as cultural achievements rather than individual creations. Czech's own works, such as the Kleines Café (1970-1974) and the Generations Living housing project (2007-2011), embody the *Umbau* concept – as discussed by Eva Kuss in her contribution –, representing a reflective, dynamic relationship with buildings, blending preservation and change. This design logic meets contemporary needs for recycling, sustainability, and user engagement, offering a complex alternative to traditional architectural practices.

Angelo Lunati's contribution is “The Possibility of Change: Assemblages, Accumulations, Contextual Adaptations”. He was also a member of the scientific board and is, with Giancarlo Floridi and his office Onsite-studio, the author of one of the transformation projects featured in the third section of projects of the 20th century in the book. Lunati argues that architectural meaning emerges from two spheres: the connection to architectural precedents, linking buildings to a wider cultural discourse, and the response to contextual conditions – whether physical, geographical, or cultural. This balance between universal typology and specific context constitutes architecture's highest ambition. European cities exemplify this,

where buildings accrue meaning through centuries of transformation. In Milan, the Ca' Granda, founded as a hospital in the 15th century, showcases typology's adaptability. Its simple original design has endured and supported numerous adaptations and additions, reflecting unity despite diverse transformations. Notable architects – during the centuries – like Filarete (15th century) Richini (17th century), Piero Portaluppi and Liliana Grassi (after 1949) have contributed to its evolution, illustrating how typological quality frames these changes. Similarly, the San Nazaro church demonstrates how buildings adapt to the context. Built in 385, it has undergone significant transformations, including Romanesque reconstruction and Bramantino's 16th century mausoleum. These adaptations redefine the relationship between the building and its context, enhancing its spatial and material quality.

After the last category of projects' presentation, as a conclusion of our Atlas, Hermann Czech's (reprinted) “Umbau” (here “Transformation”) – as already mentioned – elaborates the dialectic of preservation and change as both intention and implication with reference to Adolf Loos, who «seeks to take up everything in an existing culture that serves advancement». And he concludes convincingly: «What is characteristic of transformations – we now return to architectural design – is that decisions have already been implemented. When one recognizes that every design process consists of a series of decisions, and that later decisions are determined by earlier ones, it will make no essential difference whether the earlier decisions were one's own or someone else's. Each step of the design process contains specifications that subsequent thoughts must either accept or reject».

With this design conclusion, we want to send heartfelt thanks to all the contributors and authors for their enthusiasm. Thanks to our colleagues on the scientific board: Matthias Ballestrem, Marco Bovati, Antonio Carvalho, Lorenzo De Chiffre, Victoria Easton, Angelo Lunati and Paola Scala, who played a fundamental role in the evaluation and selection, together with the curatorial team, of all proposals received by our Call for Papers (by drawings). A special thank owe to be addressed to Eva Kuss and Hermann Czech, for the relevant contribution of their essays.

Last but not least, thanks to the Department of Architecture and Urban Studies at Politecnico di Milano, which – upon the invitation of Gennaro Postiglione – in 2023 hosted Andreas Lechner for a long Research Visiting Fellowship that brought together the authors' team and laid the way to the kick-off of this endeavour.

Affordances of Architectural Typology

Gennaro Postiglione, Andreas Lechner

Beyond Adaptive Reuse

Especially in the last two decades, the practice of adaptive reuse, involving the saving and transformation of existing buildings, has gained considerable prominence and has evolved into a distinct field of study and practice, separate from traditional building conservation and evident in both practical projects and scholarly research. The architectural spectrum, from renowned architects to community-driven initiatives, now embraces adaptive reuse as a flourishing and varied practice. The associated aesthetics have gained popularity among both clients and the public, leading to increased attention from architectural and conservation communities. Adaptive reuse plays a vital role in addressing urgent urban challenges, cultural preservation, and economic considerations related to the growing and diverse, redundant building stock. Policy support for adaptive reuse has expanded beyond heritage protection, with entities such as the European Union incorporating it into their agendas. The global push for carbon emission reduction, prompted by the climate emergency, has further propelled adaptive reuse as a preferred strategy to demolition and replacement. Architectural education has also started to incorporate adaptive reuse into its curriculum and the discourse on adaptive reuse has become a mainstream and relevant topic. Authors writing on the subject in the past decade emphasized its crucial role in responding to contemporary challenges, and the cultural attitude of *Reduce, Reuse, Recycle* aligns with the ethos of the twenty-first century, where everything is valued for its usefulness, purpose, and authenticity. This mindset has fueled growing literature on adaptive reuse, reflecting its increasing importance¹. The recent international colloquium *As Found* by Hasselt University and the Flanders Architecture Institute at Antwerp's De Singel as well as the *cahier Trace – Notes on adaptive reuse*, an annual peer-reviewed publication by the research group *Trace* at the same university, indicate important nodes in the formation and establishment of an international network of researchers and practitioners.

Conceptually, though, interpretations of adaptive reuse vary due to authors' disciplinary backgrounds, traditions, and agendas. While some see it as a broad practice within architectural design, others consider it a specific practice within interior architecture. The ongoing debate attempts to clarify terminology and definitions, but the multitude of terms and interpretations hinders the establishment of a shared foundation for discussion. The relationship between the old and the new remains a central theme, often discussed as a moment of disjunction between form and function. However, there is no concluding definition of adaptive reuse as the duality between old and new may very well exceed more obvious material, functional or cultural opposition². Resulting from this, the authors' research project *Affordances of Architectural Typology* puts forward a processual approach around the design of the «unaltered». What follows is the description of the central

tenets of this research project as an illustration of, and illustrated search for, a balancing of design work into a future-proof and enabling background of non-design or typological design –an identification of the affordances resulting from a building's type. This, in some cases, can eventually also result in a consistent transformation of the existing fabric aiming at improving its «typological» quality. With it, we advocate for a fundamental and specific architectural design expertise for securing the resilience of buildings.

Architectural Typology

The inconclusiveness of the literature and theory review on adaptive reuse can, with a grain of salt, be compared to the discussions of type in architecture. The many published anecdotal cases of adaptive reuse projects are, of course, the models that cannot be simply summed up and categorized into a neat and undisputed system of types. This brings back the question of typology or the question of the nature of architectural work, as Spanish architect Rafael Moneo wrote in his seminal essay “On Typology”³. For Moneo, it is up to each generation of architects to use «typology» to redefine the nature of architecture and its problems. As a direct index of politics, typologies allow us to understand how even the most mundane aspect of architecture – the disposition of primary structures and spatial elements –determine a subject's experience of space and form the basis for both the identification and the affordances of given structures.

Beyond the pragmatic aspects of repurposing buildings, this identification of the affordances as cultural and historical dimensions of the urban environment, and as a repository of architectural form that emphasizes continuity, is of course one of the central tenets of Aldo Rossi's understanding of type. Beyond today's seemingly conventional idea of repurposing existing buildings for contemporary functions, this understanding not only discredited naïve Post-War functionalism and recognized the significance of architectural artefacts in conveying the collective memory of a city, but also established the notion that buildings and urban elements are never isolated entities, as they are part of a larger and evolving urban fabric. Architectural forms are rooted in these historical and cultural contexts and are not mere physical structures as they are also carriers of meaning and collective identity, whether they be buildings, streets, or public spaces. Drawing on these and *La Tendenza's* theories, Carlos Martí Arís understands type also as a condensation of historical experience and codified knowledge without calling continuous and creative development into question⁴. For him, type in architecture presupposes a degree of abstraction that modern thought provides. His thesis that architecture is based on general principles and archetypal forms understands type as an organizing principle that forms elements into a structure through specific relationships. These relationships of structure and elements emphasize

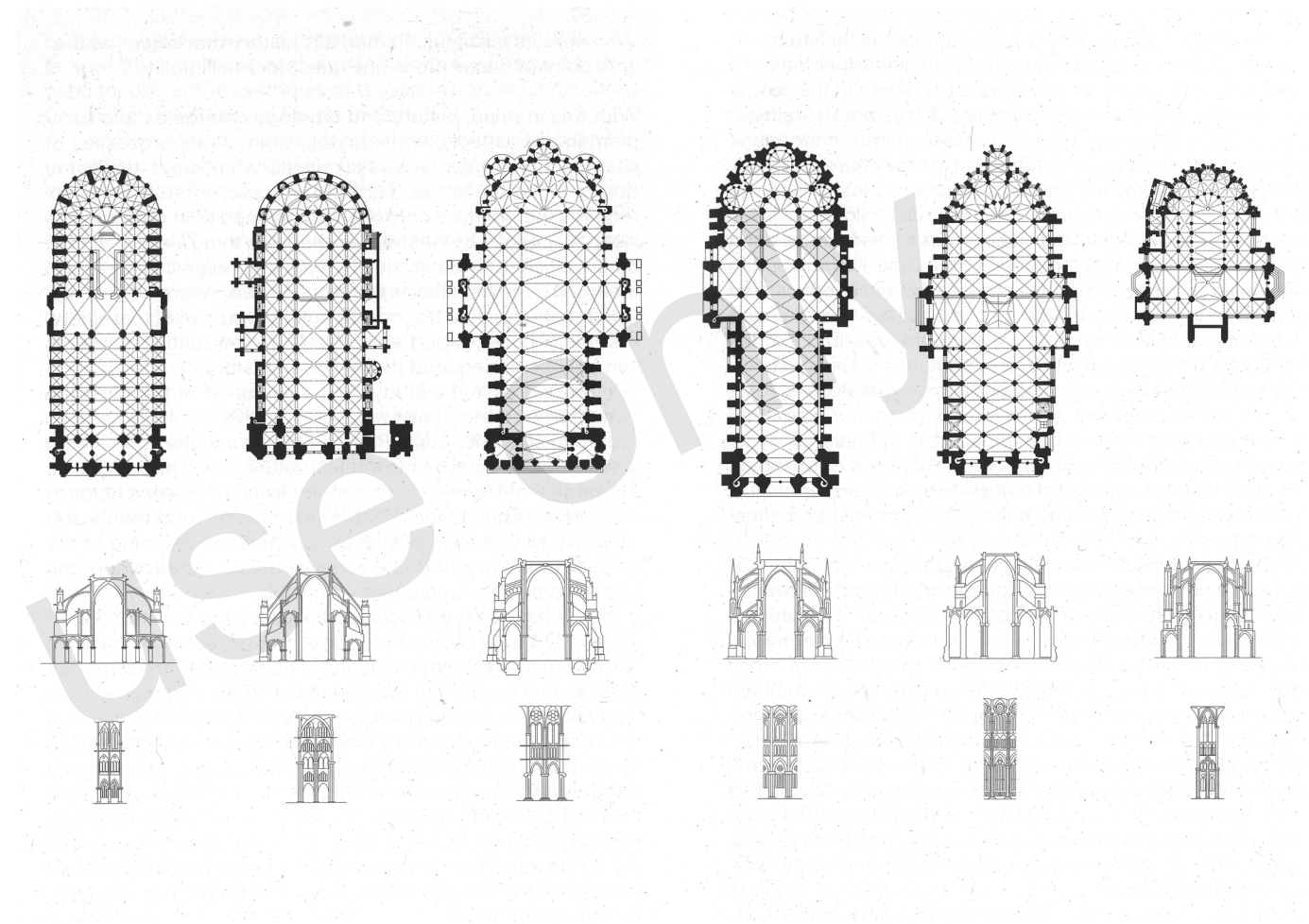


Fig. 1. The Great French Gothic cathedrals of the 12th and early 13th century: Paris, Bourges, Chartres, Reims, Amiens and Beauvais. Plans, sections and details. From Carlos Martí Arís, *Le variazioni dell'identità. Il tipo in architettura*, CittàStudi, Milano 1990, pp. 22-23.

the importance of the terminology related to buildings and their elements and of being able to precisely describe architecture. Because in order to develop architectural knowledge further, it must be viable to descriptions and thus to communication that can be shared and extended. Typological analysis is researching into, and explaining, structural similarities that are – with maybe the exception of housing – not necessarily tied to conventional uses (Fig. 1). Thus, the importance of observation and comparison becomes obviously central not only to typological knowledge but also to any form of developing and furthering knowledge in architecture. Martí Arís also decidedly distinguishes this typological understanding of structure from semiotic structuralism, when he shows how types function as elementary architectural structures and emphasizes that the constant transformation of architecture is a result of continuous (societal) change and its *longue durée*. Although the challenges of identifying typological foundations in modern architecture become fairly obvious when we compare them to the monolithic character of traditional architecture, we want to go beyond the fragmentary and fragmentable forms

of modernism to update Martí Arís' conviction that type has not lost its operative capacity in contemporary architecture but should rather be considered as a fundamental condition for an action with an outcome that is not predetermined.

Regarding today's important and necessary Vitruvian tenets of sustainability, adaptability, and aesthetic delight – an urgency also expressed by the *New European Bauhaus* initiative launched by the European Commission in 2020 in order to connect the *European Green Deal* to the desirable quality, sustainability, and inclusiveness of our living spaces – we are ever more strictly bound to study and teach the ability of assessing a building's quality. The reason for that is simple: to enhance the quality of architecture, it is imperative to understand how buildings succeed or fail in terms of sustainability, adaptability, and aesthetic appeal. Despite the superficial similarities among buildings, their longevity, flexibility, and careful design vary greatly. The typological analysis that we propose here is thus foremost a comprehensive evaluation of a design's spatial characteristics or a building's physical

evidence through a thorough architectural analysis. As a reflection of the structural context of an existing building, this understanding proposes an update of and a clarification on the role of type today, which responds to the seemingly paradoxical responsibility of coming up with future-proof design solutions for an uncertain future.

Affordances

Cross-reading typology according to cognitive psychologist James J. Gibson’s concept of *affordances* aims at clarifying these design potentials. On the one hand, *affordances* react to the ecological and pedagogical imperative of bringing building adaption more prominently into the design studio. On the other hand, the concept of *affordances* helps to define and sharpen an important update of architectural expertise, because: «An affordance cuts across the dichotomy of subjective-objective and helps us to understand its inadequacy. It is equally a fact of the environment and a fact of behavior. It is both physical and psychical, yet neither. An affordance points both ways, to the environment and to the observer»⁵. This novel perspective on the relationship between the built environment and human perception describes potential actions that the environment enables or affords to an individual – very similar to being tasked with the adaption, renewal, or extension of more or less recurring structures. The concept of affordances seeks to understand how people interact with and experience spaces, furniture or spatial elements and installations. In the context of architecture, affordances refer to inherent qualities of a space or a structure that open to an undetermined number of possible uses or actions for its occupants, rather than focusing solely on the physical attributes of a building, and therefore, Gibson’s theory emphasizes the dynamic and reciprocal relationship between the environment and the individual. This perspective moves away from a purely formal or aesthetic analysis of architecture and instead explores how the design of a space interacts with human behavior and perception.

Architectural affordances thus encompass the range of elements of architectural analysis, including spatial configurations, material qualities, and the overall layout of a building, and extend it to future possibilities. For example, a staircase affords climbing, a door affords opening, and a chair affords sitting, but these (primary) affordances (namely, their functional programs) are not solely determined by the physical properties of the intentional objects but can also be extended to other elements-stairs or window sills for sitting, pergolas for the protection from and the harvesting of the sun’s energy. Affordances are both designed and a matter of the perceptual and cognitive capabilities of the individuals interacting with them. The design of a space, therefore, becomes a language that intuitively communicates potential actions and behaviors to its users. Just like Rossi’s complex and reciprocal understanding of architecture

and the city, Gibson’s affordance theory also challenges more traditional notions of architectural typology, which tends to categorize buildings based on reductive form-function relationships by far. Instead, affordances introduce a more dynamic and user-centered approach to understanding architectural potentialities, as the concept also emphasizes the importance of context in shaping perception and behavior. A space’s affordances are not universal but depend on the cultural, social, and individual factors that influence how people interpret and interact with their environment. This contextual sensitivity encourages architects to consider the relevance of spatial qualities over the simple functional program in the design process, fostering a more inclusive and adaptable approach to architecture.

In conclusion, Gibson’s concept of affordances impacts architecture theory and typology by shifting the focus from static forms to the dynamic relationship between the built environment and its users. The theory of affordances provides a framework for understanding how architectural elements communicate possibilities for action, influencing human behavior and experience. They extend the understanding of architectural types – constantly recurring linear, radial, domed or reticulated structures, courtyards, or towers – as past and future building blocks that transcend temporal and geographic boundaries only to be constantly reused. What once challenged the modernist emphasis on universal principles and its rejection of historical precedents has today become the center of both our rational and intuitive attention: affordances of the material composition of a building as a (process of) mediation between forms and functions belong to different timescales. This correlation of architectural typologies with affordances is thus an index of longevity, as it illustrates how a building adapts to or enables different uses and habitation over time.

But how is access granted to this index? And is it exclusively through cartographic methods that we can develop this index further? Is it the descriptive combination of text and drawing that allows us to analyze spatial characteristics and inform design and architectural construction?

Affordances of Architectural Typology: a call for papers (by drawing)

Emphasizing the understanding adaptive reuse solely as an architectural design intervention aimed at repurposing a building limits its scope and overlooks its transformative agency. Shifting the focus from an oppositional duality between old and new – both in terms of materiality and in terms of function and use – toward viewing (adaptive) reuse as a process, might offer a more comprehensive and culturally complex approach. Spatial phenomena that «shift», «translate», or «occupy» hint at the negotiation of architectural form, an ambition that clearly aims at transgressing conventional product categories of the market economy.

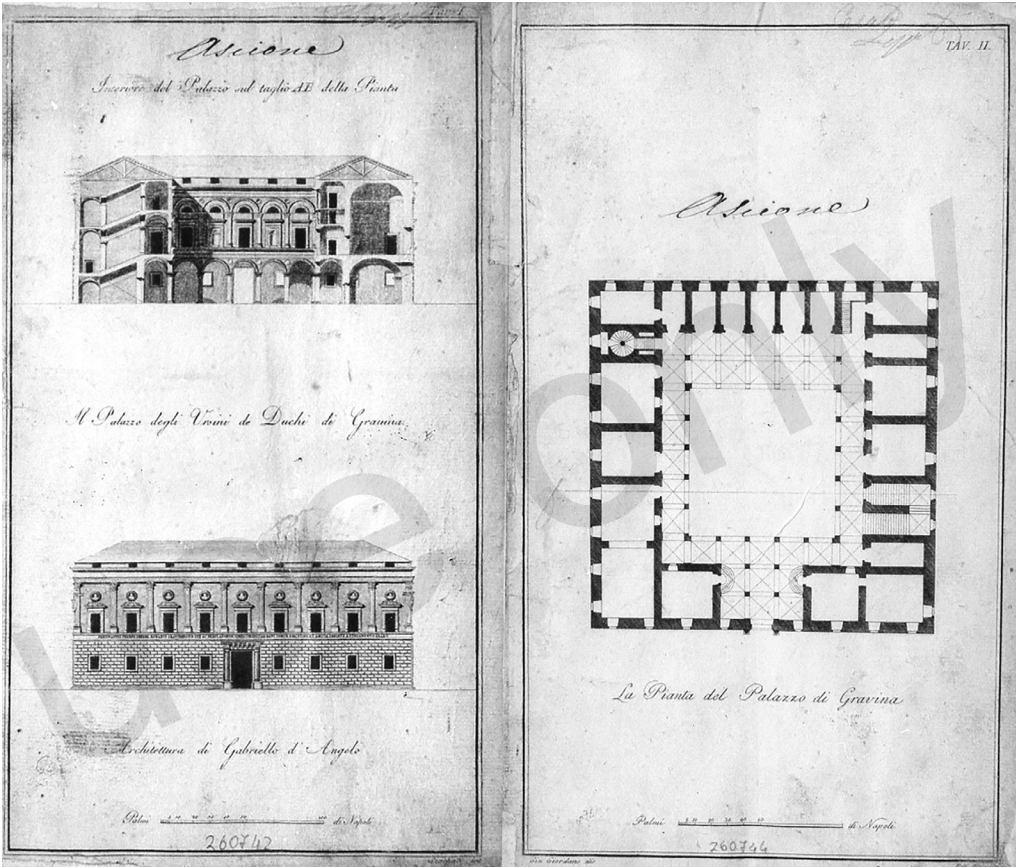


Fig 2. Palazzo Gravina, Naples (Italy), 1549. Monuments, or «palazzo types», are culturally significant and highly charged buildings that have undergone changes in use and occupation over time while maintaining or enhancing the typological integrity of the building. For example, the Palazzo Gravina in Naples was transformed from a private Palazzo to a housing block, a public building, and finally to the school of architecture it is today.

With our Call for Papers – launched in March 2023 – we were determined to explore the design process of transformation and (adaptive) reuse through plans, sections, and elevations of buildings, arguing that drawings are central to the forming and transforming, the adjusting and reusing of our built environment. To read, write, and negotiate architectural qualities «designerly» means to penetrate and elucidate through qualities and drawing – its abstraction grants us the possibility of envisioning both past and future forms of inhabitation and alteration. And it is through drawing that the more vague and unaltered character can be revealed underneath as the building’s type. A resilient structure that seemingly coincides with the building type – as a formal structure or notion of organizing forms that confers a recognizable order upon architectural elements – and that we understand / conceptualize as «Affordances of Architectural Typology». This coincidence is evident in the strong footprint of historical buildings – load-bearing elements, building volume and rooms overlap structurally and allow, along with often generous dimensions, for centuries of different uses and adaptations.

To look for and unpack this inner character and quality of existing buildings is one of the central goals of the research project «Affordances of Architectural Typology» which stems from the cooperation between the authors, each with their respective design and research backgrounds in interior architecture and architecture typologies. The project works toward a publication in the atlas model with additional essays

by members of its scientific board. An international call for papers collected projects in three categories – monuments, 19th century institutions, and more generic or mono-functional 20th century buildings – and used an extensive drawing strategy developed by the authors to tell the story of the transformations of these projects, highlighting their typological character and resilience. All projects are reduced to the most significant floor plan, section, and elevation. These drawings are always vertically positioned on one single page. They are drawn in their initial phase (black), in the state of demolition and addition (yellow and red), and in the transformed or final stage (black), on separate pages, thus making the changes over time readable and comparable. Due to older accumulation – of time on the one hand and physical manipulations on the other – convincing projects tend to feature more pages to show their transformations and thus reveal their affordances through alterations of modern structures at the opposite end. This necessitates both more interpretation and more self-determination, as the cases in the third category will show. With this concept in mind, we go beyond a simple recording of qualified building transformations (adaptive reuse) that occurred over time and aim at highlighting reuse interventions that clearly manifest a certain «typological approach» as a design-driven focus. This is where our investigation takes more clearly distance from the adaptive reuse approach, shifting the interest from a design process that, despite being very qualified, is only generically engaged with the pre-existing structure (and creatively open to multiple

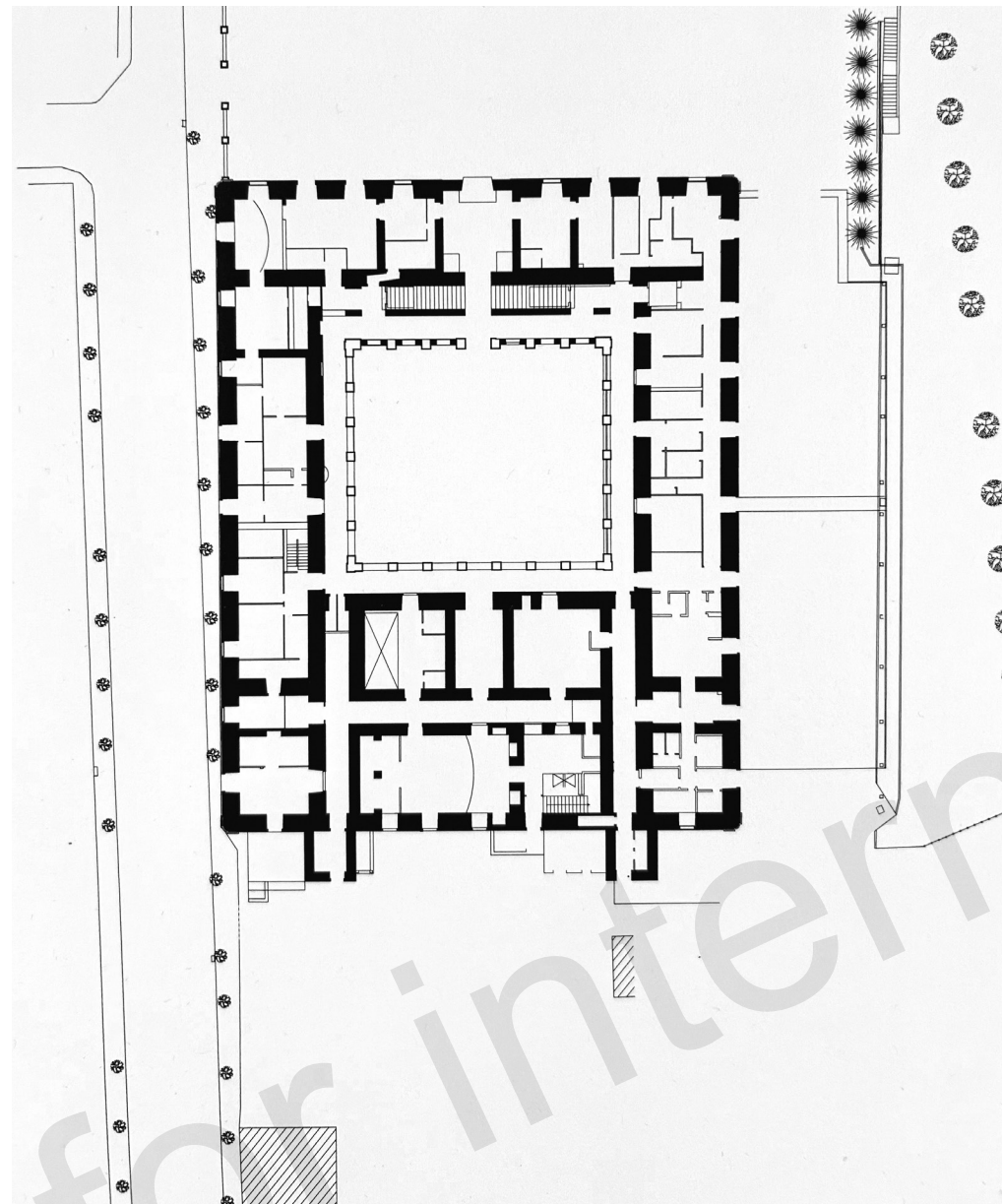


Fig 3. *Pousada de Viseu Hotel*, Viseu (Portugal), 1842(?). Institutions, civic buildings, and public buildings, mainly from the 19th century, are culturally significant structures based on classical compositions. These buildings have undergone significant interventions to improve and enhance their existing character, making them more resilient by reducing and clarifying the architectural means. The interventions alter the use of the building, but they may also affect its typological integrity by adding or removing structures. For instance, the *Pousada de Viseu Hotel*, formerly known as the *Hospital de São Teotónio* in Viseu by Gonalo Byrne.

approaches) to a design process that is specifically focused on and engaged with the typological qualities (whether present or not) of the structure.

To identify or unlock the *typological* character as a quality of a (existing) building or of a building reuse beyond its functional and / or aesthetic dimension, the key is to be found in the translation of spatial phenomena into architectural form. It is through or in the process of mapping spatial relationships and spatially related information – an operation that emphasizes the disruption of the traditional coherence of architectural technique – that the architectural process conceptualizes and integrates both time and place in the exploration of the embedded discontinuity within mapping⁶. The drawing enables the analytic, representational, and speculative use of the architectural process precisely because it suspends a building’s connection to time and space.

This focus on mapping spatial information through architectural drawing involves the creation of a spatial ordering system within a mapping – we position all ground floors, sections, and elevations vertically on a single sheet. We facilitate the development of a theoretical position in architecture by focusing on the analytical comparison of instances of (adaptive) reuse within a project. And the conceptualization of order extends beyond formal analysis to include spatial disposition, taxonomy, organization, and program through an annotated history in footnotes and references that allows the reader to understand the project’s narrative both spatially and theoretically with considerable depth.

This extensive focus on mapping the process of alteration within (adaptive) reuse projects counters a recently published book by an eminent scholar in the field⁷, Liliane Wong. This publication connects fifty seminal adaptive

reuse projects to the global changes related to usage contexts of energy, manufacturing, agriculture, transportation, religion, and new cultural heritage. This typological order according to the original context of use serves to arrange the projects into six chapters where the technical and social revolutions explain why certain architectural structures have been reused.

Departing from Wong’s typological atlas, our framework classifies projects into three distinct typological categories – formal, representational, and ambiguous – each grounded in the respective life cycles of the building types. The formal category comprises edifices that manifest a robust typological identity, such as monumental or palatial structures, distinguished by spatial configurations that inherently support adaptive reuse with minimal intervention. These buildings exemplify resilience and longevity, embedding sustainability within their typological essence – a continuity perpetuated through iterative cycles of (adaptive) reuse across centuries.

An illustrative instance of this extended typological life cycle is the Palazzo Gravina in Naples (1549–2023), which has transitioned from a private residence to a residential block, public facility, and ultimately an architecture school (Fig. 2). We consider this formal typology of particular relevance, as it vividly demonstrates the “affordances of architectural typology”, substantiating our hypothesis that a clearly articulated typological identity enhances a building’s adaptability and resilience, enabling it to extend far beyond its original function. This analysis underscores the pivotal role of typology in sustainable, design-oriented strategies. Furthermore, our study reveals that structures with pronounced typological characteristics often undergo transformations requiring minimal physical intervention, thereby reducing carbon impacts and amplifying both architectural and ecological value.

Our second category encompasses primarily 19th-century buildings that originated from typologies newly formalized during that period, including museums, theaters, railway stations, and industrial facilities. These case studies exhibit a robust typological structure, often shaped by Beaux-Arts principles, which enhances their resilience and capacity for functional transformation beyond their original purposes. This typological expression is frequently articulated through stylistic elements emblematic of the era, suited to their intended function. The representational category highlights adaptive reuse projects that repurpose former industrial, infrastructural, military, or healthcare buildings through significant programmatic shifts. Although architectural literature offers numerous examples, our selection prioritizes cases that retain a pronounced typological identity while navigating complex architectural interventions. A salient example is the *Pousada de Viseu Hotel* (1842–2023), formerly the *Hospital de São Teotónio* in Viseu, Portugal, and reimagined by Gonalo Byrne (Fig. 3). Such transformations adapt architecture to new functional demands while preserving or accentuating its typological essence, even amidst extensive modifications. This approach imbues these buildings with a renewed resilience – a concept we term “typological affordance” – equipping them for future repurposing with minimal alteration.

The third category investigates cases where the original spatial qualities were relatively neutral, generic, or underdeveloped – a common trait of mono-functional 20th-century buildings. Here, a typologically oriented design strategy enables adaptive reuse projects to introduce significant transformations, instilling a new spatial identity. This typological intervention not only strengthens the architectural character but also prolongs the building’s lifespan by aligning its structure with a new programmatic purpose. In selecting case studies for this category, we prioritize projects originally conceived as culturally neutral or typologically indeterminate spaces – such as commercial, retail, office, or warehouse structures – that have since been transformed into environments with distinct spatial identities. This transformation often introduces an architectural generosity absent from the original form, positioning these buildings for future adaptability. An illustrative case is the ED.G.E. (1973–2022), a mixed-use complex in Milan, Italy, redesigned by Onsites-tudio (Fig. 4), which demonstrates how typologically driven reuse interventions can recalibrate a building’s form to offer resilience through architectural character – an affordance transcending functional adaptability and endowing the structure with lasting flexibility.

This typological categorization of reuse interventions, centered on clarity of typological identity and extended life cycles, reveals the strategic potential of a “typological approach” in adaptive reuse. By adopting a design-oriented focus, this method not only satisfies emerging functional requirements but also fosters resilience inherently embedded in architectural form – a fundamental affordance of architectural typology.

Conclusion: Resilience through Typological Clarity

The principal aim of *Architectural Affordances*, as a typological atlas of building transformations across three lifecycle categories, is to reveal two key insights into the intricate and often paradoxical nature of architectural design. First, this collection of projects underscores that achieving typological clarity extends beyond simply satisfying functional requirements; it posits that such clarity is fundamental to architectural excellence, laying the groundwork for flexibility in future transformations. In this sense, high typological quality does not merely respond to current demands but fosters a design approach that anticipates and accommodates evolving functions and uses.

Second, this atlas advocates for a renewed paradigm in conceptualizing and designing resilience within architecture. Revisiting and updating the post-functionalist critique of type as an epistemological foundation within architectural practice is crucial for assessing building quality. Enhancing architectural quality thus requires not only an evaluation of how buildings succeed or fail in sustainability, adaptability, and aesthetic merit but also an examination of the rhetorical constructs and descriptions that link physical form to sociocultural representation. Typological research and building analysis foster a reflective design approach by integrating three dimensions of history in architecture: history for architecture – considering, for instance, the insights of Colin Rowe’s *The Mathematics of the Ideal Villa* (1976); history

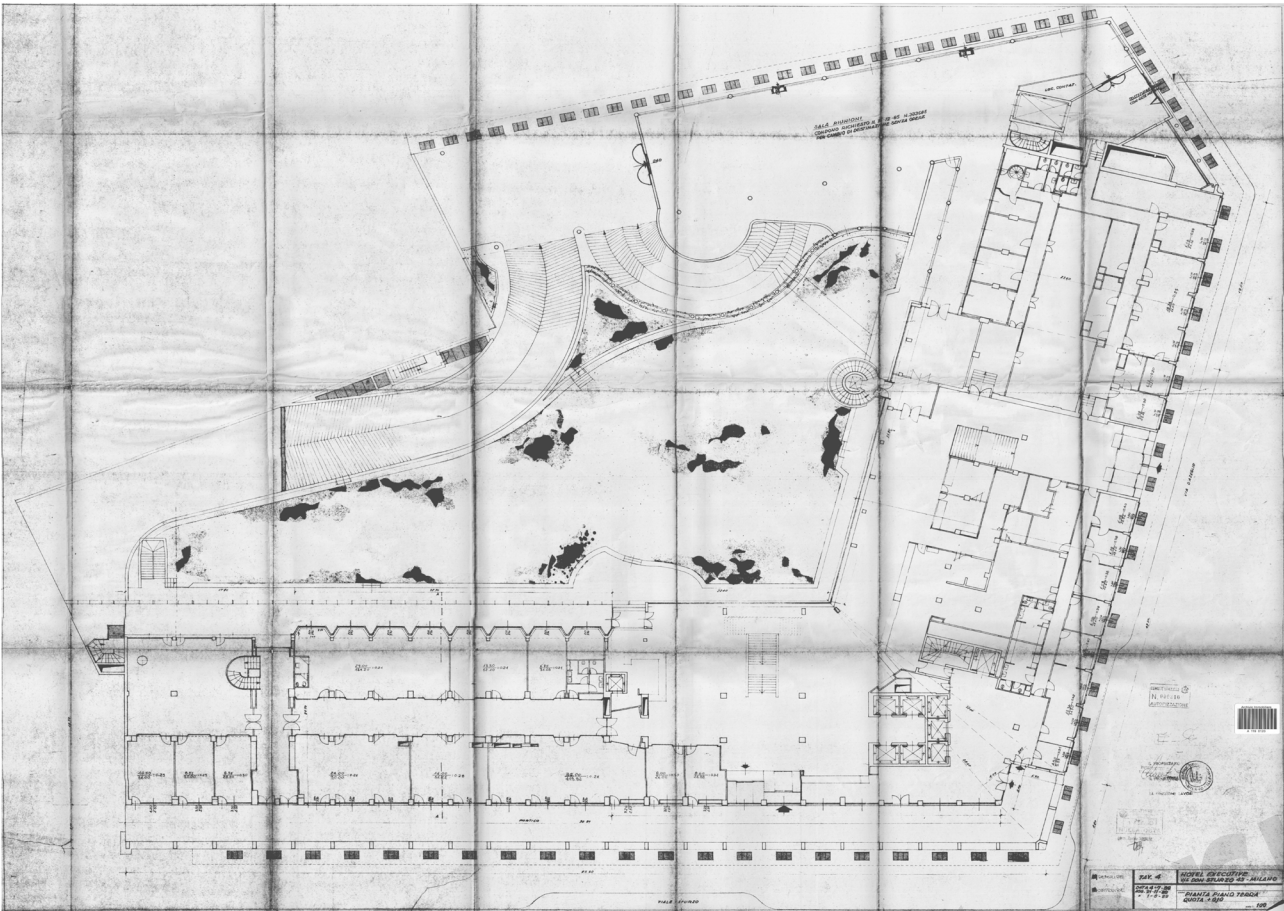


Fig 4. Floor plan of the former Hotel Executive (1988-1989), transformed into the multi-tenant tertiary complex ED.G.E in 2022.

of architecture – articulated in Manfredo Tafuri’s seminal *Theories and History of Architecture* (1980); and history in architecture – as exemplified by Robert Venturi’s *Complexity and Contradiction* (1977). Together, these perspectives offer a historical lens essential for understanding architectural typology, illuminating type’s significance in design, and addressing the inherent challenge of creating solutions that remain resilient amid changing conditions.

This historical dimension also underscores the concept of a building’s “shearing layers”, where core structural systems endure for centuries, while elements such as non-bearing walls, finishes, furnishings, and specific uses tend to evolve more rapidly⁸. The differing rates of change across these components shape the building’s affordances, emphasizing the importance of designing with these varying temporal rhythms in mind: site, structure, skin, services, space plan, and furnishings. Resilient, adaptable design begins with an understanding of these differential temporal dynamics. Defining foundational structure and essential services typologically facilitates smoother adaptation to changing needs without substantial overhaul, while elements like spatial layout and decorative features can be modified more readily to reflect evolving preferences or requirements⁹.

Architecture’s role here is critical in realizing these affordances, crafting designs that are both durable and adaptable enough to support diverse functions – a quality we term “spatial resilience”. This resilience promotes the sustainable, economical use of built environments, reinvigorating spaces that might otherwise fall into obsolescence or underuse. Through adaptive reuse, architects help reduce construction waste and conserve resources, aligning their work with contemporary environmental objectives and minimizing the ecological footprint of new builds. Beyond physical adaptation, architecture’s cultural role in adaptive reuse necessitates an integration of typology and (urban) form, balancing functional, aesthetic, and contextual dimensions of the built environment – engaging the histories *in, of, and for* the architectural project at hand.

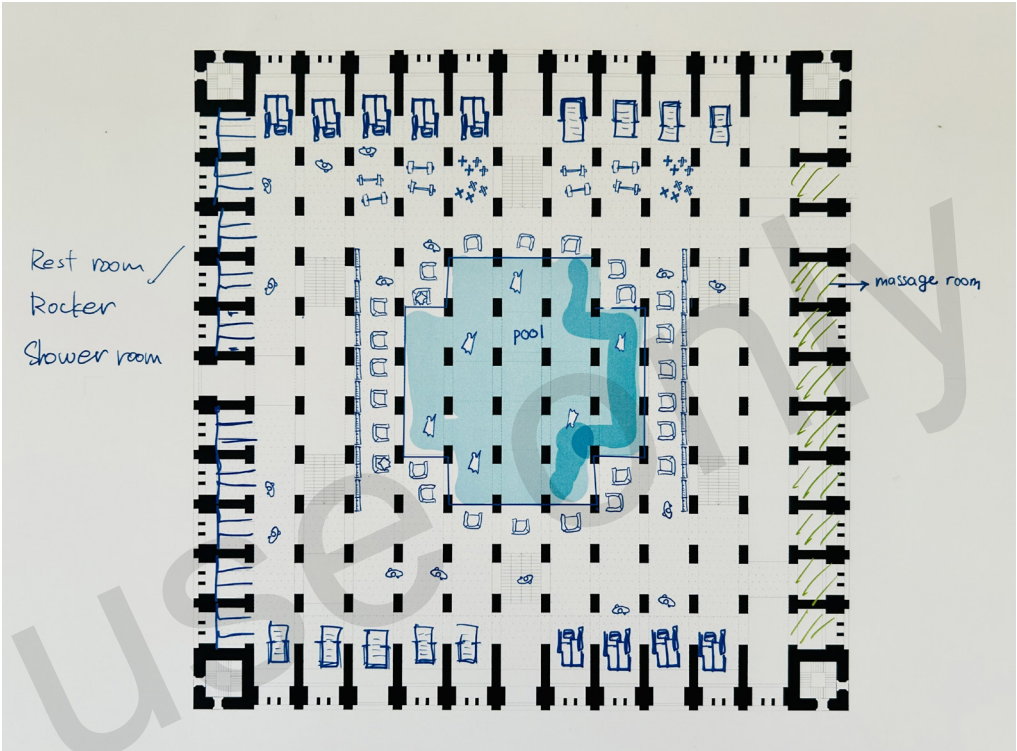


Fig 5. Ala Talebian and Takumi Kondo, *Intervention for the UPF Library* (2050), Barcelona (Spain), 2023. In 1992, the architects Luis Clotet and Ignacio Paricio Ansuategui transformed the former water reservoir Diposit de les Aigues into a modern university library. The graphic analysis of the transformation was followed by its expansion into a spa centre, designed by students Ala Talebian and Takumi Kondo, as a speculative step towards a possible 2050 conversion perspective. This discussion occurred during the academic seminar «Affordances of Architectural Typology» held by G. Postiglione, F. Serrazanetti, and M. Gold at the Technical University of Berlin in November 2023.

Notes

Both authors contributed to the final version of the article: Andreas Lechner has been more responsible for Paragraphs 1 and 2; while Gennaro Postiglione for Paragraphs 3 and 4; the Conclusions are the result of shared discussion and writing.

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Unpacking Temporality Through Drawing

Maike Gold, Francesca Serrazanetti

Temporality, Type and Typicality

In architecture, the term *Umbau* refers to the importance of *temporality* rather than *history*, considering the future as the fundamental phenomenon of time, as Martin Heidegger argued¹.

Typology, intended as a system of knowledge that allows to organize the world into categories, is also strongly linked to the concept of temporality: it helps us to recognize similarities in reality, and to integrate them into an architecture that has the potential to adapt to new styles and uses over the centuries, while its basic structure remains unchanged. These structures have great value because they embody experience and knowledge of scale, construction methods and patterns of use.

Looking at the transformations of architecture as proposed in this publication is a way of highlighting not only the importance of temporality but also the fact that this aspect is profoundly linked to form²: form intended as an invariant structure, and therefore, as a typology³. A clear description of the idea of type is the one suggested by Victor Hugo in the novel *Notre Dame de Paris*: «Great edifices, like great mountains, are the work of centuries. Art often undergoes a transformation while they are pending, *pendent opera interrupta*; they proceed quietly in accordance with the transformed art. The new art takes the monument where it finds it, incrusts itself there, assimilates it to itself, develops it according to its fancy, and finishes it if it can. The thing is accomplished without trouble, without effort, without reaction, following a natural and tranquil law. It is a graft which shoots up, a sap which circulates, a vegetation which starts forth anew»⁴.

With the variation of the “skin”, of the styles and of the decorations, the formal structure of architecture – the internal “skeleton” that defines its basic spatial articulation – does not change but remains an invariant character. The clearest example is that of religious architecture: «Whatever may be the carved and embroidered envelope of a cathedral, one always finds beneath it – in the state of a germ, and of a rudiment at the least – the Roman basilica. It is eternally developed upon the soil according to the same law. There are, invariably, two naves, which intersect in a cross, and whose upper portion, rounded into an apse, forms the choir; there are always the side aisles, for interior processions, for chapels, a sort of lateral walks or promenades where the principal nave discharges itself through the spaces between the pillars. That settled, the number of chapels, doors, bell towers, and pinnacles are modified to infinity, according to the fancy of the century, the people, and art. [...] Hence, the prodigious exterior variety of these edifices, at whose foundation dwells so much order and unity. The trunk of a tree is immovable; the foliage is capricious»⁵.

In his article *Type, Field, Culture, Practice* (2011), Peter Carl discussed the concepts of typicality and typology in architecture and their historical development⁶. To him, *typical* can have various meanings, from banal to universal. Typicality refers to common elements in different things, while typology in architecture describes specific, recurring types. Thus, typology focuses on the

variations of types, while typicality considers deeper human situations and contexts. Peter criticized that true architectural depth and human experience can only be achieved through the understanding and integration of typicality, rather than relying solely on simplistic typologies.

This distinction (and relation) between type and typicality recalls the connection between Typology and Affordance, as it is proposed in this book: firstly, the interpretation of architecture, space and use expand the concept of Typology, and secondly, *typicalities* in the broadest sense are also a way of thinking the designs further and further. We could think of the transformations in architecture (the yellow / red drawings, as explained in the next paragraph) in terms of *typicalities*. A tension between the conceptual field for types and the concrete topographies which we inhabit. «From a descriptive point of view, the most important aspect of architectural types is their heuristic value; they embody considerable experience or knowledge regarding sizes, construction, use-patterns, and so on. However, design too often reifies this knowledge, closing off the true depth of typicality. For example, the type ‘bedroom’ tends to solicit a medium-sized room with a bed, side table, window, closet, and access to a WC; whereas the typical situations of sleep, dreams, sex, illness, death, open much more profound and rich possibilities of interpretation (evident, for example, in the sleeping terrace beneath the canopy of Le Corbusier’s Villa Shodhan, 1951)»⁷.

In this publication, thirty projects are presented in categories that go beyond their functions: what is important is not their category of use but rather their formal structure (in relation to the temporality) and their ability to accommodate transformations, just as defined by the idea of Type, which several essays on these pages recall. Nevertheless, their transformation is intended as a way to host the Typicality of life.

The relationship between the concepts of Type, Temporality and Typicality brings into question the theme of reuse. The drawings published in this volume offer a specific and more strictly disciplinary look at the urgent topic of transformation and sustainability: the reuse of built heritage is one of the themes at the center of contemporary architectural practices⁸, also in relation to environmental sustainability.

One of the major issues concerning the practice of reuse is that of the adaptation of buildings following the insertion of a new function. Today we talk about *adaptive reuse* with reference to interventions that can be more or less invasive on buildings, depending on their characteristics.

The topic of change in use, which involves spatial transformations on buildings, is complex. In fact, the intervention can be envisaged both on buildings recognized as “monuments” and on those not designed to last over time. In the first case, the difficulties concern the comparison with the constraints imposed by the protection of historical assets, while in the second case, the problem leads to the question of how to give a new purpose to



Fig 1. Joseph Michael Gandy, *An imagined view of the Bank of England in ruins*, London, 1830 © Sir John Soane's Museum, London. Often referred to as “The Bank in ruins”, this drawing is a cutaway axonometric that imaginatively conflates conventions of the Renaissance aerial cutaway perspective with the eighteenth-century Piranesian ruinscape to create an ambiguous image of the Bank of England both seemingly in ruins and under construction.

artefacts that were not designed to accommodate uses other than their original ones.

As already mentioned, there are various initiatives that in recent years have brought this aspect to attention in terms of both research and curatorial practices. However, the topic is present and debated in social or even artistic terms, or through collections of photographs of projects that explore the “aesthetics of recycling”, the quality of the unfinished and of ruin, more than their architectural essence. With the call for paper «Affordances of Architectural Typology» we instead attempted to focus attention on the formal quality of architecture in typological terms.

Perspectives on time and type: drawing as close reading

On the one side, the research focuses on *altering architectures*, which means that it does not explore what architecture is but rather what it can potentially be, through highlighting the constant change in its human interaction (Typology Affordances). On the other side, the question of affordances is linked to the role of the architect as a stakeholder and a “facilitator” in transformation processes.

The fact that the contributions to this book were mostly proposed and written by architects is not of little importance. The book started in 2023 with the call for paper «Affordances of Architectural Typology: A Call for Papers (By Drawing)», which was not a call for scientific essays or contributions but rather a call for critical re-elaborations which assume drawing as a tool: this is the reason that contributors are mostly architects. Similarly to what architects such as Peter Eisenman did in their approach to analysis of existing buildings, it is important to underline, then, that this book collects critical works mainly by architects, not historian or critics. Therefore, it is concerned with what Eisenman calls «a close reading of architectural traces»⁹, as «An architect sees differently than does a historian or a critic»¹⁰.

The method proposed by the call for papers, and applied in the projects published here, proposes a strategy of analysis and stratification of signs using drawing as a key-device.

As a first step, for each case study, the most significant plan, section and elevation are drawn, as they originally appeared or as they were when they hosted the first intended use. Afterwards, the transformation is analyzed for each building, indicating the time period to which it dates back and highlighting with different colors what has been demolished (yellow), added (red) or has remained unchanged (grey). Subsequently, the plan, section and elevation are shown, updated with respect to the previously analyzed transformation, and this drawing is considered the starting point in the case of subsequent transformations (always represented with the three different colors and indicating the period in which they were carried out). This process is repeated until the result is obtained, as a consequence of the last change in use.

This methodology is considered essential for analyzing transformations, as it allows us to have a clear image of the building in the different phases. In fact, although today there are many projects that intervene on buildings, one of the greatest difficulties is that of finding materials that explain how the architecture has been transformed. The analysis proposed herein is therefore based on the need to identify, highlight and compare the transformations that the different buildings have undergone over time.

This aspect highlights the role of drawing as a tool of analysis and as a “frame” for the gaze, as a way to make visible «what cannot be seen».

Using the same codes to “unpack” the projects also allows for a comparative analysis of drawings. This is similar to what Pier Vittorio Aureli suggested in relation to the use of diagrams: «The use of the diagram not only consolidates the idea, i.e., the content of the architecture and the configuration of the architectural object, in a summary drawing; the reduction of the architecture to a diagram allows for a comparative reading [...]»¹¹.

The layering of yellow-red drawings, as proposed herein, despite putting together proper architectural drawings, has the value of a diagram: it proposes a methodology to present and analyze transformation projects and their different typologies.

From drawing to design (and return)

Comparative critical analysis of built form, using the formula suggested by Kenneth Frampton¹², requires a common methodology to be established. As mentioned, we have established this methodology based on the use of drawings: the sequence and layering of representations published for each project (without any photographs) bring the attention to certain aspects of architecture and allow us to clearly identify common design strategies for the three proposed categories.

The first category includes buildings attributable to the Italian “Palazzo” category (building that were built from scratch and at the same time also were the result of transformations, such as the Palazzo Madama in Turin, which developed around an Ancient City Gate). The projects antiquity to the Renaissance to the Baroque to the modern age and the contemporary. However, the “second lives” of religious architecture also appear in this category – from the Dominican monastery converted into a library to the chapel of Our Lady converted into a home (both in Belgium) – or the evolutions of the English Terraces Houses (the AA School of Architecture or the Soane Museum).

The projects therefore seem to identify, for this category, three specific typologies and three geographical areas (Italy, England, Belgium), with the widest and most flexible variety of uses and interventions (given that it might seem contradictory in relation to old and mainly listed structures). The Bourse de Commerce is a case in itself which reinterprets the archetypal architecture of the Grain Market designed by Nicolas Le Camus de Mézières, transformed by Henri Blondel and then by Tadao Ando.

Most impactful strategies of intervention in this category are completions and closures (of building sides and roof courtyards).

The second category includes civil or public buildings and institutions, built mainly in the 19th and early 20th centuries. Buildings in this category are recognized for their cultural value and are often based on classical compositions.

The architectures that have been taken into consideration are those of former industrial or storage buildings (such as the Provianda Santa Marta and the UPF Library), infrastructural buildings (such as former stations or railway tracks, see the Museum of contemporary Art of Republic of Sprska), healthcare buildings (such as hospitals, it is the case of the Pousada de Viseu), or public buildings (Martin Luther King Memorial Library, Postparkasse, Museum of contemporary Art of Republic of Sprska).

However, this category also includes private houses (Casa de Serralves, Deutsches Architekturmuseum, Casa Andersen) and religious buildings (Môtesplats Mariatorget) that are big sized and were built at the turn of the 19th and 20th centuries.

In this category, the strategies of intervention are oriented to allow and improve circulation and to facilitate the public use of spaces. The big dimension and the scale of the buildings are significant in this series of projects.

The third and final category includes all 20th century

single-function buildings, without a strong typological identity. They are “generic” buildings that are not recognized for their importance on a cultural level, such as commercial buildings (such as 577 Niagara Street and 63rd House), new infrastructure facilities (of the last century, Peveril Gardens), offices turned into hotels (or vice versa, such as the ED.G.E. Office Building), warehouses and factories (ZHAW School of Architecture, Espacio expositivo Serrería Belga, The New Farm, Opificio Golinelli).

One of the most common characteristics of these buildings is the presence of enormous empty spaces that are completely undivided (except for the load-bearing system of pillars) inside box-like casings. Generally, these buildings were built with pre-fabricated concrete and metal elements found in industrial areas.

Having to deal with large open spaces, the interventions often involve the insertion of box-shaped dividers rather than additions or demolitions of walls, giving the sensation of an architecture within an architecture. The transformations to which these buildings are subjected, despite being very invasive, give a quality to spaces that were not designed to be reconverted, and suggest that they will be able to accommodate further changes in the future. Further projects in this category include the conversion of small and anonymous buildings into houses (the Casa Asilo and the Single Family House, both designed by Giuseppina Grasso Cannizzo), and the implementation of the Milan School of Architecture, starting from an existing service building of the University Campus.

Historical continuity, future adaptability

The desire for a building to survive the action of time and the acceptance of the temporary nature of its intended use have led to the attempt of predicting the change of the building starting from its design phase.

In this regard, Kevin Lynch in *What time is this place?*, talked about «adaptability» as a way to keep the future open and proposed a series of attitudes that seem to foster adaptation (such as, for example, distinguishing the load-bearing elements from the not load-bearing, provide for the ends to allow for “growth of the form”, analyze which historical conditions fostered the changes, etc.). These are all strategies that do not involve the creation of a closed and well-defined form, so as not to create obstacles for future use and possible development.

However, the same author then pointed out that complete indeterminacy, which allows for an “unlimited” transformation, as well as being excessively expensive, would give space to infinite possibilities, from which it is difficult to choose (and deprive architecture of identity).

The projects collected in this book seem to suggest that the more “identitarian” and “traditional” buildings (such as the Palazzo and other examples of the first category) allow for more changes in their temporality (past, present and future) than modern and generic structures.

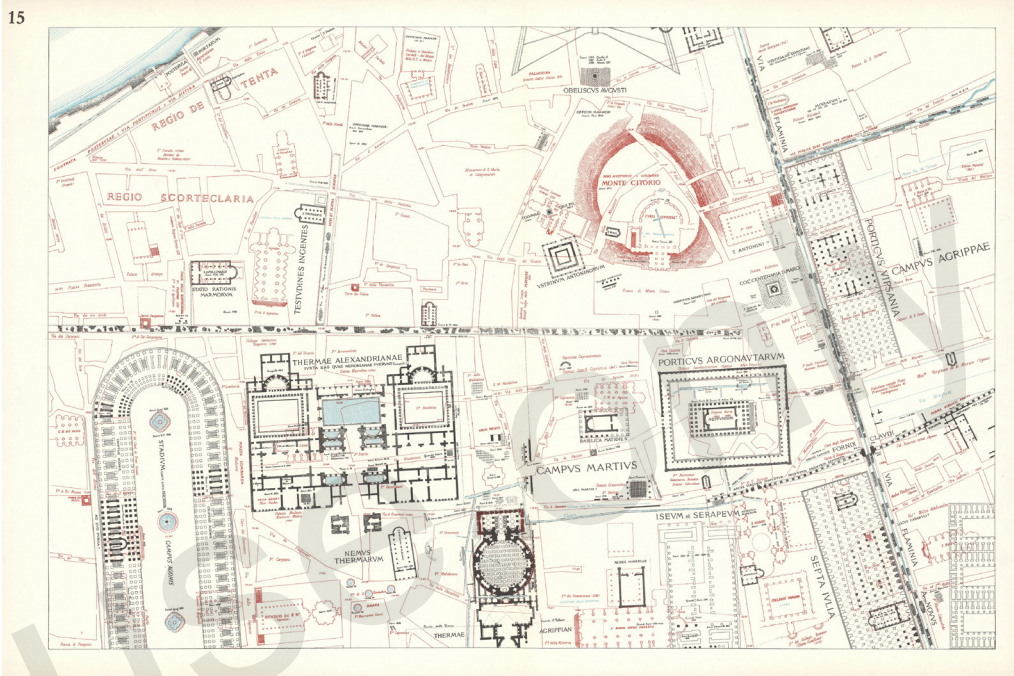


Fig 2. Rodolfo Lanciani, *Forma Urbis Romae*, Rome, 1901

The explorations in this text, and more broadly in this book, underline a crucial shift in architectural discourse toward the embrace of temporality over historicity. Central to this argument is the notion of *Umbau*, which emphasizes the forward-looking transformation of architectural typologies rather than their historical preservation alone. This approach reframes architectural development not simply as a linear progression through time, but as a dynamic interaction between past, present, and future.

A more profound engagement with typology, which categorizes and identifies similarities within architectural forms, allows buildings to evolve while retaining their basic structures. This perspective values architectural typologies as repositories of knowledge and experience, integral to understanding spatial articulation and historical continuity amidst changing contexts.

Notes

Both authors contributed to the the article, which is the result of shared discussion and writing: Francesca Serrazanetti has been more responsible for Paragraphs 1 and 2; while Maike Gold for Paragraphs 3 and 4.

1. «Das Grundphänomen der Zeit ist die Zukunft». M. Heidegger, *Der Begriff der Zeit* (1924); Eng. tr. *The Concept of Time*, William Alexander Cairns McNeill, 1991, p. 14.
2. Cf Vittorio Ugo, *Architettura e temporalità*, Edizioni Unicopli, Milano 2007: in this essay Ugo crosses the topic of temporality and architecture through the theoretical thought of philosophers such as Gadamer, Heidegger, Ricœur, etc. He argued that «anche la temporalità, a differenza del tempo (storico, psicologico o cronologico che sia), non sia condizione del darsi dell'opera, un involucro già-dato nel quale l'opera successivamente si pone, ma scaturisce da essa, dalla sua “forma” appunto, della quale fa parte integrante e che contribuisce a definire.»
3. In Greek philosophy, form is defined by three concepts: *eidos*, *idea*, and *morphe* (Tatarkiewicz 1993). While the latter refers to its empirical substance (the visible form) and the former to abstract forms, resistant to different appearances caused by changes in perspective, *idea* indicates the conceptualization of form and has a meaning of logical order. Similar differentiations exist in other languages (let us think of German *Form* and *Gestalt* or English *form* and *shape*) while they are flattened into a single term in Italian (*forma*).
4. Victor Hugo, *Notre Dame de Paris*, 1831.
5. *Ibid.*
6. Peter Carl, *Type, Field, Culture, Praxis*, in «Architectural Design» n° 81, 1, 2011, p. 39.
7. *Ibid.*

The diverse architectural examples published in this book illustrate how transformations-whether adaptive reuse of historic monuments or innovative adaptations of modern structures-reflect the enduring typological frameworks that transcend temporal boundaries. Such reinterpretations affirm the vitality of architecture as a medium that accommodates multiple functions and cultural shifts over time. Unpacking temporality through drawing is an attempt to challenge conventional views of architectural preservation and adaptation, advocating a nuanced understanding that balances historical continuity with future adaptability. This perspective not only enriches architectural discourse, but also informs contemporary practices aimed at sustainable design and the preservation of cultural heritage in a dynamic world.

8. I.e.: 10th Architecture Biennale Rotterdam, *It's about time, the architecture of Change* (22 sept-13 Nov 2022); *The great Repair*, the project curated by «Arch+» and hosted by La Biennale di Venezia 2023 and the Akademie der Künste, in Berlin (14 October 2023-14 January 2024).
9. «I remember my shock when traveling with Colin Rowe in Italy in the summer of 1961, after my first year of teaching at Cambridge. Rowe said to me in front of my first Palladian villa: “Tell me something about the villa that you cannot see.” He did not want me to tell him about its three stories, about its material rustication, about its symmetrical window arrangement; these were obvious and seeable. But an architect must learn to see beyond the facts of perception. An architect must see as an expert. This expertise implies two things. First, being able to see, as a form of close reading, the not present-the unseen. Second, and more importantly, an architect is a maker, not just a reader. In order to make what contains ‘what cannot be seen’, one has to know what that is, i.e. in order to make what can be close read, one has to know first how to close read». P. Eisenman (from the program of the course *Theories of Authority: Seeing as an Architect*, Peter Eisenman, Elisa Iturbe, Yale Architecture University, 2016).
10. Peter Eisenman, *Palladio Virtuel*, Yale University 2015.
11. Pier Vittorio Aureli, “Chi ha paura della forma? Origini e sviluppo del formalismo nel moderno” in Peter Eisenman, *La base formale dell'architettura moderna*, Pendragon, Bologna 2009, p. 23.
12. Kenneth Frampton, *A genealogy of modern Architecture. Comparative critical analysis of built form*, ed. by Ashley Simone, Lars Müller Publishers, Zürich 2016.

Typology: An Emotional Rationalization of the Existing

Victoria Easton

The Design of an Analysis

Typological studies in architecture imply investigation, and classification, the results of which may later be used for design. But when does the analysis stop and the design start? In his essay “Analysis and Design”, Giorgio Grassi explores this relationship by assuming that «there is no break between the moment of analysis and that of the project, because the object of the analysis is, strictly speaking, the same object as the design» since «design is actually a special type of analysis»¹. Both imply decision making, as well as an author (or authors), and indeed for Grassi, analysis and design are «mingled both in the process of making (in the compositional process) and in the highlighting of the logical structure of architecture»². This emphasis can rely on typology as a tool, and thus on the identification of types. This process requires a subjective stance, maybe even an emotion, which is then to be rationalized by means of a homogeneous and normed system of investigation.

The Affordance of Typology

In his seminal text “On Typology”, Rafael Moneo states that «to raise the question of typology in architecture is to raise a question of the nature of the architectural work itself. To answer it means, for each generation, a redefinition of the essence of architecture and an explanation of all its attendant problems». Moneo here confirms the close intertwining of architecture and typology, but most interestingly, he highlights the possibility of adaptability: time and architectural evolution have the power to change the type. This is where the idea of «affordance» comes into play. Architecture consistently engages with ideas that predecessors have crafted, and these ideas are subsequently manipulated and refined. This is only possible because of the inconsistency of the type. And therein lies both its uniqueness and its boundless potential. Moneo goes on to say, that «the most intense moments in architectural development are those when a new type appears. One of the architect’s greatest efforts, and thus the most deserving of admiration, is made when he gives up a known type and clearly sets out to formulate a new one. Often, external events—such as new techniques or changes in society—are responsible for impelling him toward this creation of a new type». The concept of type remains very much alive, undergoing a continuous evolution that can range from rapid to gradual shifts over time. The type’s malleability is manifest when the principle is confronted to other external conditions: the cultural conditions of a new context, the adaptations linked to the geometry of a plot, or of topography. A new building is created, but reminiscences of the original type are still visible. Moneo clearly sees the potential of typology in the design process: «In this continuous process of transformation, the architect can extrapolate from the type,

changing its use; he can distort the type by means of a transformation of scale; he can overlap different types to produce new ones. He can use formal quotations of a known type in a different context, as well as create new types by a radical change in the techniques already employed. The list of different mechanisms is extensive – it is a function of the inventiveness of the architect».

These extrapolations, changes, distortions, and overlaps are also present when the type is not displaced to another context, but changed within its own substance: a change of function, an extension, a densification. Such amendments are skillfully documented by the various case studies documented in *Affordance of Architectural Typology*. The investigation shows that the typological strategies are manifold. The first and most radical approach involves a pure functional shift with minimal structural alterations. A striking illustration are Michelangelo’s subtle modifications to convert Diocletian’s thermal baths into the Church of Santa Maria degli Angeli in Rome. The definition of the new entrance within the former Caldarium, a few walls defining a nave, which is also a transept, and a choir, are the only interventions undertaken by Michelangelo.

Another strategy, and probably the most obvious one, is to occupy or fill in an existing large spatial expanse. This common tactic is evident in the repurposing of industrial or infrastructural buildings into cultural venues, necessitating the addition of architectural elements. The transformation of Halle 180 into an architectural school in Winterthur, or the famous transformation of the Gare d’Orsay into a museum by Gae Aulenti, are implementations of this strategy.

Moreover, augmenting substantial volume, which can redefine the typological scheme or balance an asymmetrical one, is surely the most frequent strategy. Karl Friedrich Schinkel’s renovation of Schloss Tegel in a classical style is intriguing in this context (Fig. 1). By integrating the existing Renaissance structure with a single tower into a four-winged complex with four corner towers, Schinkel completely shifted the typological order of the original house. The addition of a significant layer profoundly impacts the building’s internal organization in relation to light and circulation. Other examples include the incorporation of a chapel into the construction of the Serralves villa or Adolf Loos’ enveloping of a 19th century country house with a 3,5 m spatial layer in the Villa Karma (Fig. 2). In both cases, a completely new façade envelopes the original structure. In the case of Florence’s Palazzo Medici Riccardi, the seamless extension of the façade, raises the question of the esthetical relation between a precedent and its extension.

The *typological affordance* of a building is guaranteed by the systematicity of its architectural form. It is fundamental and logical, thus allows to be interpreted anew. The essence of

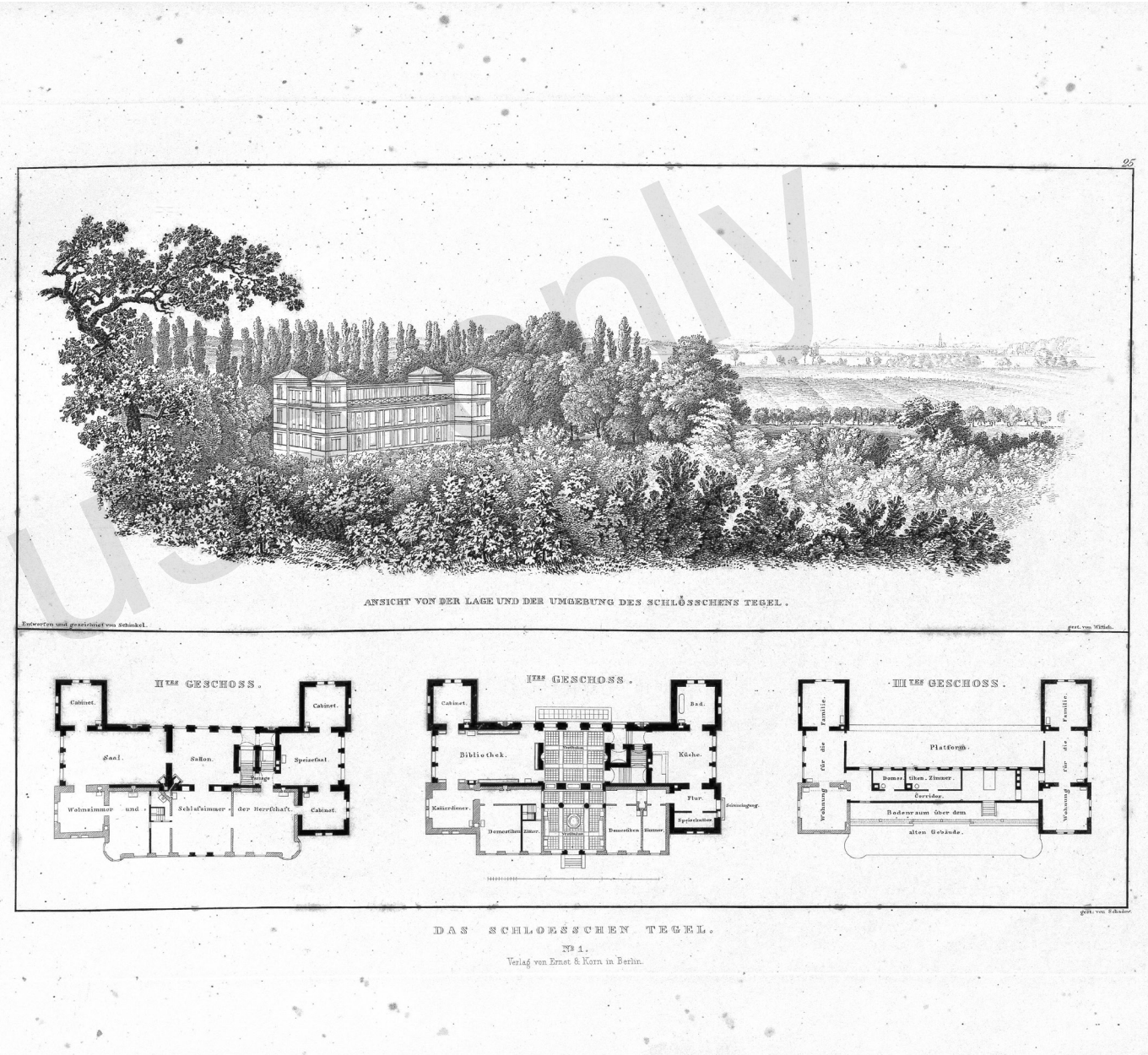


Fig 1. Karl Friedrich Schinkel, *Design for the Schloesschen Tegel*, 1858

architectural form «is independent of all functional determination and exists on the strength of its own compositional force as a permanent principle in all epochs and cultures»³.

Beyond its documentary value, this analysis allows to consider architecture in an ahistorical way. This aspect is essential in the belief that architecture is always «a version of a determined fundamental idea, then this work is inevitably linked to the subsequent ones, and the latter will always be an explanation, a deepening of it as well as of the reasons that produced it»⁴. Thus, each new work always «represents

a direct confrontation with the experience of the past»⁵, in its act of composition.

The Ecology of Typology

What will become of the architecture we build today? Answers to the ecological challenges of our time, for example in relation to the responsible use of material resources, can be found in the study of typology. It is our responsibility to guarantee a long-lasting future for today’s buildings, not only in terms of material, construction, and technology, but

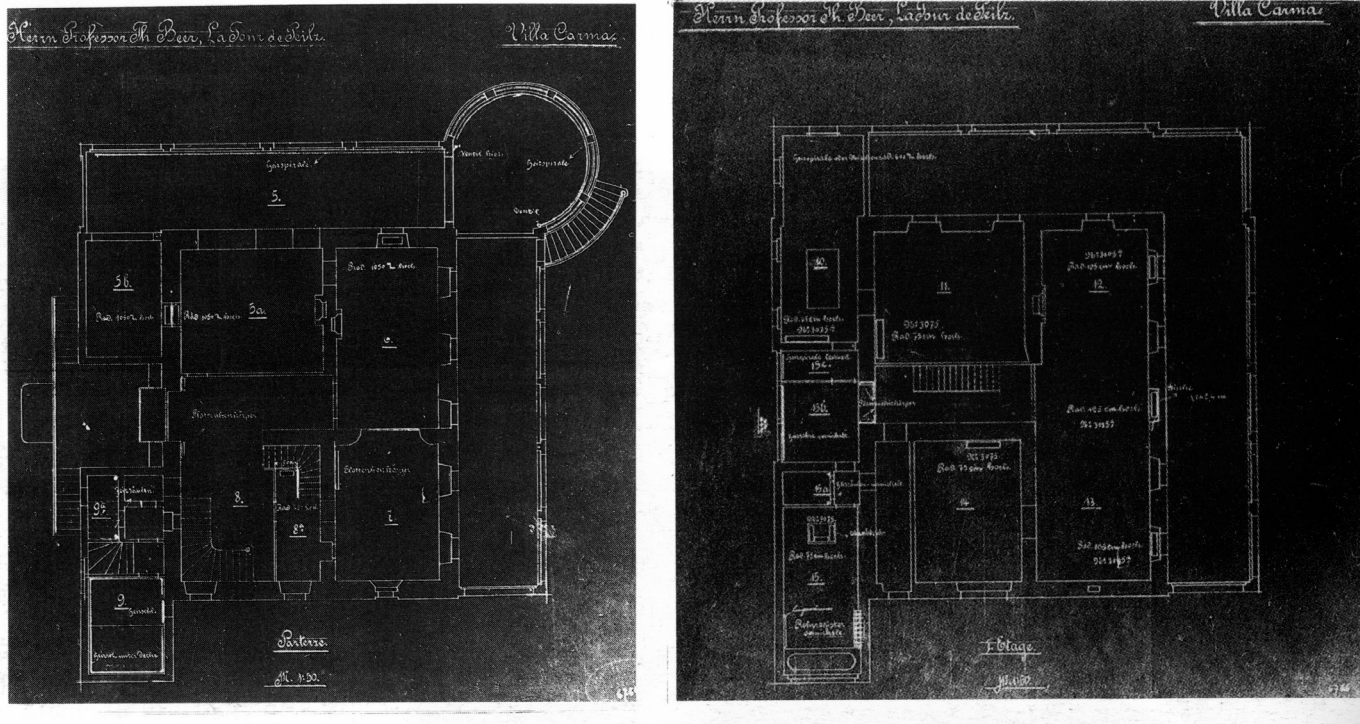


Fig 2. Adolf Loos, Villa Karma. Preliminary studies for the refurbishment of the parterre and first floors. The plans differ from the ones realized but the additional layer is already visible.

above all in terms of typology. The emancipation of architecture from its original conditions is only guaranteed by a general form that can sustain the changes of requirements. Type can contribute to the development of buildings whose structure can outlast longer periods of time thanks to their structural and formal qualities.

Obviously, designing architecture today means acknowledging the existing. The tabula rasa operation, and the new construction on the green field are legitimately not an option anymore, while moratoriums on new construction are being called for⁶. The future of building is in what is already there, and in the strategies developed to sustain its resilience. The act of transformation relies on a deeper understanding of the existing, and the existing is better understood by considering it within a series of precedents. A logical analysis of a structure which might have undergone many alterations, or punctual additions, is the only way to guarantee a future-oriented adaptation. A deliberate definition of criteria is necessary to assess what is to be kept and what is to be left. An accurate catalogization can allow for efficient re-use. A rationalization and abstraction can allow to consider historical heritage for its typological potential rather than for its decorum. An emotional perception of a situation can allow to keep the unique character of an

ensemble. Maybe, the methodological approach needed to face the current paradigmatic change in architecture can seek inspiration in typological studies: the dry rationalization of a principle coupled with random choices of architectural intuition.

In a conversation between Rem Koolhaas and Hans Ulrich Obrist, Oswald Mathias Ungers explained about the rational approach in his project for the urban planning competition of Grünzug-Süd (1962-1966) in Cologne, Germany, that «You first have to understand what the structure is. By thinking yourself into it, you naturally come closer to this story emotionally and create a new one by rationalizing the matter. So, you have this interaction between emotion and rationalization. And that's the case everywhere. [...] Everything is always a rationalization of the existing»⁷. An emotional rationalization of the existing, this might be the architecture we are looking for.

Notes

1. «Noi diciamo che non c'è frattura fra il momento dell'analisi e quello del progetto perché l'oggetto dell'analisi è, in senso stretto, lo stesso oggetto del progetto. (...) vuol dire secondo me che il progetto è in realtà un tipo particolare di analisi». Giorgio Grassi, "Analisi e progetto", in Agostino Renna, *L'illusione e i cristalli*, CLEAR-Cooperativa Libreria Editrice Architettura, Roma 1980, p. 234.

2. «(...) essi si confondono sia nel processo del fare (nel processo compositivo) sia nella messa in evidenza della struttura logica dell'architettura». Giorgio Grassi, "Analisi e progetto", in Id., *L'architettura come mestiere e altri scritti*, Colonna di architettura diretta da Massimo Scolari, Milano 1985, p. 55.

3. Oswald Mathias Ungers, "The City as a Work of Art" (1963), in Joan Ockman (ed.), *Architecture Culture, 1943-1968: A Documentary Anthology*, Columbia Books of Architecture / Rizzoli, New York 1993, p. 361-4.

4. «Se guardiamo però quest'opera come una versione, la più importante anche di una determinata realtà, di una determinata idea fondamentale, allora

quest'opera risulta inevitabilmente legata alle successive e queste ultime saranno sempre anche una spiegazione, un approfondimento di essa oltre che dei motivi che l'hanno prodotta». Giorgio Grassi, "Analisi e progetto", in Id., *L'architettura come mestiere e altri scritti*, cit., p. 55.

5. Ivi, p. 56.

6. *A global moratorium on new construction*: <<https://agn.arch.ethz.ch/pivoting-practices-a-global-moratorium-on-new-construction/>>

7. «Man muss zunächst begreifen, was die Struktur ist. Indem man sich hinein-denkt, kommt man natürlich emotional dieser Geschichte näher und schafft durch die Rationalisierung der Angelegenheit eine neue. Somit hat man diese Wechselwirkung zwischen der Emotion und der Ratio. Und das ist überall der Fall. [...] Es ist alles immer wieder eine Rationalisierung des Bestehenden». Oswald Mathias Ungers, Rem Koolhaas, Hans Ulrich Obrist, *Die Rationalisierung des Bestehenden*, in «ARCH+» n° 179, 2006, pp. 6-11.

Hermann Czech's *Umbau* as Architectural-Theoretical Concept

Eva Kuss

«Anyone wishing to convey new ideas cannot simultaneously make use of a new language to do so»¹.

In 1989, Viennese architect and architectural theorist Hermann Czech wrote the essay “Umbau”² (*transformation*) for the catalogue of an exhibition on Adolf Loos at the Albertina Museum in Vienna, where Czech served as a member of the exhibition committee. Within his discourse, Czech not only applies *Umbau* to the transformative endeavors of Loos but extends its application to Loos’s architectural thinking in general. Moreover, he elucidates an architectural concept of *Umbau*, delineating a distinct approach in architecture – a design methodology. In this sense the term carries connotations distinct from mere alterations, evoking a departure from the neutral notions of renovation or maintenance. By examining the architectural works of Adolf Loos, Czech illustrates this nuanced understanding, thereby acknowledging Loos’s significance in the discourse. However, the focus of this text lies less on the homage to Loos and more on the endeavor to define *Umbau*, or transformation, as a theoretical term of architecture. It is precisely this objective that I aim to elucidate in the subsequent considerations.

To get an idea of the rationale behind Adolf Loos’s adoption of his distinctive and still unconventional design approach, it is necessary to briefly delve into the cultural milieu of Loos’s era, spanning roughly from 1895 to 1930. Vienna had experienced a profound urban metamorphosis between approximately 1850 and 1900, characterized by the dismantling of the city walls and the conversion of the open parade ground into the majestic Ringstrasse. Furthermore, the integration of the Stadtbahn (Metro) with the suburban railway by a ring of above-ground tracks not only facilitated enhanced accessibility throughout the city but also transformed the cityscape. For contemporaries of the era, the urban landscape underwent a rapid and profound transformation, signifying not merely physical changes but also emblematic of societal and cultural shifts occurring within Vienna.

When Loos entered the Viennese scene as an architect in the 1890s, urban development was at least for the moment already thought through. Czech describes in his text that therefore Loos already had to adopt a «reflective attitude towards the existing». Interestingly, he set himself the task of planning the empty area of the Glacis of 1859 as an alternative³. Conceived as an imaginary plan, he did not demand that the development of the Ringstrasse be reversed. This plan consisted of three essential elements: a sequence of squares that would have interlinked the suburbs with the city center, the introduction of new visual connections to important buildings both existing and new – like Stephansplatz or Karlskirche – and at last all the new buildings were intended to be public. In the design, Loos drew also on historical elements such as the Baroque axes already proposed by Fischer von Erlach.

His vision was to create relationships within the existing city and interlink the suburbs and the inner city. (Fig.1).

Nearly at the same time, Otto Wagner, who was mainly responsible for the planning of the Stadtbahn, conceived his study «Vienna – an unlimited metropolis» on occasion of a lecture to which he was invited by Columbia University in New York in 1910. Wagner’s study was also imaginary; he developed a vision of a city with unlimited radial outward growth, in a pure form unencumbered by any existing structures. Wagner’s plan proposed an unlimited metropolis that envisioned a linear progression of modernity, while Loos developed his planning on a profound reflection on the existing structure.

Loos was an outsider in the architecture scene, he did not finish his architectural training, he came from the provinces, had spent time in the USA and consciously also staged himself as an outsider. He thus received his commissions from private clients mainly being from the liberal, often Jewish-assimilated, progressive-minded middle classes. Having dropped out of school and without an architect’s license, he began his career with commissions for interior design and renovation projects. It can be assumed that he developed a special attitude towards the existing structures also as a result of this forced preoccupation with them. Even in the first conversion projects, he developed a design method that «enter[ed] into a dialogue with the remaining space»⁴ and created something new in this relationship. This was not a «sensitive» approach, it was not about conservation, the elements of the old building, with their alterations and the newly created elements, form a completely new unit that creates a truly new work. In the Villa Karma he introduced a new layer of space around the existing volume, or in many interior designs he used the constructive required beam when opening a wall to give a room a new constructive orientation by adding a layer of fake beams on the ceiling. (Fig. 2, 3).

However, this attitude of entering into a relationship with the existing building, of using what is there, is not only a method used by Loos when rebuilding, but also determines his new buildings. For Loos, architectural forms are not the work of a single person but are the cultural achievement of a society. This is why he vehemently resisted designing new ornaments, as did his greatest competitors, the designers of the *Wiener Werkstätte*, in particular architect Josef Hoffmann. His most famous saying «Ornament is crime» has to be understood also in this sense: not to design new ornament, but using pre-existing, classic ornament. «The concept of transformation thus contains a dialectic of two intentions: of preservation and change»⁵. Change is only permitted where it brings an improvement and change is based on taking up «everything in existing culture that serves its advancement»⁶.

In the case of the building on Michaelerplatz for men’s outfitters Goldmann + Salatsch, the focus of criticism and

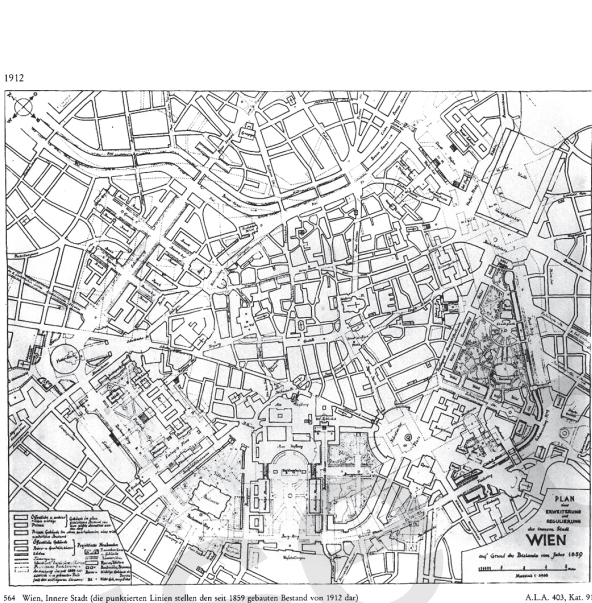


Fig 1. Adolf Loos, Plan of Vienna, Vienna, 1912 (the punctuated lines show the development after 1859)

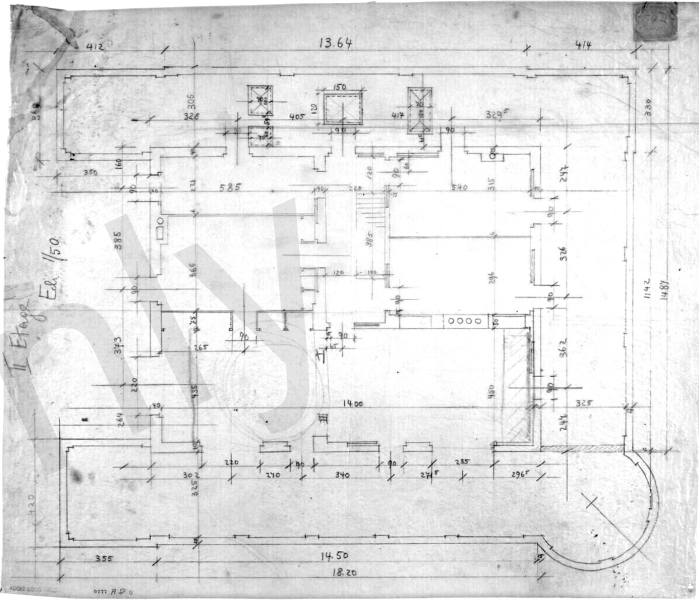


Fig 2. Adolf Loos, Villa Karma, floorplan, 1903-1906



Fig 3. Adolf Loos, Haus Mandl, interior, 1916



Fig 4. Adolf Loos with Ernst Epstein, Haus am Michaelerplatz, facades, 1909-1911

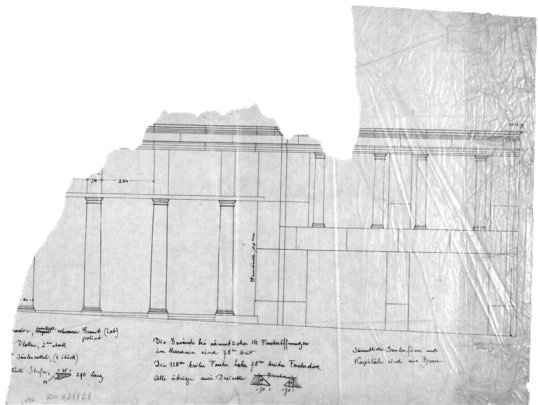


Fig 5. Adolf Loos, Haus am Michaelerplatz, facade detail, 1910

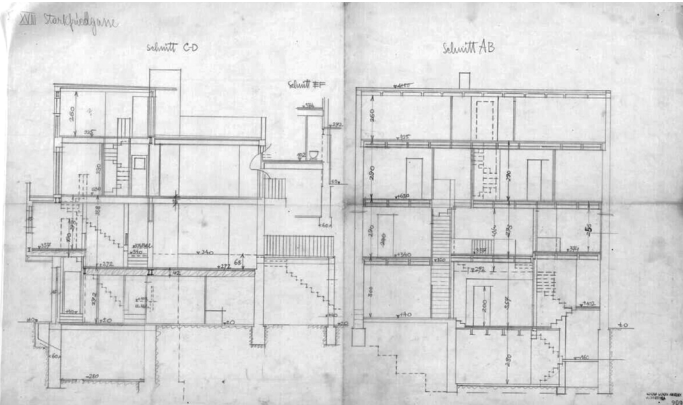


Fig 6. Adolf Loos, House Moller, section, 1927

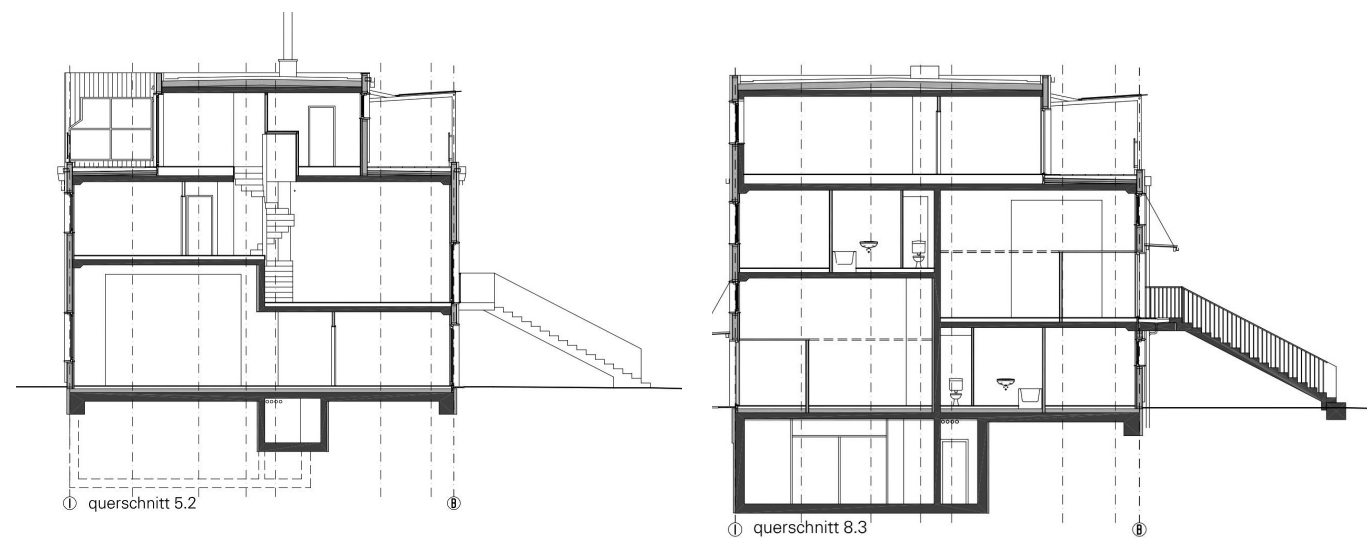


Fig 7. Hermann Czech, *Housing «generations living»*, sections, 2007-2011.

later the architectural reception was on the smooth, unornamented façade of the upper floors. The rest of the design was dismissed as «not yet fully arrived in the modern age». However, the design can also be interpreted, as Czech and Mistelbauer did in 1968, as a deliberate setting that enters into a relationship with the existing building in order to «take up everything in existing culture that serves its advancement»⁷. (Fig. 4, 5).

Seen in the context of its surrounding buildings (Michaelerkirche and Hofburg), the columns can be understood as a differentiated repetition of the porticoes of these buildings; the gentleman's outfitter, a bourgeois, assimilated Jew, is also given his place next to the church and the imperial house with his own portico honoring him, which, however, is given two essential differentiations: the marble columns do not support the suspended steel girder that reveals modernism, they become symbols of a «distinguished entrance» and they do not stand on a raised plinth with the stairs in front, but the falling terrain to the square is simply formed with steps in between the columns that wears away with the terrain⁸. Loos takes the elements that are there and reassembles them or leaves out what is no longer needed. The decoration of the façade in the upper floors, where modern man withdraws and wants to remain anonymous to the outside world is for Loos no longer needed. (Fig. 6).

Czech recognizes in Loos a design method that progresses from one thought, one consideration, from one decision to the next, whereby each decision can be questioned again and again. He illustrates this logic with the example of the *Raumplan*⁹, where Loos propagated to organize a space also in the third dimension according to its needed room heights. The development of the *Raumplan* would not have been possible without this logic of designing, as it makes it necessary to constantly think from the bottom up and from the top down, in feedback loops. The existing building in this logic is also understood as something where there are already predetermined decisions to which new ones are added, which also

can call the predetermined ones into question, just like one's own judgements in the design process. Consistently thinking ahead, one's own series of decisions cannot be considered to have ended with the completed building. Loos even denounces this decidedly in the story of the poor rich man who becomes a foreign body in his perfectly designed house¹⁰.

To conclude, I would like to show the definitions of the term *Umbau* as reflected above by analyzing two works by Hermann Czech himself¹¹. (Fig. 7).

The Kleines Café is one of Czech's most known projects, it was built between 1970-1974 in several building phases. In a time when Hans Hollein built his legendary small shops in Vienna which used new materials, new forms, new technologies in the spirit of the time with its enthusiasm on the space flight, Czech, on the contrary, kept what was there and what was still usable for a café like the existing wooden shop portal or the ceramic tiles on the floor. He preserved and improved the existing but without screaming it out in the design. The entrance portal got a new color, green, in reference to the green painted wooden windows in the surrounding houses. It got a new sign in the typical technique of existing shop signs, glass with black color on the back. To the existing ceramic tiles in the room, he added new ones in a new style but not evidently new. He changed the characteristics of the spaces by adding a new layer of ordering wooden profiles and mirrors, set in their frames in a way that, on first glance, you do not recognize the mirror but feel as entering a generous space. In this way new relationships are generated within the space itself but also among the visitors. There are many more architectural considerations and decisions like these. The Kleines Café is unchanged and in use since its opening, more than 50 years now. Its ageless appearance makes it incredibly sustainable. (Fig. 8).

In the Generations Living housing project 2007-2011, Czech makes use of the Viennese building regulations which allow on that lot a maximum building height of 7,5 m. This in consequence makes a room with a height of 4,0 m possible.

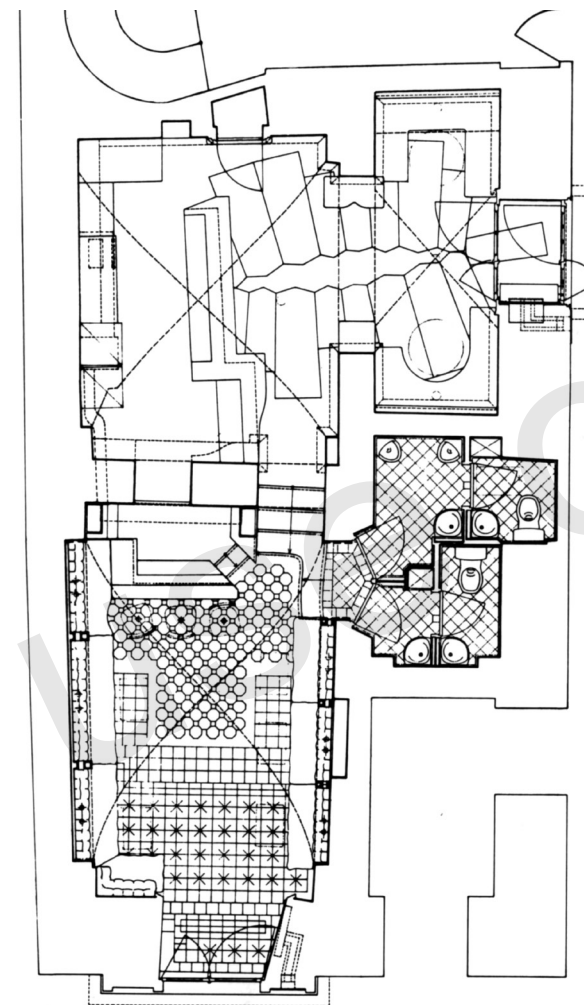


Fig 8. Hermann Czech, *Kleines Café*, floor plan, 1970-1974.

This 4,00 m room cannot be subdivided according to the building regulations but is de facto expandable in a gallery as an informal used space. A spiral staircase is set in the space in such a way that this new level may be accessible. This space conception invites its inhabitants to change the space and allows users to participate in the architecture. The garden zone is given to the residents of the first floor and is subject to disfigurement, the architecture is strong enough to bear these traces of individual *Umbau*.

Conversion, *Umbau* in this concept is a reflective attitude, an active relationship with the building and its surrounding, a tension that results from the dialectic of preservation and change. This type of conversion is a draft of a series of decisions open to the future. Designing in the logic of *Umbau* represents a new level of complexity compared to the classic way of designing a new building and meets essential current needs: recycling, sustainability, and a new way of dealing with users and actual participation.

Notes

1. Hermann Czech, "Transformation", in Hermann Czech, *Essays on Architecture and City Planning*, Park Books, Zurich 2019, p. 190.
2. *Ibid.*, pp. 185-191.
3. Burkhardt Rukschcio, "Der Plan von Wien. Städtebauliche Arbeiten von Adolf Loos in Reflexion der Theorie Camillo Sittes", in Adolf Loos, Adolf Loos: [Katalogbuch... zur Ausstellung "Adolf Loos", veranstaltet von der Graphischen Sammlung Albertina in Zusammenarbeit mit dem Historischen Museum der Stadt Wien, ... 2. Dezember 1989-25. Februar 1990], Löcker Verlag, Wien 1989, pp. 217-250.
4. Hermann Czech, "Transformation", cit., p. 188.
5. *Ibid.*, p. 189.
6. *Ibid.*, pp. 189-190.
7. Hermann Czech, Wolfgang Mistelbauer, *Das Looshaus*, Löcker Verlag, Wien 1984

8. *Ibid.*, pp. 111-112.
9. Hermann Czech, "Transformation", cit., p. 190.
10. Adolf Loos, "Von einem armen reichen manne", in Adolf Loos, *Ins Leere gesprochen 1897-1900*, Brenner Verlag, Innsbruck 1932, pp. 214-220.
11. See: Eva Kuss, *Hermann Czech: an architect in Vienna*, Park Books, Zurich 2023.

These considerations were first presented on occasion of the international conference on «Architektur in Transformationsgesellschaften, Geschichte und Gegenwart des Umbaus» held at the TU Munich School of Engineering and Design, Lehrstuhl für Theorie und Geschichte von Architektur, Kunst und Design, 26-28/10/2023.

The Possibility of Change: Assemblages, Accumulations, Contextual Adaptations

Angelo Lunati

The typological energy of buildings radiates through successive transformations, sustaining new uses for spaces – the main reason why architecture is altered throughout its lifespan. It is their typology that allows buildings to endure.

The meaning of a work of architecture can be understood as deriving from two distinct spheres. The first connects the individual building to a larger constellation of architectural precedents, based on similarities of form and structure. In this way, the building is linked to a universal dimension, a wider cultural picture related to the disciplinary discourse. This condition of belonging amplifies the meaning of a building and connects the singularity of its existence to a collective knowledge. The second is determined by the way the architecture responds to the diverse conditions of its situation. The uniqueness of the architectural fact is connected to the specificities of the context, be them physical, geographical, or climatic conditions or more intangible parameters such as cultural, economic, or political frameworks. The meaning of architecture grows in line with its capacity to express these diverse conditions. Balancing the qualities of the two spheres – the abstract simplicity and universality of the type and the complex contingencies of real life – is the highest ambition for every work of architecture. European cities offer some exceptional illustrations of this principle, in buildings that have accrued architectural meaning through a centuries-long process of transformation of the original relationship between form and use.

In Milan, the changing fortunes of the Ca' Granda, founded in the 15th century as the city's main hospital, demonstrate in the most extraordinary way the permanence of form – of the very idea of the building providing a crucial foundation for its endurance – for the possibility of its reuse. Here, at the same time, we see the capacity of the building typology to support adaptations, substitutions, and accumulations, which amplifies the spatial quality and meaning of form through time.

The powerful idea of the scheme – the simple original figure represented with a few precise lines drawn by Filarete on the paper of his *Trattato* – has survived through the centuries, weathering moments of economic crisis, changing needs, and unexpected destruction. The aura of the building lies in the gap between the idealized unitary form, outlined in the original drawing and translated into the 17th century extension, and the actual formal result of its complex and diverse accumulations: a figure of *assemblage* in which the typological quality elegantly frames the different transformations, creating a prevailing sense of unity.

This building has had many authors through the long period of its construction, from Filarete – who was himself probably inspired by the ideas of Leon Battista Alberti – to Giovanni Antonio Medea – who worked on the portico of the

central courtyard – to Francesco Maria Richini – who was responsible for the 17th century redevelopment and completion of the entrance-courtyard system – to Ambrogio Annoni, Liliana Grassi, and Piero Portaluppi – who oversaw the postwar repair of the building and its transformation into a university complex. The diverse contributions of these architects overlap and merge into the materiality of the building we experience today, with the relevance of the built form diluting any possible authorial dimension (Fig. 1 and 2).

The tension between form and use – between the formal clarity produced by the multiplication of the same geometry and the functional adaptations that give the spaces many different characters – is still evident today in several parts of the building. The generous vaulted volume of the *Crociera* (Crossing) – 10 m wide and 95 m long – built to host hospital beds, is now a grand space for the central library of the Department of Law: Portaluppi's postwar intervention remodeled the same figure of the cross in a more daring way, by working on the architectural transparencies of the corners and placing a suspended staircase at the intersection of the two naves.

The different pieces, repaired, replaced, and added over time, all refer to the original building, which serves not just as a physical but also as a cultural foundation. In this respect, the postwar transformation is particularly significant as it combines restoration and replacement in a synchronic way, in line with Ernesto Rogers' observation that «to conserve and to construct are moments of the same act of conscience»¹.

The side of the building along Via Francesco Sforza, formerly the Naviglio (Milan's canal), does not display a geometrical sequence of pieces but has always been – particularly before the 1943 bombardment but still today – a messy accumulation of added structures. The original frontage is submerged under the buildings that have piled up around the square Chiesa della Beata Vergine Annunciata, which in the past included carpentry workshops, a laundry, a morgue, and a mill. Up until the late 1920s, an 18th century portal led to the bridge across the canal.

By contrast, the side along Via Festa del Perdono reveals the very nature of the construction. On closer inspection, the around 320 m long compact mass is formed of a succession of pieces built in different periods. Although it is not exactly a series of separate buildings along the same street, it is still perceived as diverse elements belonging to a unitary body. There is Filarete's decorated terracotta mass, characterized by the portico on the first level and the brick front with its frescoed decoration in roundels and lozenges; there is the intermediate piece related to Richini's 17th century façade, resembling Filarete's geometries and materiality, and defined by its large central portal leading to the main courtyard; and then, finally, there is the simple 19th century extension

toward Via Laghetto. With this merging of different pieces built over the centuries, any possible connection to the building's original (or contemporary) purpose is lost; instead, the resulting assembly stands as meaningful evidence of the accumulative quality of the city – of its capacity to reconstitute disparate elements as a whole.

However, transformation can also be driven by a change in the crucial relationship between the object and its context; in other words, transformation can also be driven by external forces rather than inherent contingencies or aspirations. We could call these cases «contextual adaptations», as the architectural object is adapted and reconnected to a physical situation or specific cultural context by drawing on its typological qualities.

The case of San Nazaro, just a few meters away from Ca' Granda, significantly combines different transformations – some adaptations and reconstructions of the same typological figure, and some additions – to redefine the relationship between the object and its context. The basilica, originally dedicated to the Apostles, was built around 385, in late imperial Roman times. It was related to the Via Porticata, the monumental road connecting Milan to Rome, through a porticoed atrium or quadriportico. Its plan was modeled on that of the Church of the Holy Apostles in Constantinople, forming a Greek cross with four identical arms, 20 m long and 7 m wide. After a fire in 1075, the basilica was rebuilt in a Romanesque style, using the original walls but also adding a vaulted roof, octagonal dome, tiburium, and large apses to the side arms. Two additional volumes were built in the 16th century: the Trivulzio Mausoleum, which covered the original façade of the basilica and radically changed its presence toward the street, and the chapel of St. Catherine on the left transept. Bramantino's design for the mausoleum – the painter's only work of architecture – replaced the quadriportico with a large square brick vertical mass: the façade is bare, decorated with simple Tuscan order pilasters, a mullioned window on the upper order, and a portal surmounted by a triangular tympanum. The interior of the mausoleum is also bare, but is bright and sculptural. The small inner faces of the octagonal space can be divided into three horizontal sections: the lower section and the middle section with niches, and the upper section with large mullioned windows, each supported by a central Doric column.

The powerful and dry abstraction of this architecture is reminiscent of the bare geometries of the urban buildings that formed the surprising backdrop to the *Crucifixion* Bramantino had painted some years before. The volume firmly extends the church toward the square, aligning with the façades that define the public space: the simple act of superimposing a new volume of the same dimensions as the original quadriportico, combined with the austere elegance of the brick façade, radically transforms the building, promoting a new relationship between the reconstructed Roman space and the city.

Here, the original abstraction of the figure is reinforced through a series of substitutions, adaptations, and accumulations of additional pieces with specialized purposes in relation to the main use, leading to a more complex figure – another figure of *assemblage*, in which the mausoleum and chapel extend the spatial and material quality of the original scheme and contextually adapt it to the city.

Accumulations and adaptations are essential for the production of architectural meaning; type, as Moneo argues, is «the frame within which change operates»², but change can be driven by different factors – by new functional requirements linked to different uses, by a lack of space or need to rationalize the existing plan, by ruinous events such as fires, economic crises, war. In all these cases, the typological quality of the building sustains successive transformations. Akin to biological processes of mutation, these transformations strengthen the genetic structure of the building, allowing it to have a second life that was unforeseen at the time of its construction. Adaptations that arise from external forces or produce different relations to the outside world represent the ultimate conditions for a contextual architecture, not only enhancing the resilience of the form-structure but also charging the surroundings with a new tension. The dry condition of typological change is then reinforced by the new role the building performs in the city.

More than imagining new, unalterable forms, the work of the architect today has to do with understanding and negotiating possible relationships with existing buildings or given formal situations; *assemblages* and contextual adaptations may support these transformations, increasing the meaning of the form and at the same time reconnecting it to the articulated and everchanging richness of the city.

Notes

1. Ernesto Nathan Rogers, *L'esperienza dell'architettura*, Einaudi, Torino 1958, p. 318.

2. Rafael Moneo, *On Typology*, in «Oppositions», n° 13, ed. by P. Eisenman, K. Forster, K. Frampton, M. Gandelsonas, A. Vidler, p. 27, The MIT Press, New York 1978.

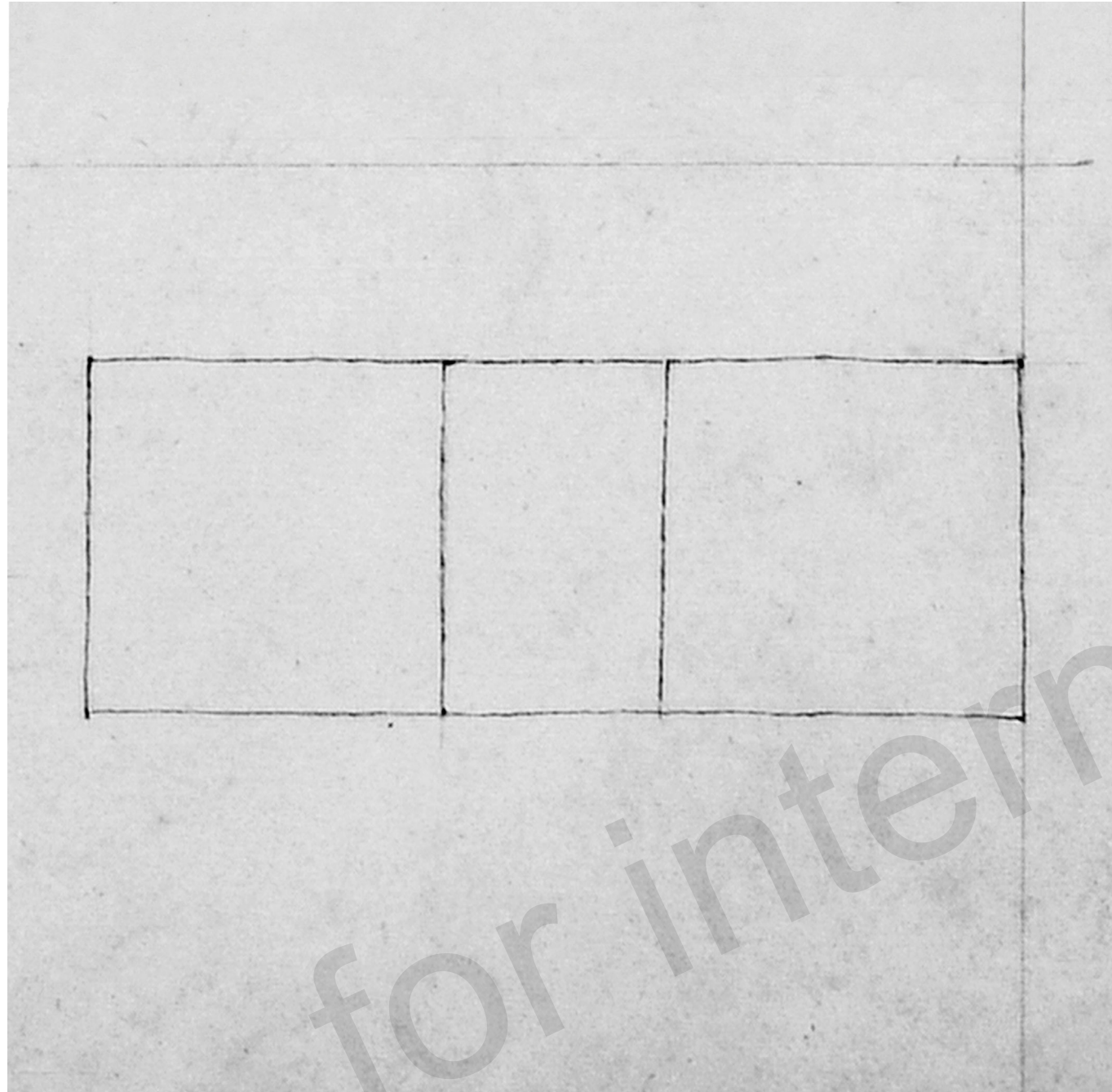


Fig 1. Antonio Averlino detto Filarete, *Schema planimetrico, Trattato dell'architettura*, ms, membr., mm 398 x 280, 15th century (Firenze, BNCf, Fondo Nazionale II.I.140)



Fig 2. Liliana Grassi, *Project for the restoration and arrangement of the old Ospedale Maggiore in Milan for the La Statale University*, Photographic reproduction of the general plan scale 1:500, Milan, 1954 (Liliana Grassi Fund)

Transformation

Hermann Czech

Granted that Loos’s early works are interior design projects for shops and apartments in existing buildings, that is consistent with the sort of work typically marking the beginning of an architect’s career. And granted that in his later work, adaptations and transformations¹ – in short, interaction with existing built substance – continue to play an important role, that could simply be seen in relation to the fact that he hardly completed any large projects.

When one considers the Otto Wagner’s work, no transformations come to mind. Yet is it really a matter of the size of the projects? Isn’t it more that transformation plays a constitutive role in the architecture of Adolf Loos – far beyond the role of a beginner’s exercises in the *métier*? And doesn’t Loos’s oeuvre already stand for a spirit of the times that no longer progresses linearly through techno-industrial modernism, but, having encountered it, adopts a complex, reflective position toward it?

The urban aspect

The 19th-century metropolis is an opus at different scales. First, it is a network of traffic circulation, structured by the built form (for example, in blocks of buildings). Next, it is an addition of built structures (for example, “houses”). And a third, structural scale exists that usually distinguishes itself technologically and legally: that of the individual use, including the shop, the café, the apartment, the workshop.

Each of these scales is a specification of the next larger one. Order arises through the decisions in the larger scales, variety through the decisions in the smaller scales. (If, for example, the small-scale decisions are lost, perhaps because there are now only large housing developers or large department stores, then it is pointless to try to simulate them with architectural means.)

The different scales have different time frames. The decisions in the respective larger scales are longer lasting than those at smaller scales. Therefore, without the process of transforming, urban life would be utterly inconceivable.

Otto Wagner did manage to complete the large-scale transformation of the *Gründerzeit* urban fabric; this was the city that Loos encountered, and he grumblingly critiqued the *Ringstrasse*’s shortcomings by means of a hypothetical city plan.

Loos’s distinct urban design projects, which – had they been carried out – would have confirmed the large-scale urban structure and enriched it with incisive effects, should be understood in this relation of scales: they take up the larger-scale specifications, for example, of the *Ringstrasse*, and are themselves structures that allow a variety of small-scale uses.

The architectural-spatial aspect

In the hierarchy of these scales, the “furnishings” of shops or apartments are the “minor” design problems – if not subordinate, certainly, not befitting major architects at the height of their productivity.

Loos’s interventions in existing built substance no longer correspond to this hierarchy of scales of the classical metropolis. They are not interpretations but rather reinterpretations, not instances of fitting out a building but transformations. Such a transformation approaches the building “substance” by calling it into question – but certainly not by eliminating it.

Loos’s modifications can be classified relative to a few different configurations. One of them could be described as the addition of spatial layers, in the case of at *Villa Karma* externally, but otherwise usually internally. It involves not merely introducing a layer of material as veneer, but rather a three-dimensional layer that enters into a dialogue with the remaining space. The original spatial arrangement is thereby modified or counteracted in the service of new, often axial spatial contexts. The new three-dimensional layer provides small rooms, corridors or cabinetry. Only in the case of suspended ceilings does the partitioned volume remain unused.

Another configuration of the spatial modifications is the removal of a load-bearing wall and the accompanying structural measures, particularly in connection with an addition to a building. The downstand beam structurally required to support the loads above it becomes a prominent means with which to organize the ceiling and the space (*Mandl House*).

While a floor is seldom removed or relocated, in another prototypical reconfiguration, existing rooms are subdivided by inserting an additional floor, for example as a gallery.

For Loos, these means and their spatial consequences are not attributable to transformations in particular, but are general components of his spatial thinking. A chronology of specific thoughts about design would perhaps even suggest that their origin lies in transformation.

A transformation is not inferior to a new structure; it is not a compromise. In a transformation project the elements of the existing building and the changes made to it form a union with the newly introduced elements. This union constitutes a substantive work in its own right.

The cultural aspect

The concept of transformation thus implies a dialectic of two intentions: of preservation and of change. Although Loos makes it clear that he is modern and focused on the future, the main thrust of his argument is on preservation. Change is only permissible if it spells improvement. Type and shape «are the result of the overall unconscious efforts of people of an entire culture», and «the individual is incapable of creating a form, and so is the individual architect»². Yet Loos is convinced that an individual can succeed in creating a new type, not just to be part of a tradition, but also to establish a new one.

But his *Lebensreform* approach does not involve breeding an isolated seed for a new world; he seeks instead to take up everything in existing culture that serves advancement. He

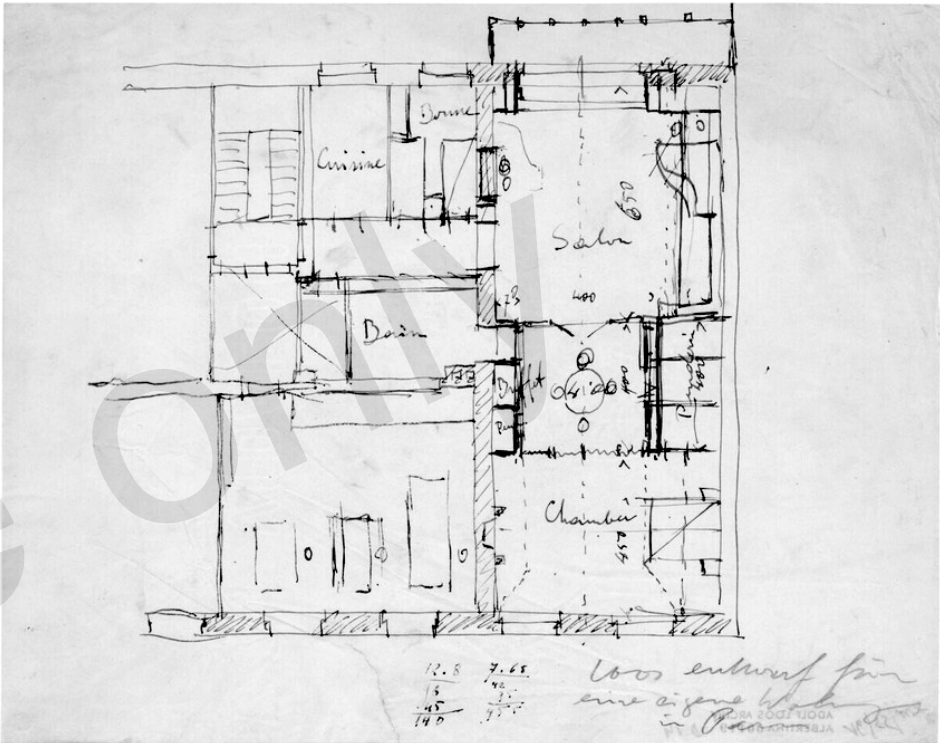


Fig 1. Adolf Loos Apartment in Paris, floor plan, 1925

does not consider every detail from scratch. Anyone wishing to convey new ideas cannot simultaneously make use of a new language to do so.

Neither in the physical nor in the intellectual sense does he seek out – as Otto Wagner did – the most permanent material, but rather the material with the suitable durability. An association of ideas does indeed lead from re-use to re-cycling; in the same vein, the *Raumplan*³ gives rise to an understanding of the ecological principle – namely, when discussing a system, to consider the consequences outside the system.

The methodological aspect

What is characteristic of transformations – we now return to architectural design – is that decisions have already been implemented. When one recognizes that every design process consists of a series of decisions, and that later decisions are determined by earlier ones, it will make no essential difference whether the earlier decisions were one’s own or someone else’s. Each step of the design process contains specifications that subsequent thoughts must either accept or reject.

Precisely, the *Raumplan* requires constant feedback between one story and the next, between the longitudinal and

the cross sections, in the course of which it may not necessarily become easier to relinquish an earlier idea of one’s own than it is to remove an existing building component.

Tendentially, the aim of the *Raumplan* is to create a congruous construct to which no changes can be made. Nevertheless, Loos’s designs always have the character of being works in progress; his presentations – for example, for competitions – never possess the smooth perfection of, say, those of Otto Wagner, which seem to have arisen in his mind in a completed state.

This is why Loos can countenance the notion that others might later change his work; he was the first to tell the story of the poor rich man, in which he relates that an apartment or a house must live on with the user, and put up with different notions of taste – that is, put up with another ethic. And only in light of Loos’s oeuvre as a whole does the idea of delegating aesthetic decisions to others – present and future users – make sense: not on account of some insincere fiction of purported neutrality that makes no decisions, relinquishing them to the users. For Loos gives us a glimpse of an architecture that is strong enough to set the tone, open to absorb much more, yet aware of the harm of future distortion.

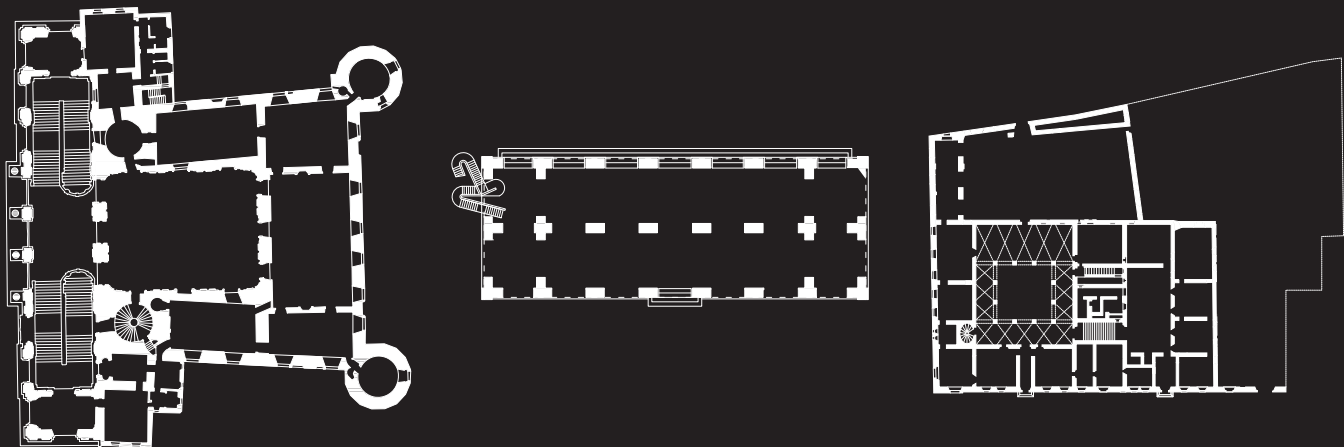
Notes

1. No English word can convey the many meanings of *Umbau*; depending on the context it connotes transformation, remodeling, adaptation, conversion, etc.
2. Adolf Loos, “Ornament und Erziehung” (1924), in *Adolf Loos: Sämtliche Schriften*, vol. 1, ed. by F. Glück, Herold, Vienna / Munich 1962, pp. 391-398.
3. The *Raumplan* – in Loos’ view, of his own invention – consists of interlocking volumes with ceilings only as high as the respective room requires. Loos was convinced that «a water closet doesn’t need to have the same height as a hall»

and that «people will one day succeed in playing chess in three dimensions». The economy of the floor plan is carried over to the section.

*This essay was published in German under the title “Der Umbau,” in: *Adolf Loos* (exhibition catalog), Albertina, Löcker, Vienna 1989, pp. 159-172; in English as “Transformation” in: *Hermann Czech, Essays on Architecture and City Planning*, transl. and ed. by Elise Feiersinger, Park Books, Zurich 2019, 185-191.

First Category Formal



Buildings with a strong typological footprint and spatial quality of monuments or palazzo types. The selected cases show the minimal efforts necessary to harbor new uses. The resilience and longevity of these buildings coincides with the affordances provided by the underlying type as a powerful typological footprint – sustainability through centuries of (adaptive) reuse.



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Palazzo Madama
p. 36

Ancient City Gate / Museum of Ancient Art
I sec b. C. / 2006
Turin, Italy

Palazzo della Ragione
p. 54

City Parliament / Exhibition Space
1233 / 2000
Milan, Italy

Palazzo Medici Riccardi
p. 66

Palazzo Medici / Museum, Public Library, Florence Metropolitan Council
1444 / 1952
Florence, Italy

Palazzo Gravina
p. 80

Palazzo Orsini di Gravina / Faculty of Architecture
1549 / 1948
Naples, Italy

Het Predikheren
p. 94

Dominican Monastery / City Library
1650 / 2019
Mechelen, Belgium

Chapel-House
p. 102

Chapel of Our Lady / House
1661 / 2022
Ninove, Belgium

Bourse de Commerce
p. 108

**Halle aux Blés et Farines /
Bourse de Commerce-Pinault Collection**
1763 / 2021
Paris, France

Architectural Association
p. 118

Georgian Terraced Townhouses / AA School of Architecture
1775 / 2021
London, United Kingdom

Soane Museum
p. 132

House at no. 12, Lincoln's Inn Fields / Sir John Soane's House and Museum at Lincoln's Inn Field
1792 / 1833
London, United Kingdom

Palazzo Madama
 Turin, Italy

I cen b.C: Ancient City Gate
 1317-1367: “Casaforte” Fortress
 1402-1418: Castle (towers addition)
 1638-1663: Noble Residence (covering of the courtyard)
 1718-1721: Baroque Palace (new façade + staircase) –architect: Filippo Juvarra
 1819-1822: Astronomical Observatory
 1861-1864: Senate of the Kingdom of Italy
 1934: Civic Museum of Ancient Art

I b.C Ancient City Gate
 2006 Museum of Ancient Art

Located in the heart of Torino, Palazzo Madama is a perfect synthesis of two thousand years of history. The ancient city gate proved to be sufficiently manipulable and capable of suggesting different uses and conformations throughout history, thus allowing for the development of a rather rich sequence of spatial settings. This ancestral typology fulfilled the role of a threshold, a point of access to the protected space of the City. The gate was first transformed into a small fortress (Casaforte) during the Middle Ages, and expanded into increasingly sophisticated configurations up to becoming the residence of the Acaja family. During the 16th century, following extensive renovations, it was transformed into a luxurious aristocratic residence of the House of Savoia; the object was connected to the Palazzo Ducale through a gallery and the castle courtyard was covered to create a new hall. In 1720, Filippo Juvarra “attached” a new significant façade to the old castle. A monumental staircase connected the floors for receiving prestigious guests. In 1822 an astronomical observatory was built on the north-west Roman tower, and in 1886 a telescope topped with a dome was added; both objects were demolished in 1920 and the roofs of the Roman towers were restored. Between 1861 and 1865, the Palace became the Senate of the newly formed Kingdom of Italy; the covered hall from the 16th century was set up with wooden structures to accommodate senators. During the 20th century, the building served various purposes, including housing the Museum of Ancient Art and the City Museum of Art. Restoration work was undertaken to preserve and showcase the historical significance of the building. Today, Palazzo Madama is home to the Civic Museum of Ancient Art. Its architectural evolution, with its layering, has transformed the building into a unique testament to European Cultural Heritage.

Drawings Chronology

I cen. b.C: The Ancient City Gate “Porta Decumana” protruded from the eastern section of the walls, at the end of the decumanus maximus. It consisted of two larger archways in the center and two smaller ones on both sides, and was flanked by two towers. A rectangular building with an open inner courtyard (cavedium), where the guardhouse resided, leaned against the wall between the towers on the side facing the city¹.

I cen. b.C / 1317-1367: A new gate was opened in the walls defended by a tower and preceded by a ravelin; what remains of the old guardhouse was demolished. The project promoted by Filippo d’Acaja transformed the building into a true castle; two square towers were added next to the old city gate².

1317-1367 / 1402-1418: Between 1402 and 1418 Ludovico D’Acaja started the expansion of the castle adding two new towers identical to the Roman ones. Ludovico marked a new turning point in the building’s history, deciding to enlarge and further dignify the castle to the point of making it a courtly residence³.

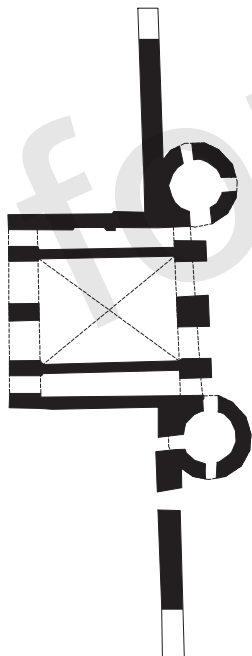
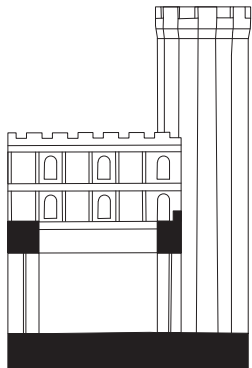
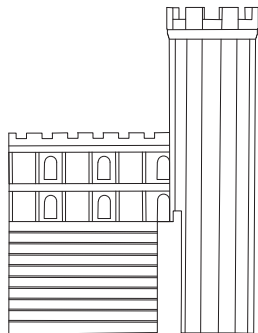
1402-1418 / 1638-1663: In 1638, Christine of France, after the death of her husband Vittorio Amedeo I di Savoia, chose the old castle as her residence. A key element of the enlargement work she promoted was the covering of the old medieval courtyard. This space was transformed into a large ceremonial room⁴.

1638-1663 / 1688-1721: The castle became a palace at the behest of second Madama Reale, Maria Giovanna Battista di Savoia Nemours. The renovation of the interior decoration began in 1688 and from 1718 to 1721 architect Filippo Juvarra completed the new façade with the grand staircase. This grandiose construction was motivated by requirements of ceremonial functionality⁵.

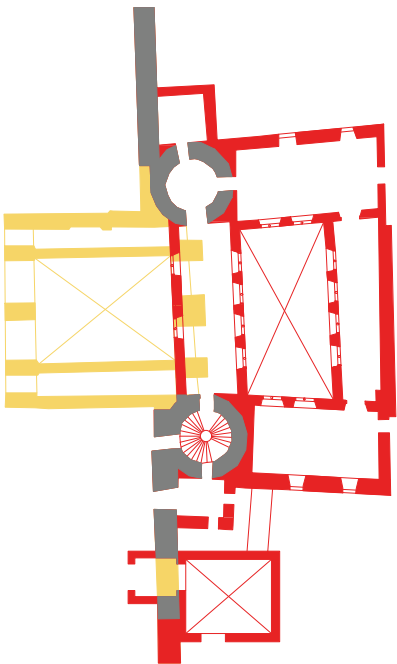
1688-1721 / 1819-1885: The building became home to the Astronomical Observatory. Between 1819 and 1822, a new volume was erected on the roofs of the building, placed close to the crowning of the facade at the northwest Roman tower. In 1885 a revolving dome was built that housed a telescope⁶.

1819-1885 / 1861-1864: On May 1848, after King Carlo Alberto di Savoia granted the statute, the room hosted the first meeting of the Subalpine Senate. On February 25 1861, the birth of the Kingdom of Italy, with Turin as capital, was proclaimed in this room. The Senate used to meet in Palazzo Madama until in 1864 it moved to Florence, the new capital⁷.

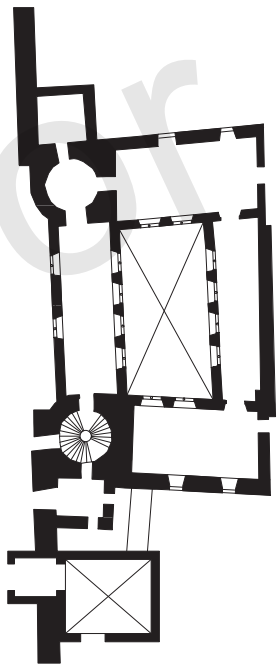
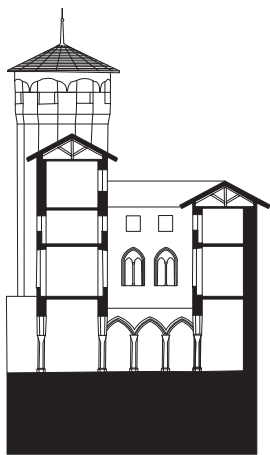
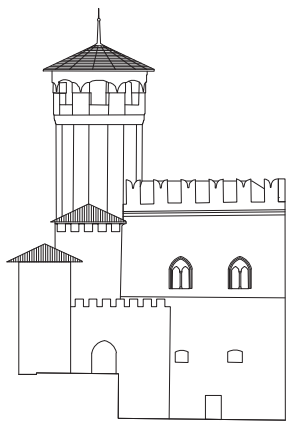
1927 / 2006: The specola was removed in 1920, when the Observatory was permanently transferred to the hills, away from lights and noise that hindered observations. The wooden structure that used to host the senators remained in place until 1929⁸.



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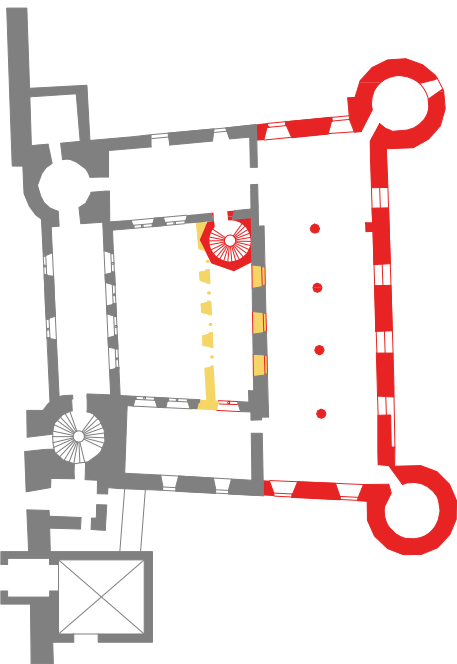


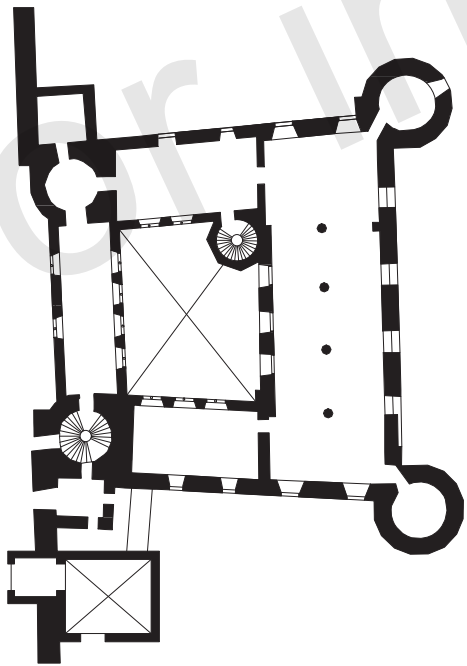
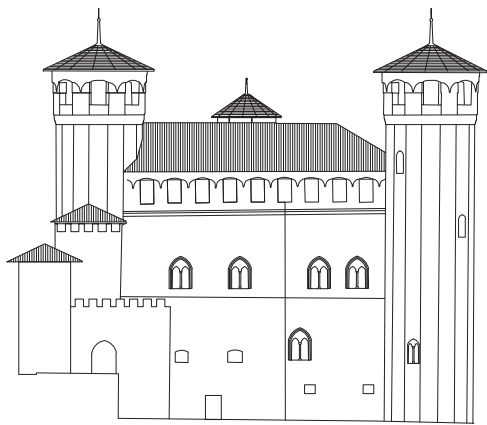
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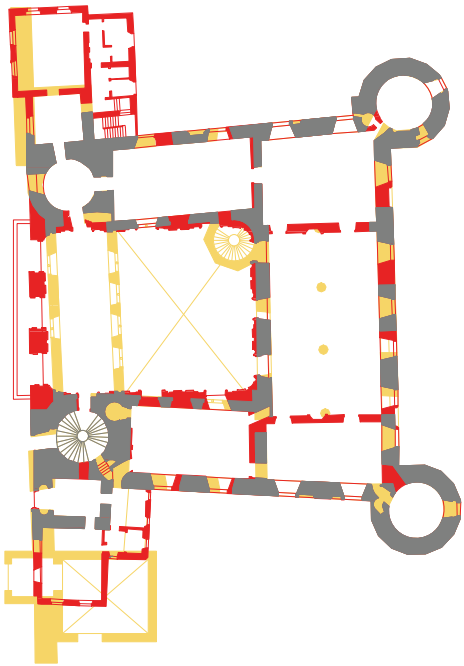
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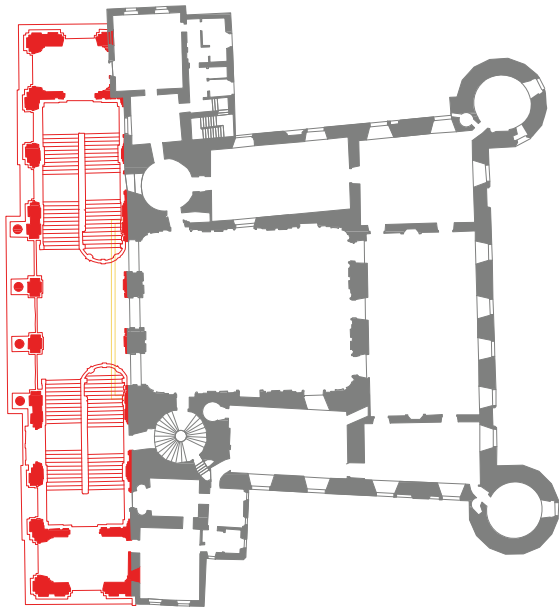
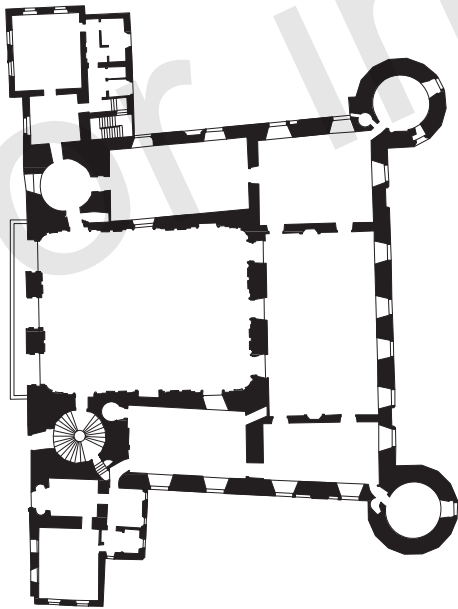
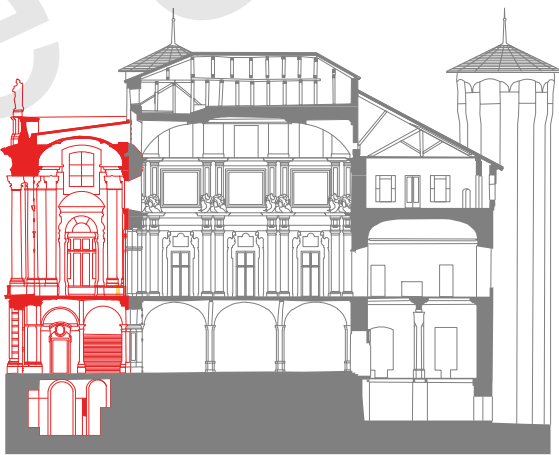
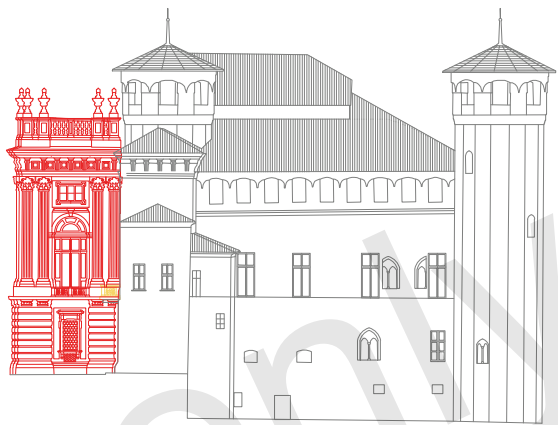




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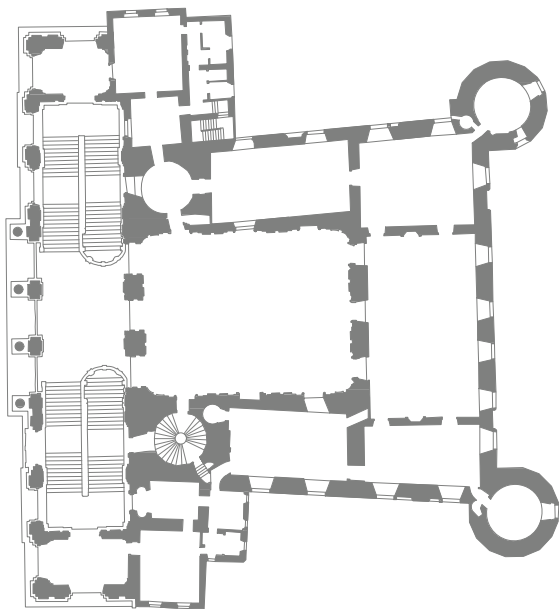
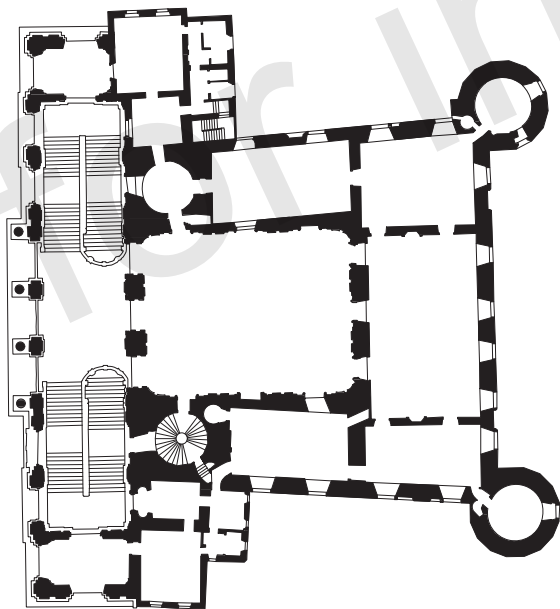
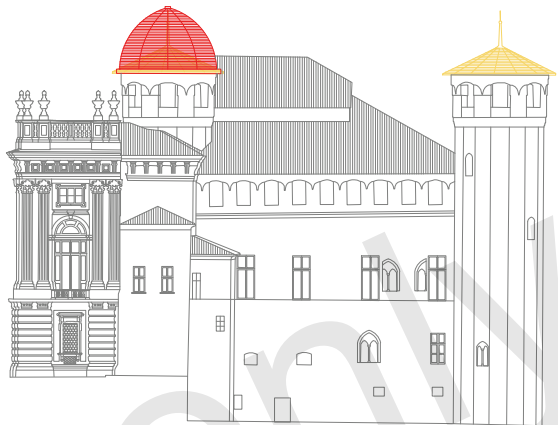
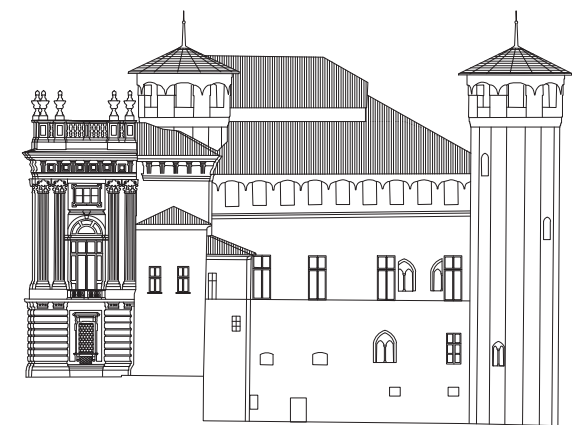


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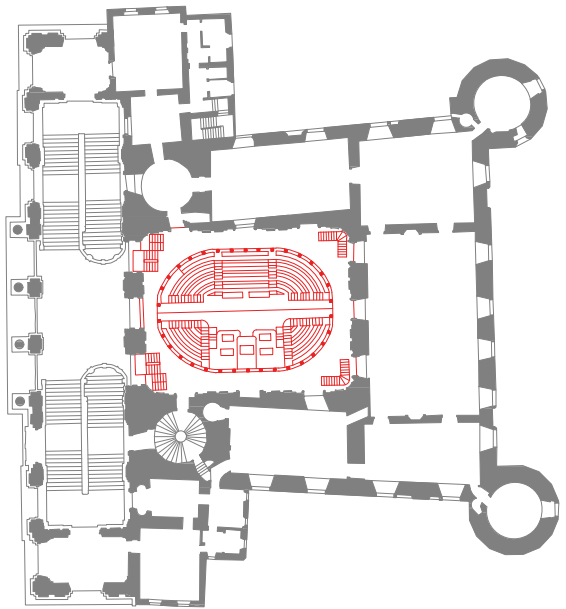
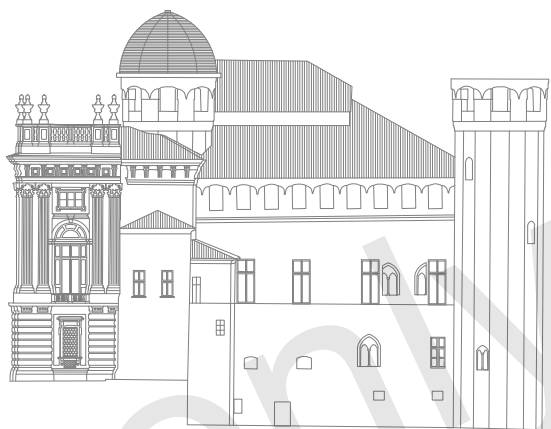
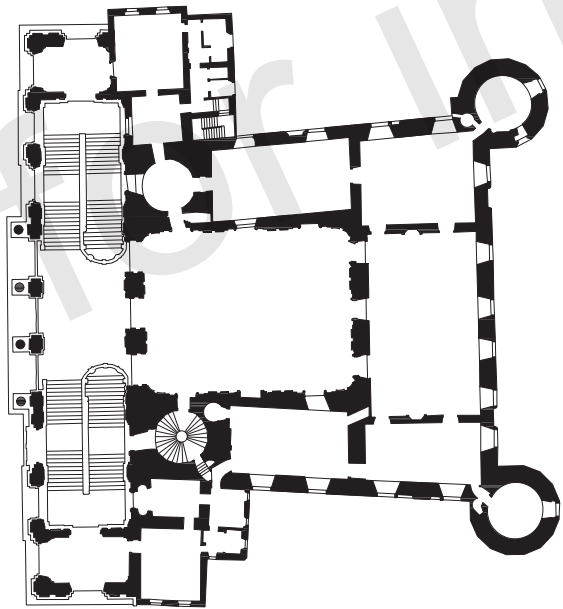
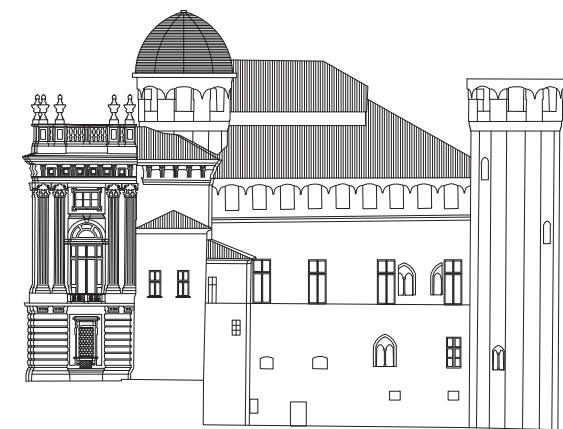
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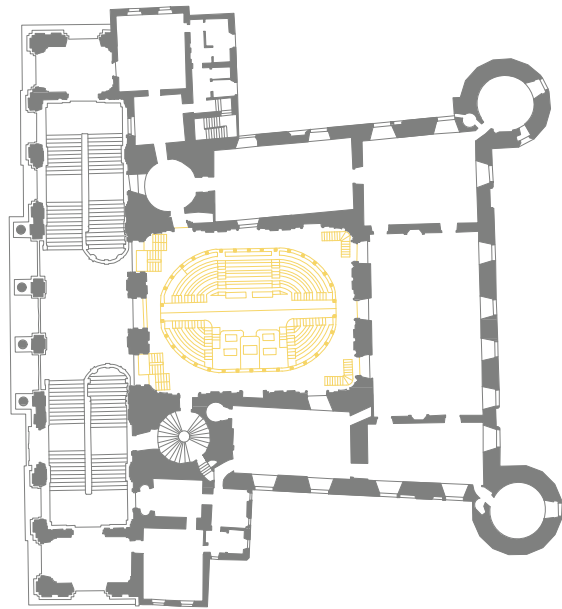
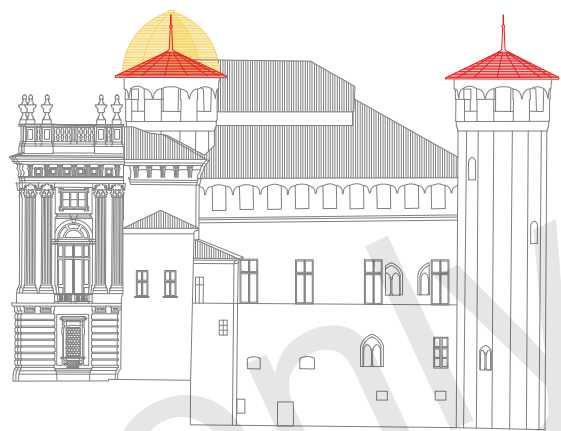
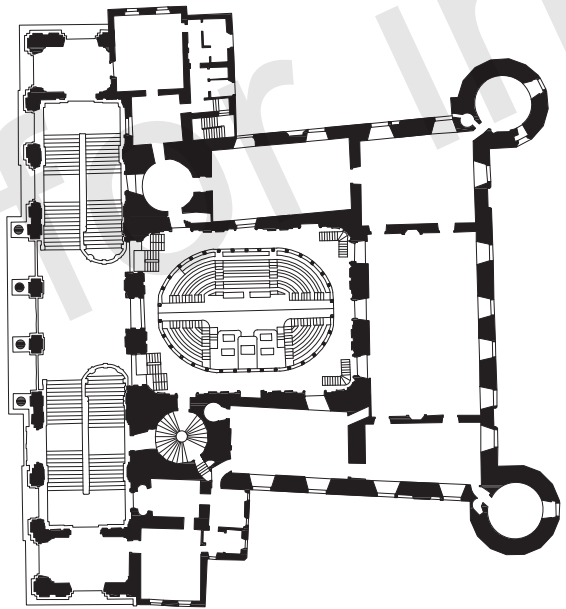
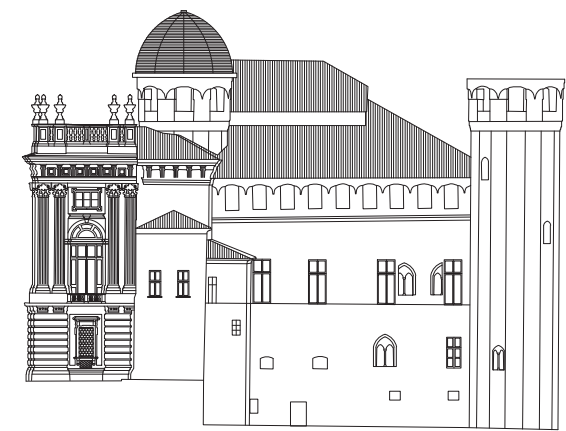
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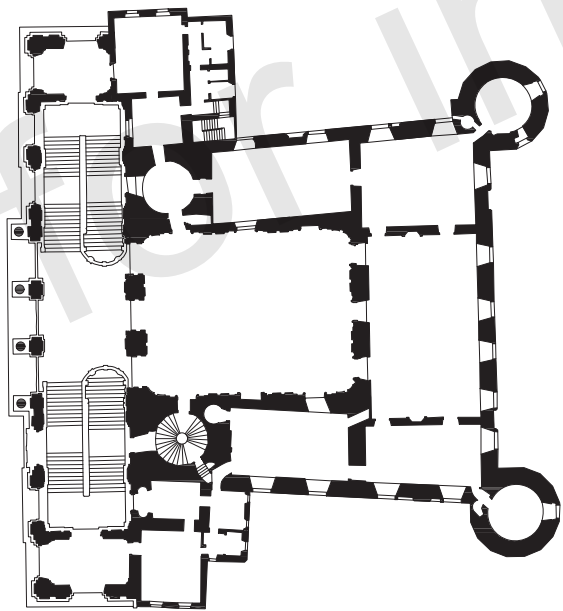
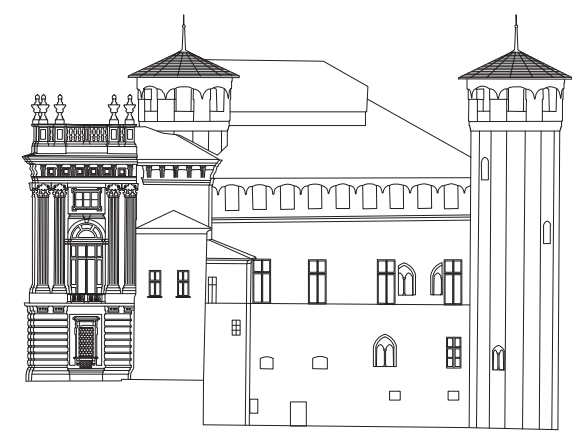
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Notes

1. At the beginning of the first century B.C, the site of the palace was occupied by a gate in the Roman walls that was the starting point of the decumanus maximus of Augusta Taurinorum. After the fall of the Western Roman Empire, the gate was used as a fortified stronghold in the defence of the city.
To redraw plan elevation and section, the author has used the Plan of the Roman City by Alfredo d'Andrade. Fondazione Torino Musei, GAM, Galleria d'Arte Moderna e Contemporanea, Fondo d'Andrade, and D'Andrade's survey of *Porta Decumana*, Archivio D'Andrade.
2. To redraw plan elevation and section, the author used the Ground floor plan of Porta Decumana superimposed with the plan of the first expansion (14th century) and the second expansion (1402-1418) of Casaforte d'Acaja, Palazzo Madama Archives.
3. Ludovico marked a further turning point in the building's history by deciding to enlarge and dignify the 14th-century castle, so that it became a courtly residence inspired by Lombard models. His interventions involved the enlargement of the fortress perimeter with the addition of a new sleeve marked by large terracotta pillars, the construction of two new polygonal towers like the Roman ones, and a smaller tower in the northeast corner of the courtyard.
To redraw plan elevation and section, the author has used D'Andrade's survey of "Casaforte d'Acaja", and the Ground Floor Plan with first and second expansion and Section of Casaforte of Ludovico d'Acaja, Archivio D'Andrade.
4. When Cristina of France assumed the regency, she decided to establish her official residence in the Castle and undertook a rearrangement of the apartments by building a roof over the medieval court, thus creating a large reception hall on the second floor. To redraw plan elevation and section, the author has used a Fresco in the central hall of the Valentino Castle showing a Detail of the Turin Castle by Isidoro Bianchi,1633, drawings from: Francesca B. Filippi, *Palazzo Madama, Gli appartamenti delle Madame Reali, 1664 e 1724*, Museo civico d'arte antica e Palazzo Madama, Torino 2005, and drawings from: C.G.F. Villa (ed.), *Palazzo Madama, la porta di Torino*, Ink Line, Strambino 2022.
5. The promoter of the new image of Palazzo Madama was the second Madama, Maria Giovanna Battista di Savoia Nemours. The duchess moved into the

- castle in 1684 and between 1688 and 1689 initiated a campaign to modernize some of the rooms based on a design by engineer Carlo Emanuele Lanfranchi. The rooms and the stairs leading to the main floor were too narrow and therefore were not adapted to the royal status acquired by the House of Savoia. The palace was completed between 1718 and 1721 with the grand staircase and monumental facade designed by Filippo Juvarra, an open structure dominated by light, one of the greatest inventions of European Baroque. To redraw plan elevation and section, the author used drawings from: Giuseppe Dardanella (ed.), *Palazzo Madama, Lo Scalone di Filippo Juvarra rilievo e ricerca storica*, Città di Torino, Torino 1999.
6. The palace became home to the Astronomical Observatory. In 1822 the Royal Astronomical Observatory was built on the northwest tower, and the rooms on the second floor housed the astronomy school and technical offices. The specola was removed in 1920 when the Observatory was permanently transferred to the hills, away from lights and noise that hindered observations. To redraw plan elevation and section, the author has used photographs by A. Ambrosi from the Archivio Fotografico Musei Civici di Torino, ca. 1900. Archivio Fotografico, Fondo d'Andrade (90f), and drawings from the book *Palazzo Madama, la porta di Torino*, cit.
7. Carlo Alberto reconsidered the building, making it the seat of the Subalpine Senate from 1848 (until it was moved to Florence following the September Convention). The Senate was inaugurated on May 1848; on February 25 1861, the birth of the Kingdom of Italy was proclaimed in this room, with Turin as capital; the last session was held on December 1864. The chamber, which was still intact until 1929, was later demolished following interior renovation works. To redraw plan elevation and section, the author used drawings by Ernst Melano, from: Enrico Pagella, *Sarà L'Italia, la ricostruzione del primo Senato*, Allemandi, Torino 2011, pp. 30-38.
8. In 1934 Palazzo Madama became home to the Civic Museum of Ancient Art in 1934 and underwent numerous restorations which were completed in late 2006. All this has given the city an important documentation on the two-thousand-year History of the palazzo. To redraw plan elevation and section, the author has used drawings from: Carlo Viano (ed.), *Palazzo Madama, Il rilievo Architetonico*, Città di Torino Fondazione CRT, Torino 2002.

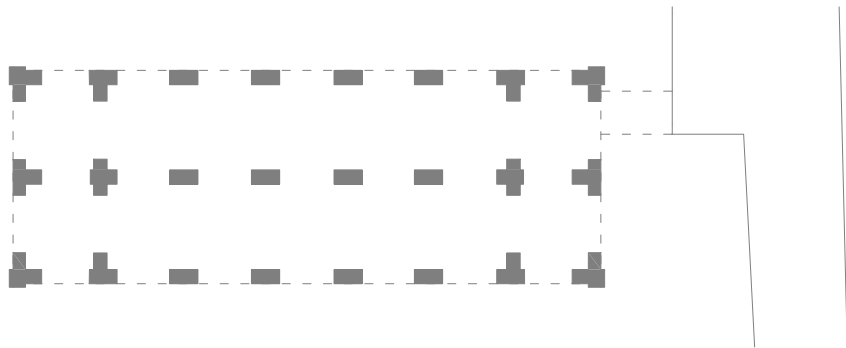
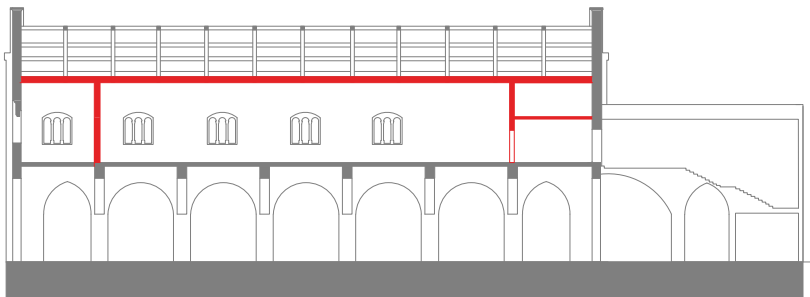
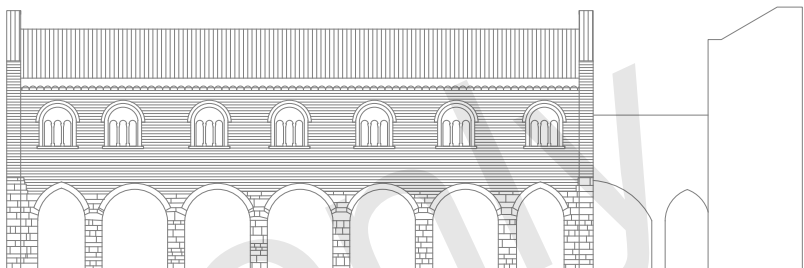
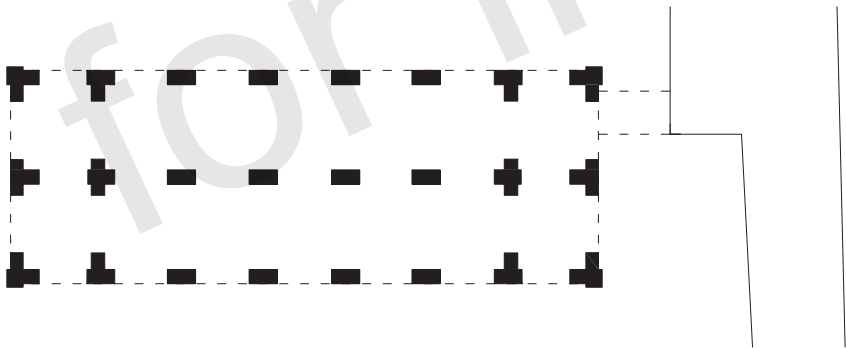
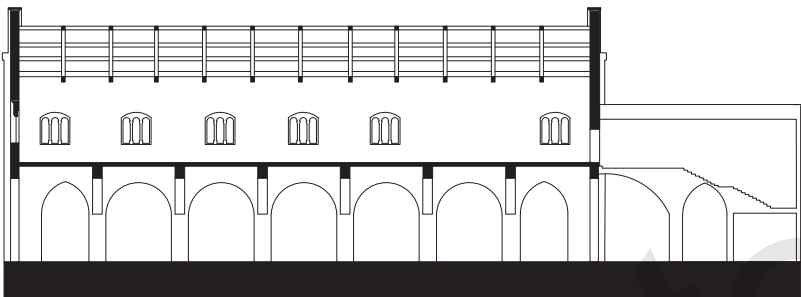
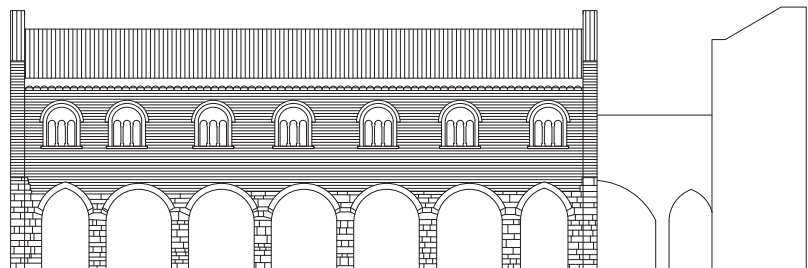
Palazzo della Ragione
 Milan, Italy

1233: City Parliament and Civic Court Portico
 17th century: Praetorium and Mercanti Portico
 1771-1850: Notarial Archive and Coaches repair portico – architect: Francesco Croce
 1857-1901: Notarial Archive and Commercial portico – engineer: Enrico Terzaghi
 1978-2000: Exhibition space and Public portico; restoration + new staircase – architect: Marco Dezzi Bardeschi

1233 City Parliament 2000 Exhibition Space

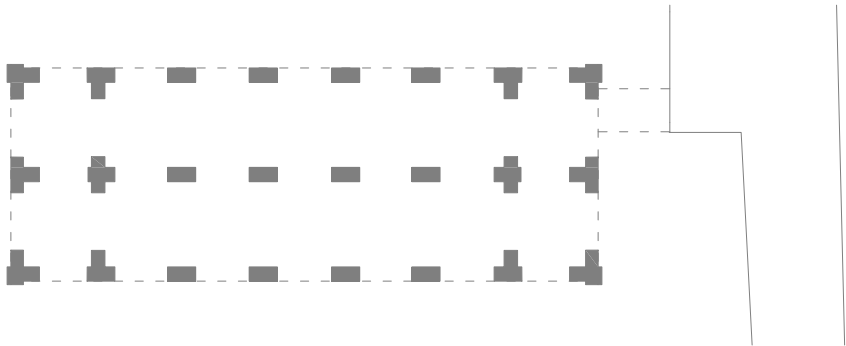
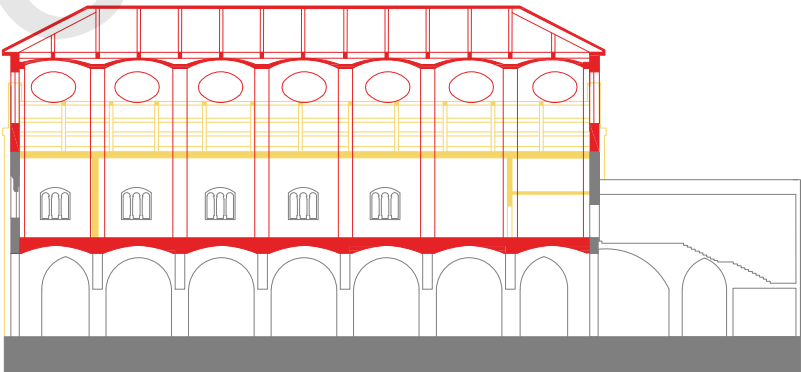
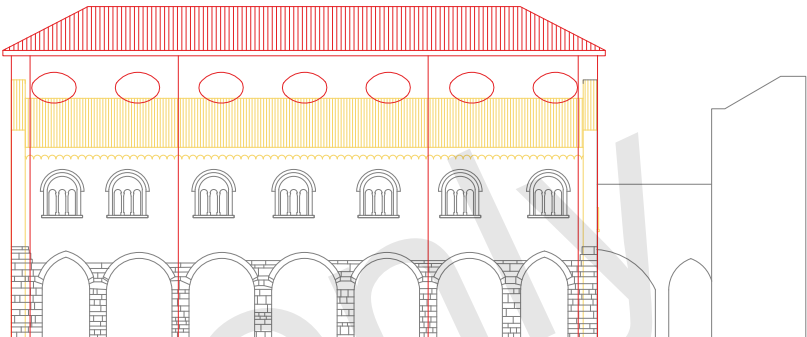
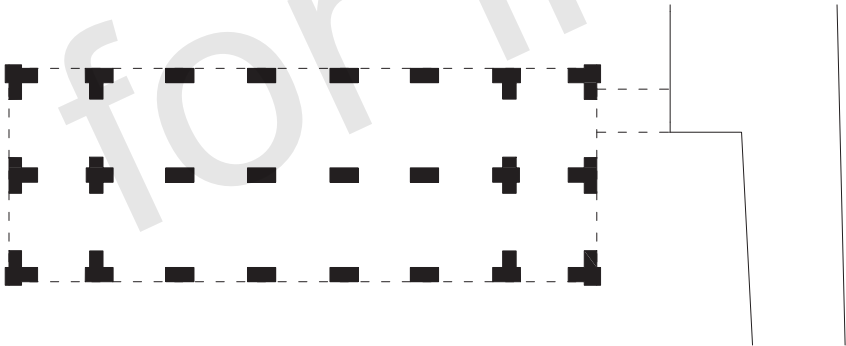
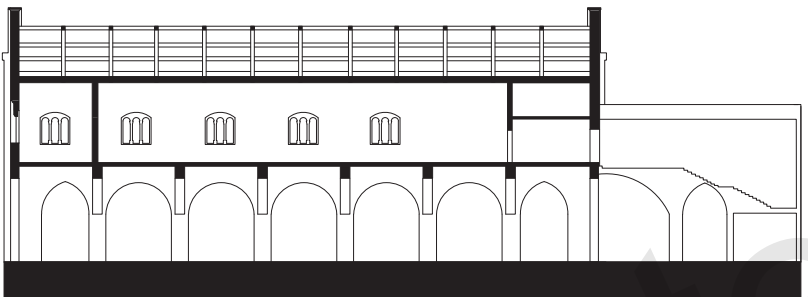
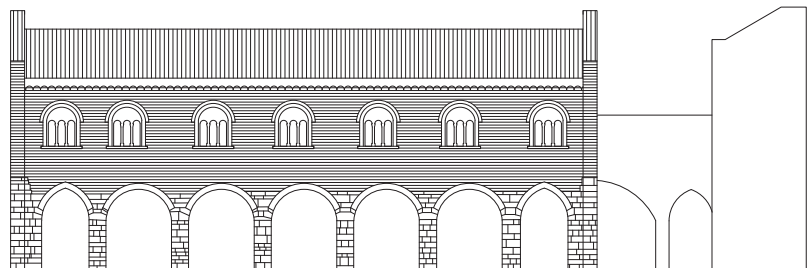
Palazzo della Ragione was built between 1228 and 1233. It was part of Broletto Nuovo, an urban courtyard in Milan where Palazzo della Ragione occupied a privileged place in the center. It is composed by a simple combination of a portico and a free hall on the upper level. Its spatial duality reflects an overlapping of uses that has driven the building’s evolution until today. The portico was initially used by merchants, but at the same time it was also the place where laws and rulings were proclaimed. In the 18th century it became a shelter for notaries’ carriages. It was restored to its commercial function only in the second half of the 19th century when engineer Enrico Terzaghi realized cast iron window frames in order to obtain closed commercial spaces. At the beginning of the 20th century, the iron frames were removed and the ground floor took on different temporary functions – after World War II it was even used as the Rinascente headquarters. Nowadays it is a raised link between via Mercanti and Piazza dei Mercanti. In the first two centuries of its life, the upper hall was used as city parliament and courthouse. In the 16th century, the city parliament moved away and Palazzo della Ragione became the city Praetorium: architect Giuseppe Meda designed two lateral rooms and a new archive space. With the Habsburg empire, in 1771 the building was converted into the Notarial Archive with a visible transformation thanks to an extra level designed by architect Francesco Croce from Milan. The Notarial Archive remained there until the 1961 and in 1978 the City commissioned architect Marco Dezzi Bardeschi to restore the building after a period of disuse. Dezzi Bardeschi also realized a new staircase to access the first floor, which is now used as an exhibition space.

Drawings Chronology¹
1233: Palazzo della Ragione, together with Piazza dei Mercanti, was built between 1228 and 1233, as attested by the coeval plaque, still present, depicting the then “podestà” of Milan, Oldrado da Tresséno. The palazzo is the natural evolution of “casa solariata”, a Longobard house type featuring a solarium or portico on the ground floor that was used as a space for commerce, above which was a floor of rooms accessed via an external staircase and used for concluding agreements and signing public deeds². In that period, the portico was the expression of two powers in medieval Milan: on the one hand, it was the place where the Merchants’ University, the city’s merchants’ league, used to meet; on the other hand, being it was also a political venue where the city’s laws were enacted and judgements were read out.
1233 / 17th century: Starting in the 16th century, a phase of transformations began in Piazza dei Mercanti and Palazzo della Ragione. After having being deprived of its decision-making power by the Sforza family and Spanish rule, the Consiglio dei Novecento, the city’s parliament, left Palazzo della Ragione. The large hall on the first floor then became the city’s Praetorian Court, called Salone dei Giudici. During these years, the first architectural changes took place. In the same years, wood boards were laid on the wooden chains of the great hall truss to obtain a new walkable floor that would serve as an archive. Between 1562 and 1566, the left side of the hall was closed to obtain two rooms.
 In 1582, city engineer Giuseppe Meda obtained two more rooms on the right side of the hall³. The ground floor of the portico was enlivened by the Merchants’ habitacula⁴.
17th century / 1771-1850: From the 17th to the early 18th century some consolidation work was carried out on the palace⁵, and in 1771 it underwent radical changes. The hall became the seat of the Habsburg Notarial Archives and architect Francesco Croce built the sopralzo teresiano. A new floor pierced by elliptical windows⁶ on all sides was built to house the archives in the large room, equipped with an imposing shelving system with four rows of galleries covering all the walls of the room⁷. Once again, the salon was set up as a spatial infrastructure whose function was designated by its furnishings. Until the middle of the following century, however, the portico became the shelter for notaries’ carriages⁸.
1850 / 1857-1901: During the 19th century⁹, the use of the upper floor remained unchanged. The portico instead was the subject of various interventions and once again took on a central role in the city’s public life. In 1834, the portico was repaved, and in 1857, the Chamber of Commerce enclosed it with stained glass windows and grilles according to the project designed by engineer Enrico Terzaghi¹⁰. With the demolition of Casa del Podestà and Porta di Pescheria Vecchia in Piazza dei Mercanti, the new Via dei Mercanti was built in 1867 (and completed in 1878), which led to a lowering of the street level and the consequent raising of the Palazzo on a podium with new steps leading to the portico. The Palazzo’s portico, with a new podium and stained glass windows, was transformed into an urban façade that would assume a predominantly commercial use until the early 20th century¹¹.
1907 / 1961 / 1978 / 2000: In 1907, after the stained glass windows were removed, the basement of the municipal building was rebuilt according to a new design which has remained unchanged to this day¹². In 1939, the Municipality became the owner of the Palazzo della Ragione and made the tower of the Palazzo di Giustizia for the seat of the archives¹³. In 1961, the Notarial Archives left Palazzo della Ragione and in the same year, the wooden framework of the salon was demolished. In 1967, the Municipality drew up a restoration project with the proposal to demolish the Sopralzo Teresiano¹⁴. The project was not completed and in 1978 architect Dezzi Bardeschi was commissioned with the conservative restoration of the building. The same architect designed the new access staircase to the first floor, which was completed in 2000¹⁵. In 2013, architect Cini Boeri from Milan designed the monument to the Resistance to be placed in the portico, realized in 2021.



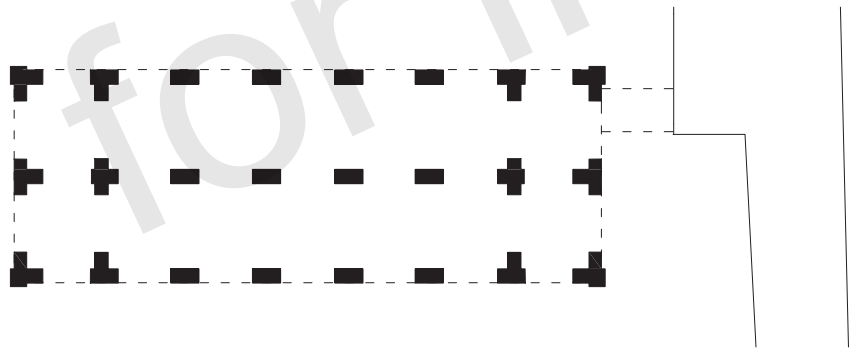
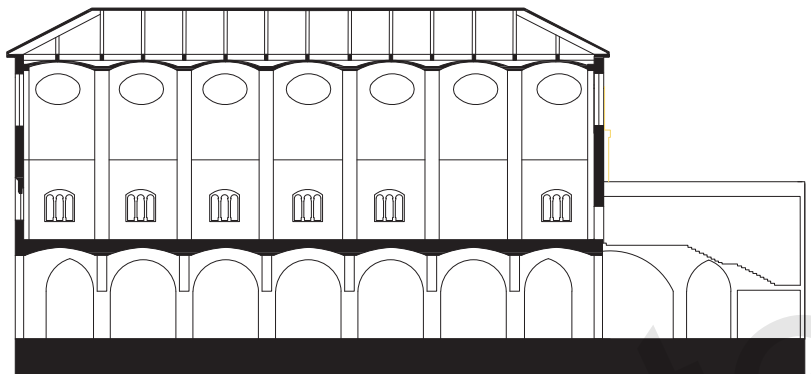
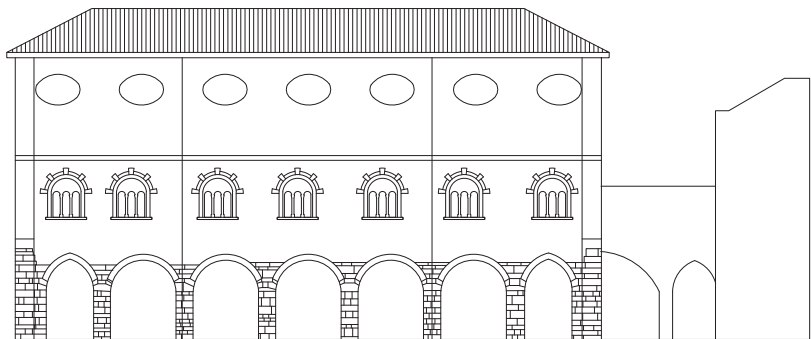
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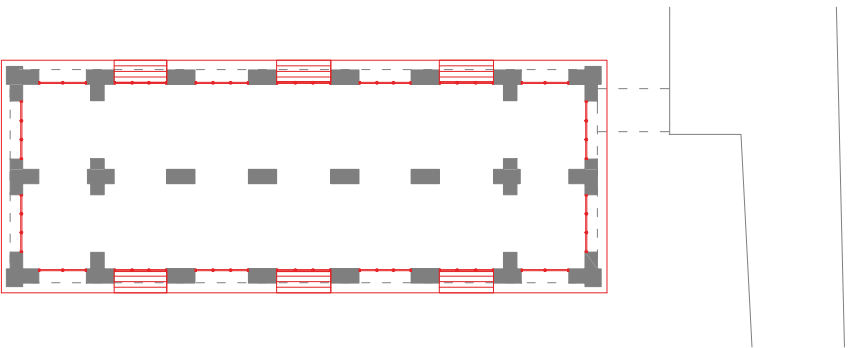
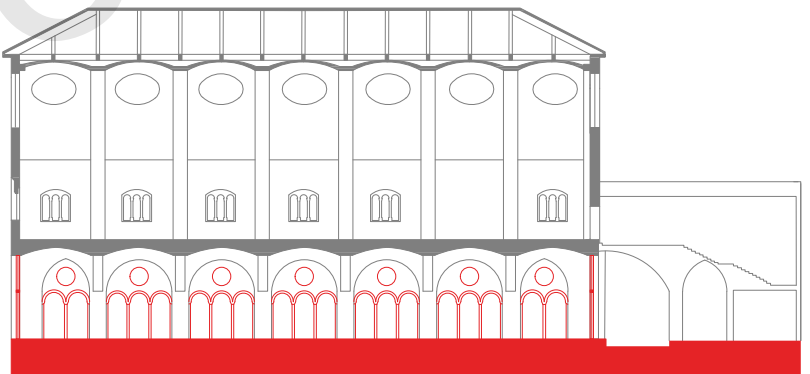
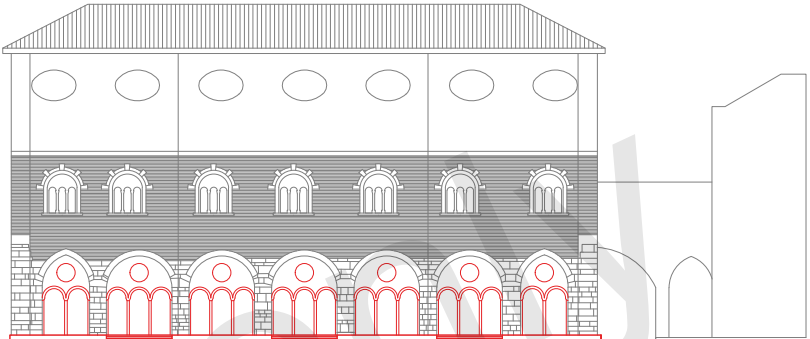


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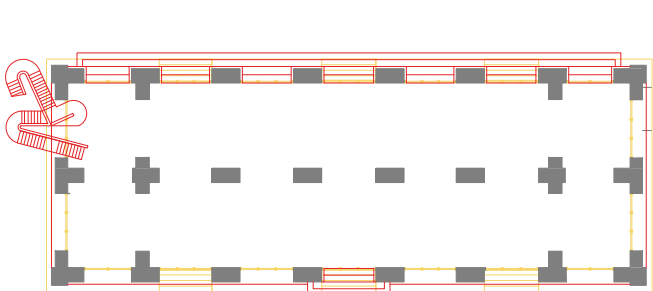
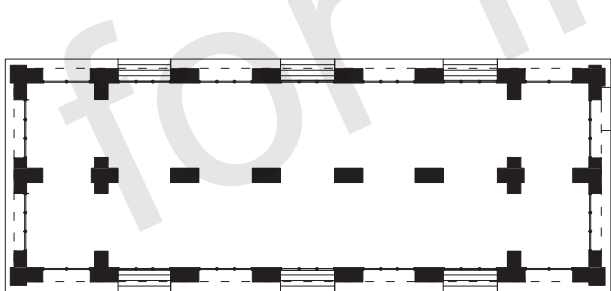
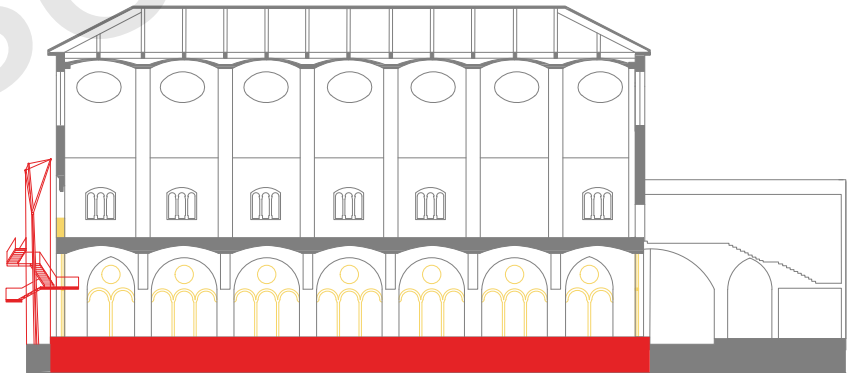
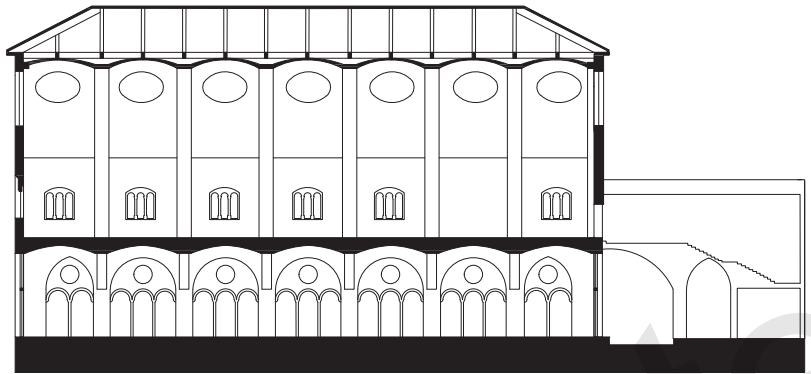
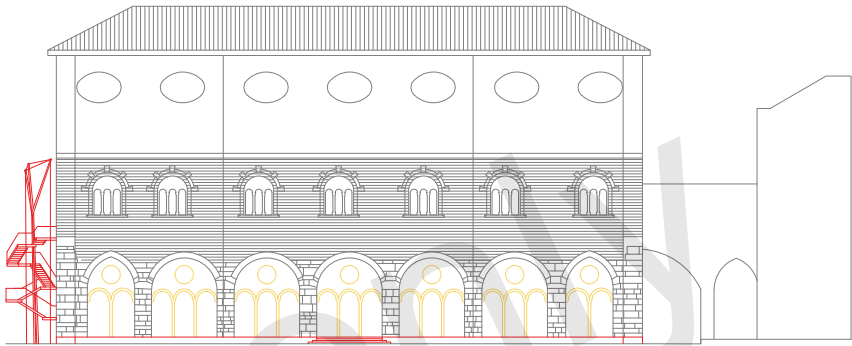
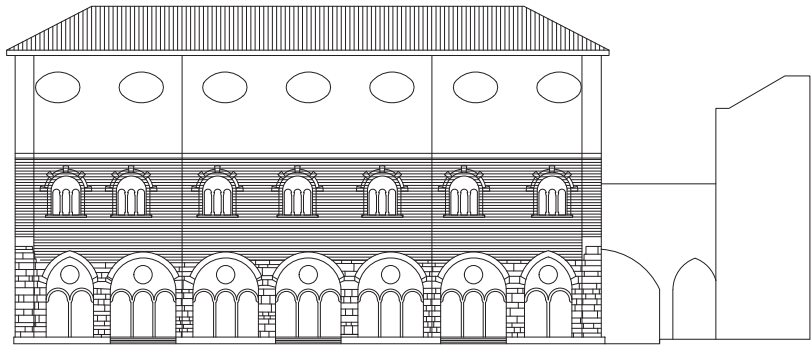
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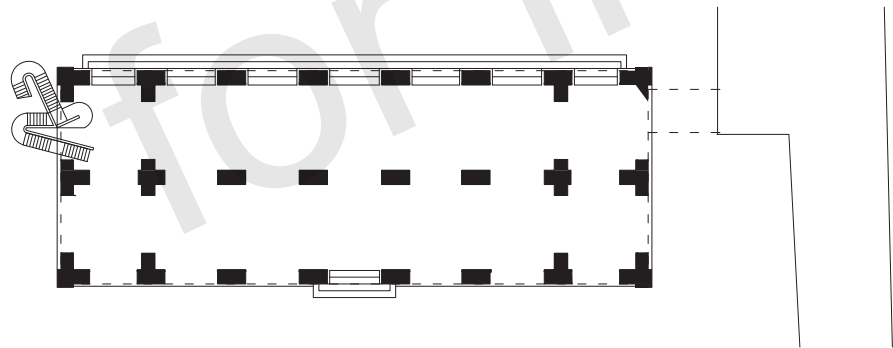
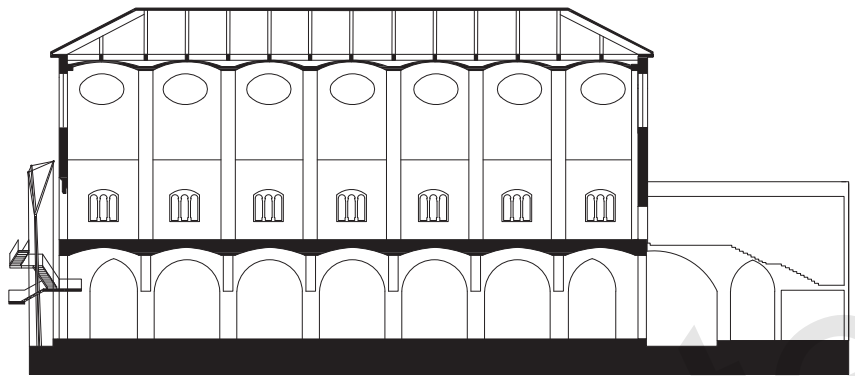
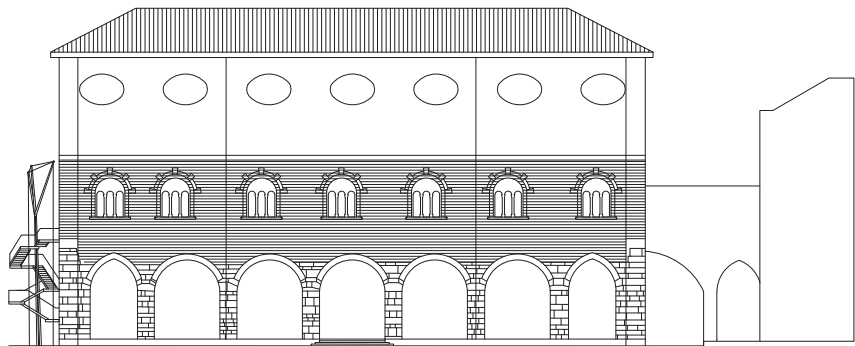


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Notes

1. Today, it is difficult to recover the original drawings of Palazzo della Ragione, those used for its construction. We can assume that the building was the same as that in the Renaissance period, but without the rooms realized later on the upper level in: A. Grimoldi (ed. by), *Il palazzo della Ragione: i luoghi dell'autorità cittadina nel centro di Milano*. Aracne Edizioni, Milano 1983, pp. 72-75. The palazzo is shown in section and elevation with the adjacent building on the right, known as the Panigarola building, which housed the access staircase to the upper floor of the Palazzo della Ragione. Although the Panigarola palace has evolved architecturally over the years, it is represented here schematically with its architectural invariants.
2. In: Scheda Palazzo della Ragione, in «LombardiaBeniCulturali», <https://www.lombardiabeniculturali.it/architetture/schede/LMD80-00059/>.
3. The remaining room on the upper floor was occupied by furniture such as chairs and desks, positioned in such a way that several judges could work in the same room at the same time (in: A. Grimoldi, op. cit., p. 76).
4. Until 1500, the portico was disputed between the merchants and the nobility of Milan who wanted to install benches under it so as to have an open city hall in the city center. However, in 1482, Gian Galeazzo II Sforza granted merchants the exclusive use of the portico. The deep urban value of the portico is confirmed by the continuous disputes about its use that continued throughout the 16th century in: A. Grimoldi, op. cit., p. 77.
5. In 1726, a new wooden roof was built by engineer Antonio Quadrio, replacing the existing, deteriorated one. At the same time, 19 gables were built on the roof in A. Grimoldi, op. cit., p. 83. Today it is possible to see the Palazzo della Ragione with its gables in a print dated after 1760 at the Civiche Raccolte Grafiche e Fotografiche. Stampe Achille Bertarelli.
6. After Milan was incorporated into the Austrian Empire, it was provided with a Notarial Archive that could be consulted by the citizens, following the example of other coeval states. The project by architect Francesco Croce, appointed as architect of the Fabbrica del Duomo in 1760, consists of a new roof that increases the height of the building. The new roof, protected by rectangular brick vaults to protect the wooden trusses from fire risk, rests on a new series of pillars that divide the hall into two large naves. Above the shelving, 19 elliptical windows are placed along the walls, smaller on the long sides (240x360 cm) and almost double in size on the short sides (405x532 cm). In addition, the floor level of the salon is lowered by replacing the wooden porch ceiling with a vaulted ceiling also made of bricks in: A. Grimoldi, op. cit., pp. 84-104.
7. A photo available on the website of the Milan Chamber of Commerce. The photo is dated 1961 – the Notarial Archive remained in the Palazzo until that year – and shows the work on the roof of the Teresian elevation and the wooden shelving in the room in <http://www.piazzamercanti.milano.it/piazza/palazzo-della-ragione/archivio-notarile/#!>.
8. The use of the portico as a shelter for carriages is attested by an aqua fortis from after 1807 that can be consulted at the Civiche Raccolte Grafiche e Fotografiche. Stampe Achille Bertarelli.
9. The elevation also changes significantly with the 1771 intervention: the fragile Lombard brick used for the extension are protected with a plaster coating. The elevation drawn is therefore an interpretation of the coin celebrating the foundation of the Notarial Archives, which shows the elevation at that time in: A. Grimoldi, op. cit., p. 82 and the aqua fortis mentioned in endnote 9.
10. From the beginning of the 19th century, shops returned to the portico. Then, in 1849, the Chamber of Commerce requested that the portico be adopted as the city's stock exchange and a café be built, but this was never done. Finally, Enrico Terzaghi's grating project was approved with funding from the Mercanti del Grano, on the condition that there would be a passageway open day and night in: A. Grimoldi, op. cit., p. 108. Drawing of the new basement and the iron grating in Archivio Storico Comune di Milano, Ornato Fabbriche II.

11. Immediately after the construction of Terzaghi's grilles, fifty-two offices and twenty-four seats were built in 1881 to be rented out to merchants. From 1881 to 1905, the portico was rented out to the Savallo e Prestini company in: A. Grimoldi, op. cit., p. 109. In this period, moreover, the external pillars of the portico's arches were filled with billboards, amplifying the symbolic value of the city's commercial portico. In 1901, the City Council, after the end of the contract entered into with the Savallo e Prestini company, decided to demolish the grilles and the portico was freed of the merchants' stalls. Forty years later, the portico would once again take on a commercial function: between 1944 and 1951, the Rinascente would occupy the space of the portico and part of the Piazza dei Mercanti with a temporary structure, as the premises in Piazza Duomo were destroyed during the bombings of 1943 in: A. Grimoldi, op. cit., p. 115 and in: Archivio la Rinascente).
12. The design of the new basement with a single access staircase to the portico on the side of Via dei Mercanti definitively marks the transition of the portico, and the palace as a whole, from being the center of city life in medieval times to being an iconic building elevated on a pedestal. The design of the plinth was based on the drawing reported in: A. Grimoldi, op. cit., p. 99 and in Archivio Storico Civico. From the beginning of the 20th century, the Palazzo della Ragione was at the center of the debate on medieval style restoration which involved many monuments in the center of Milan. Many restoration proposals envisaged the removal of the Sopralzo Teresiano, seen as an intruder on the 13th century walls (regarding the debate on restoration proposals in the early 1900s, see chapter 4 of A. Grimoldi, op. cit.).
13. With the acquisition of the Palazzo by the City Council, a period of new vitality began for the portico. In 1942, the portico hosted the Exhibition of Art and Youth Work by architects A. Ferreri, L. Fratio, V. Gandolfi, and L. Zuccoli in: «Casabella», n° 174, 1942. In 1944, however, as mentioned in endnote 12, the Municipality rented the spaces of the portico to la Rinascente, which set up a "temporary" shop that would occupy the spaces of the portico and Piazza dei Mercanti from 1944 to 1951.
14. The 1967 project was the result of a long debate on the possible removal of the Sopralzo Teresiano. In 1961, after the migration of the notarial archives, the wooden apparatus was destroyed, and this was only the first in a series of interventions aimed at eliminating the post-medieval architectural presence. Although the demolition and restoration project was never completed, a number of transformations were carried out during that period: - the access staircase to the loggia was rebuilt; - the passage between Casa del Panigarola and the palace was radically changed with the demolition of the entrance wall to the hall, the two-leaf door at the entrance to the hall was dismantled, floors and shutters were removed, and the memorial plaque founding the archive was also removed. Although the technical office project would not be completed, the drawings from the 1967 restoration project were consulted to verify the reliefs of bugnato cladding on the ground floor and the dimensions of the triple lancet windows on the upper floor. The drawings of the restoration project can be consulted at the Archivio della Cittadella di Milano (in: Tavole di Progetto, allegato 5. "Lavori di consolidamento e Restauro del palazzo della Ragione in Piazza Mercanti").
15. After a long debate on the retention of the elevation, in 1978 the conservative restoration project was entrusted to architect Marco Dezzi Bardeschi. In addition to finalizing the design of the equipment to be installed in the building, he also designed the glass and metal emergency staircase that still exists today and was completed in 2000. Regarding the debate on restoration, see the Foreword to the book in: A. Grimoldi, op. cit., and M. Dezzi Bardeschi, *Milano: restauro del Palazzo della Ragione*, in «Abitare», n° 261, 1988. The design of the staircase was elaborated by the authors on the basis of drawings in: M. Dezzi Bardeschi, *Il mondo in azione: fabbriche di pietra, d'acqua e d'oro*, in «Domus», n° 650, 1984 and in M. Dezzi Bardeschi, *Atlante Padano*, Alinea, Firenze 2001.

1444 Palazzo Medici 1952 Museum, Public Library, Florence Metropolitan Council

Palazzo Medici Riccardi, designed by architect Michelozzo in the 15th century, is the first stereometric building of Italian Renaissance, conceived as a large, unitary stone block. It responds to the need of the nobility of the time to be represented by buildings with an austere architecture strongly connected with the urban context.

The civic character of the building is conveyed by the use of rusticated ashlar on the façade, massive at the street level and increasingly smooth toward the sky. The stone disappeared at ground level in the south-east corner which hosted a loggia, later buffered to preserve the safety of the family. In 1659 the palace was purchased by Francesco Riccardi: a new phase in the building’s life began. A major extension was realized that destroyed the building’s cubic nature, changing the size of the interior spaces and adding monumental staircases to express the family’s love for luxury. The major innovations introduced mainly concerned the piano nobile, with the introduction of the gallery and the Biblioteca Riccardiana, still present today, as well as numerous renovations of the inner garden. The palace was sold in 1810 and became a grand ducal property hosting the most diverse offices and institutes, thus initiating a process of important modifications of interior spaces, volumes and connections that affected the historical design of the architecture. After the capital was moved to Rome, the Province of Florence offered to purchase the Palazzo, but it was not until the 1950s that the spaces were rearranged in such a way as to respect, as far as possible, their original distribution as designed by Michelozzo. The project was assigned to architect Giovanni Michelucci to restore a «decorous appearance to the entire building complex», while also improving its internal functionality in line with its new uses: museum, library, public offices and residence of the city prefect.

Drawings Chronology¹

1444 / ca. 1517: To preserve the safety of the family, two “kneeling” windows, attributed to Michelangelo, where built to close the loggia in 1517. As the Medici family was losing power, the public vocation of the building slowly faded away².

ca. 1517 / ca. 1659-1685: Purchase of the palace by the Riccardi family in 1659³. Extension that alters the cubic shape of the building. Large spiral staircase in place of the old ramp staircase in the southeast corner of the courtyard. Piano Nobile rooms conceived by Michelozzo underwent radical changes. Big portal on via dei Ginori. Beginning of the transformation of the garden in 1660. Extension of the Via Larga façade in 1678⁴.

ca. 1659-1685 / ca. 1685-1839: Garden loggia becomes a gallery. Giovanni Battista Foggini is the architect of the noble staircase on the right of the courtyard. It’s a simple and severe staircase, developed on a square center with square landings⁵.

ca. 1685-1839 / ca. 1839-1892: In 1810 the palace was sold. Its sale marked the end of the Riccardi era⁶. Then, in 1814 it was sold to the Causa Pia Ecclesiastica Regolare. In 1817 it became the government’s property, it was closed to the public and its interior space were considerably altered for adapting to new functions⁷. The façade remained unchanged⁸.

ca. 1839-1892 / 1952: With the new century, a series of operations began to restore the palace to its “original conditions”⁹. Loggia Riccardiana restoration. Garden restoration. Windows closed on Via de’ Gori.Medicean Museum opened in the spring of 1929¹⁰. Last works under architect Giovanni Michelucci in the 1950s.

1952: According to the drawings available on the official website of the Palazzo, the plan corresponds to the public part of the building, which is also open to visits.

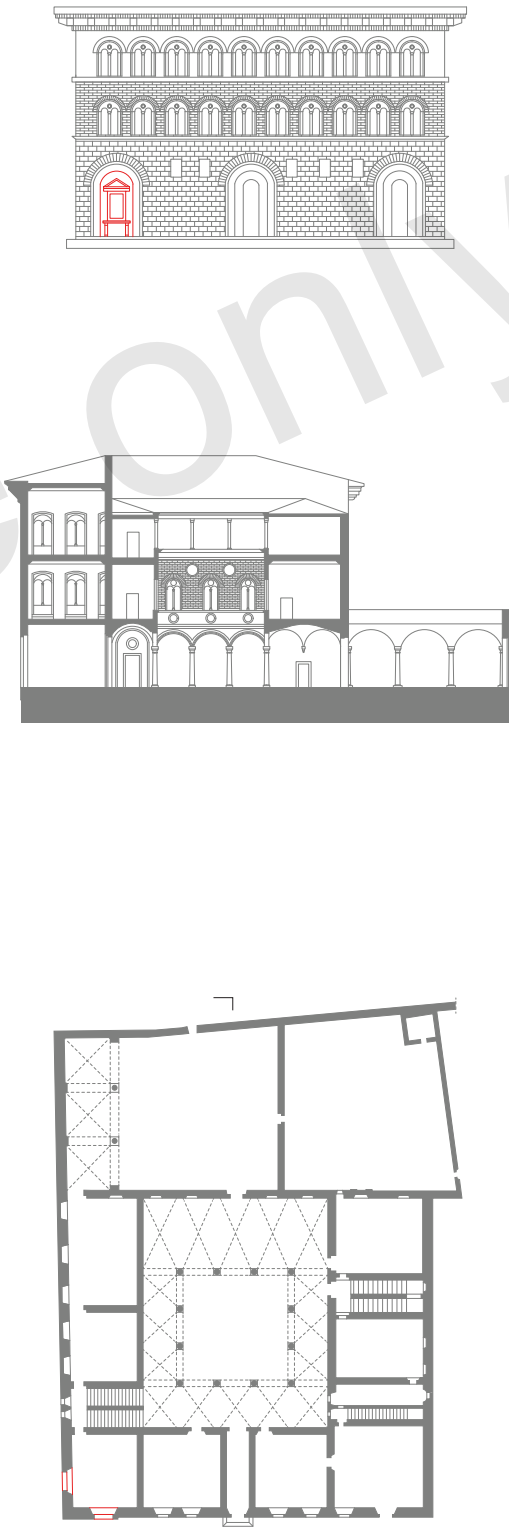
Palazzo Medici Riccardi
 Florence, Italy

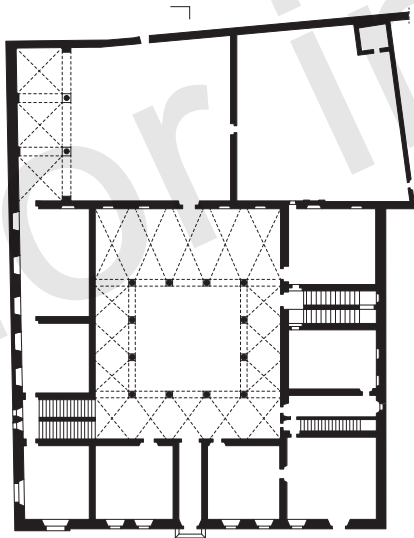
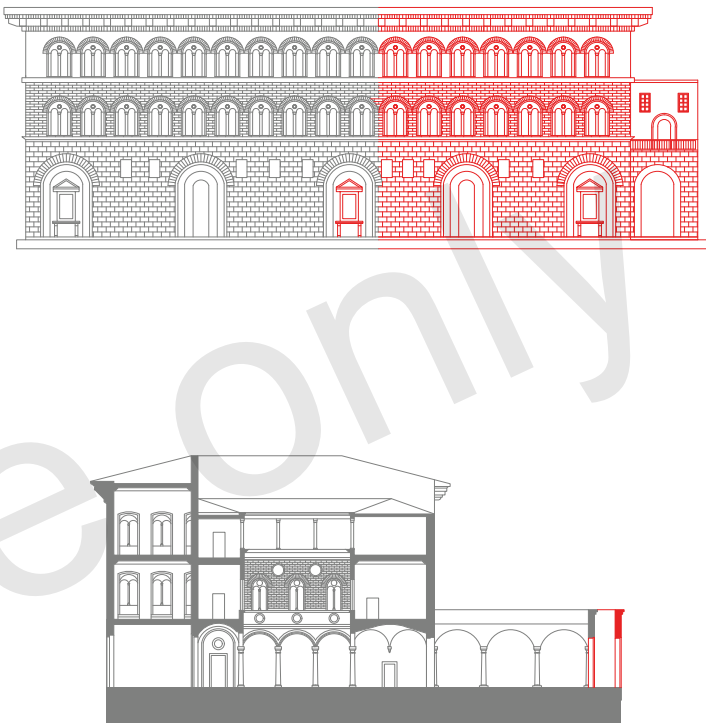
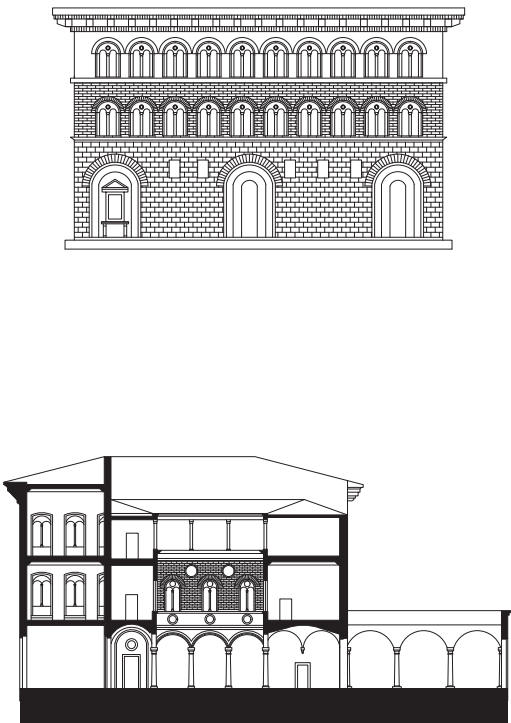
1444: Palazzo Medici –architect: Michelozzo
 1659-1685: Palazzo Medici Riccardi
 1839-1892: Public offices and library
 1952: Museum, public library, Metropolitan council –architect: Giovanni Michelucci



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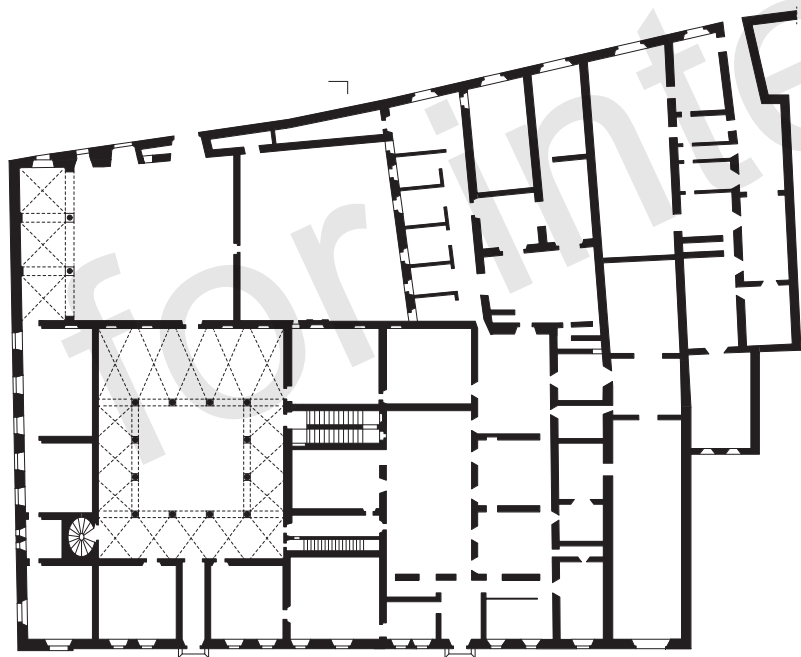
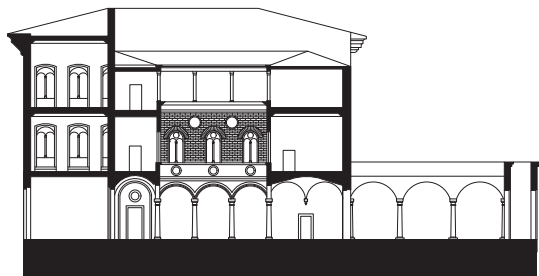
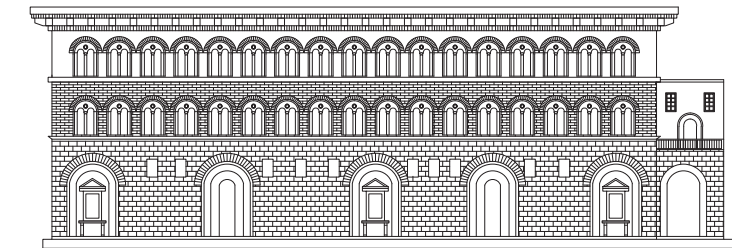
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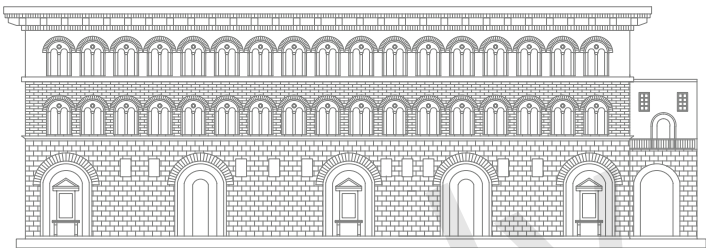


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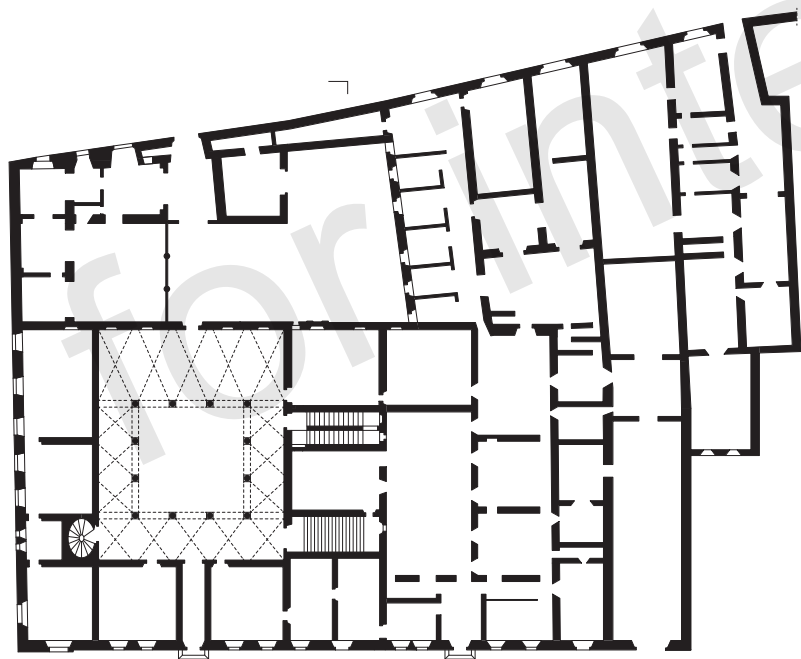
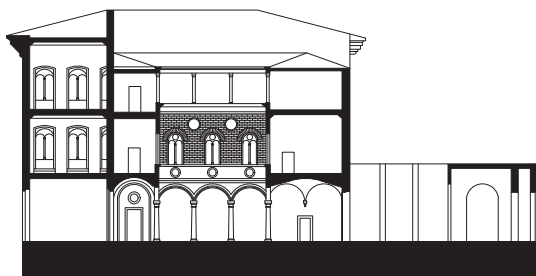
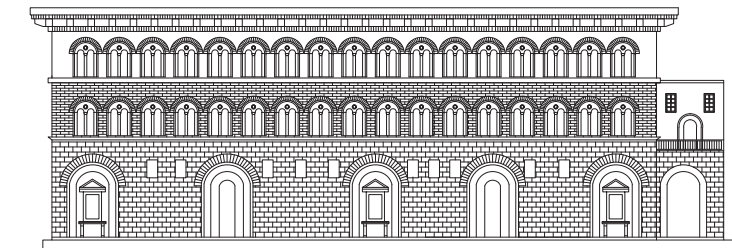
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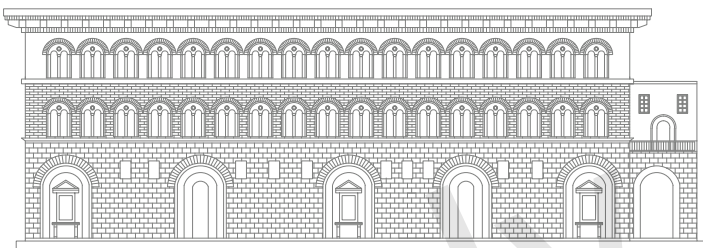
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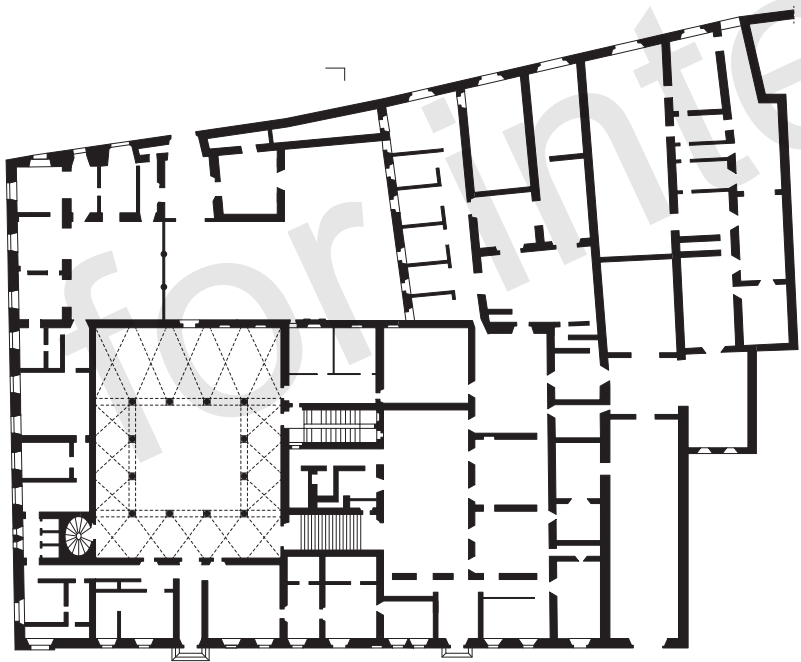
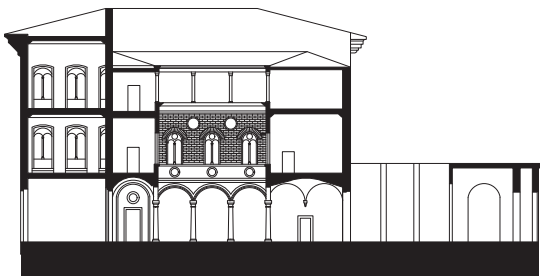
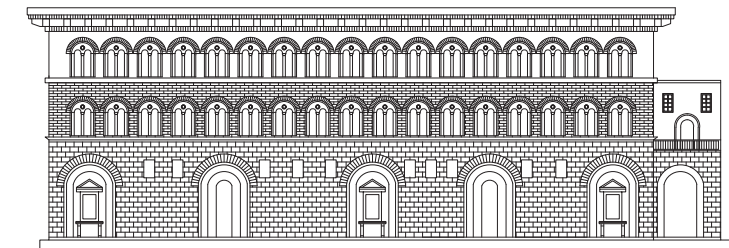
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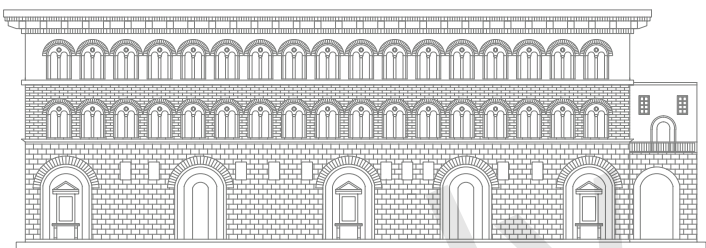
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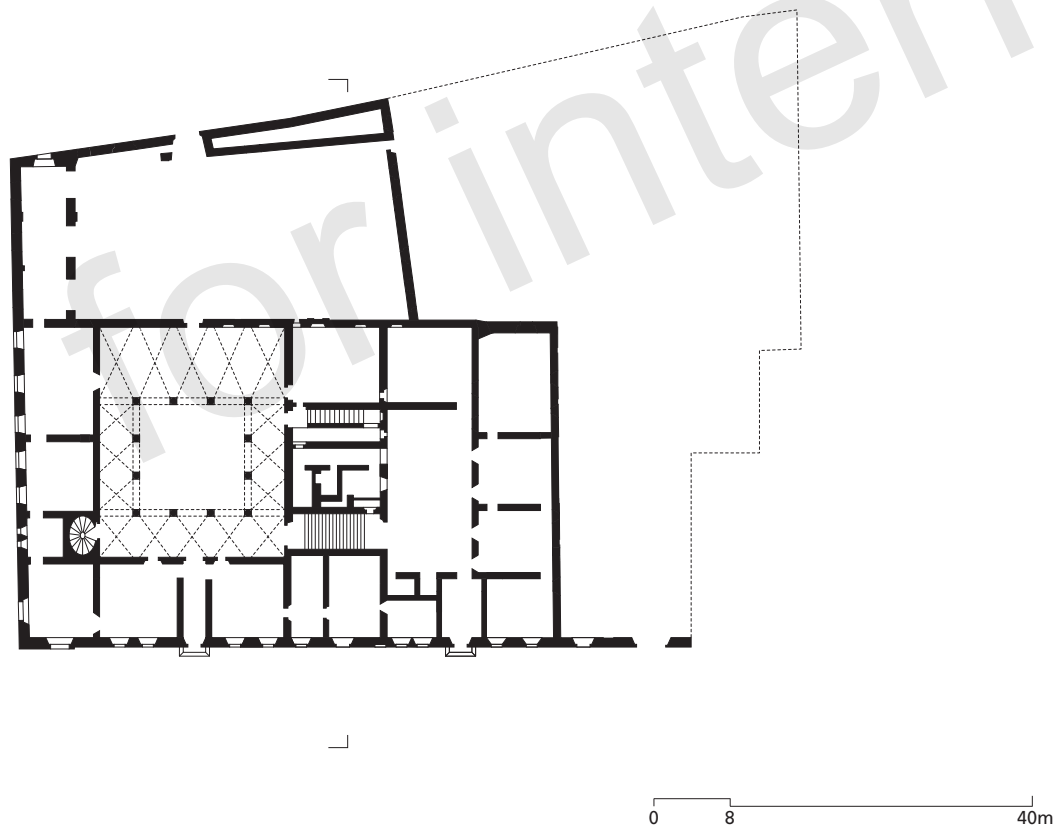
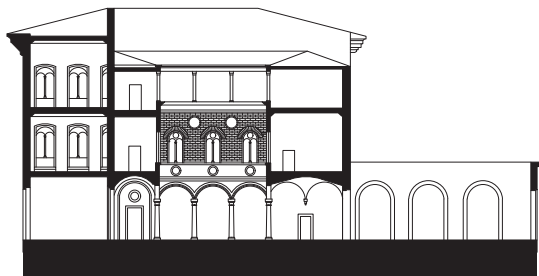
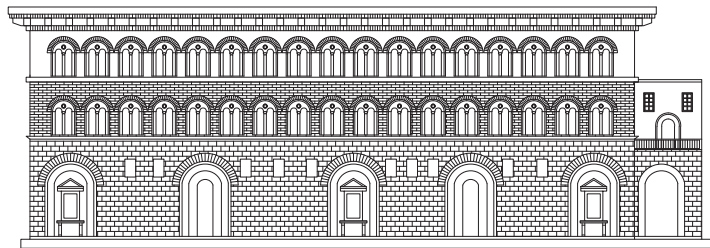
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Notes

1. Palazzo Medici Riccardi in Florence was built in 1444, when Cosimo il Vecchio commissioned architect Michelozzo with the building of a residence that would symbolize Cosimo's power and wealth (G. Cherubini, G. Fanelli, *Palazzo Medici Riccardi di Firenze*, Giunti, Firenze 1990, p. IX). With no original drawings at hand, the ground floor, the section and the elevation have been reconstructed both retrospectively, starting from the actual configuration of the palazzo, and based on the chapter "Le caratteristiche geometriche e numeriche di Palazzo Medici", by Maria Teresa Bartoli in G. Cherubini, G. Fanelli, op. cit., pp. 76-81. According to the analysis carried out, the proportion in plan and elevation was more similar to a square than a rectangle as we can see it today. Research carried out by Federica Pieri and Juliette Picherit, for the atelier Jean-Benoît Vétillard architecture
2. «Free access had been possible first from the "public loggia" that was then closed in 1517 with the famous "kneeling windows", after Cosimo il Vecchio had open it to all citizens. W. A. Bulst, "Uso e trasformazione del palazzo mediceo fino ai Riccardi" in G. Cherubini, G. Fanelli, op. cit., p. 105.
3. Together with the building erected by Michelozzo, the Riccardis became that owners of three adjacent buildings previously belonging to the Medici. The aim was to adapt the Medici palace to modern uses. The long process extended over a period of almost sixty years. The first phase can be attributed to architect Ferdinando Tacca, the second to architect Pier Maria Baldi (1670-1685), and the third to architect Gian Battista Foggini. The fourth and short renovation phase finally led to the transformation of the courtyard portico into a museum of antiquities. (F. Buttner, «All'usanza moderna ridotto: gli interventi dei Riccardi», in G. Cherubini, G. Fanelli, op. cit., p. 151).
4. The façade is a new ensemble; its proportions are clearly different from Those of the previous building: there is no longer a balanced relationship between height and length. The connection of the palace with the adjacent one, achieved by the construction of a simple door over a terrace, deserves special consideration. At this point, several purposes were superbly achieved: from an optical point of view, the palace is detached from the other buildings and is therefore independent, which accentuates its monolithic character, while the door is in rusticated ashlar and thus conforms to the appearance of the rest of the building. At the same time, the addition of this part maintains continuity with the course of the street, which forms a slight curve at that point (F. Buttner, op. cit., p. 163).

5. In architectural terms, the staircase is simple and sober. The pietra serena structure is set against smooth, white walls, according to the architectural tradition of Florence. Along the four flights of stairs, a thin cornice divides the vaulted wall. The transition from the ramps to the landings is formed by pietra serena pilasters connected by transverse beams (F. Buttner, op. cit., p. 162).
6. Financial instability, lack of descendants, new investment interests were some of the many causes that in early 19th-century Florence led large families of ancient nobility to sell their property. The old buildings, no longer suited to the new housing models, could be transformed into immediate sources of income or lent themselves to being modified internally to accommodate more family units or take on other or different functions, as was the case of Palazzo Medici Riccardi, which hosted the most diverse offices and institutions (G. C. Romby, "Il monumento diviso: le trasformazioni del palazzo dopo i Riccardi e fino ad oggi", in G. Cherubini, G. Fanelli, op. cit., p. 170).
7. Once it became government property, considering the emblematic nature of this historical building, it was decided to use it as a seat of public offices, with the exception of the library section which retained its original location on the Piano Nobile. The adaptation process lasted almost uninterruptedly for the entire century, triggering a process of fragmentation of the interior spaces, volumes, and connections, which at times irreparably affected the original layout of the palace architecture. The new functions of the palazzo included the Biblioteca Riccardiana, the Ufficio del Catasto (1832), the Accademia della Crusca (1842), the Ministry of the Interior (c. 1864). (G. C. Romby, op. cit., pp. 170-171).
8. The façade has remained unchanged and is today a testimony of the original, generative idea: the importance of the non-contingent value of drawing.
9. Following continuous solicitations from provincial councilor Arturo Linaker (A. Linaker, *I restauri del Palazzo Mediceo Riccardi*, Florence 1914) and the work by Prof. Enrico Lusini, in 1911 the Provincial Administration of Florence appointed a "Committee for the reorganization of Palazzo Medici Riccardi" which began working on 29 May 1911. The Committee had three main aims: to rid the land of the constructions made before the building was purchased by the Government; to rediscover what could be found of Michelozzo's ancient building in the later Medicean and Riccardi constructions; to restore the portion designed by Michelozzo as best as possible without destroying the Riccardi constructions.
10. Nello Tarchiani, *Il palazzo Medici Riccardi e il Museo Mediceo*, Firenze 1930.

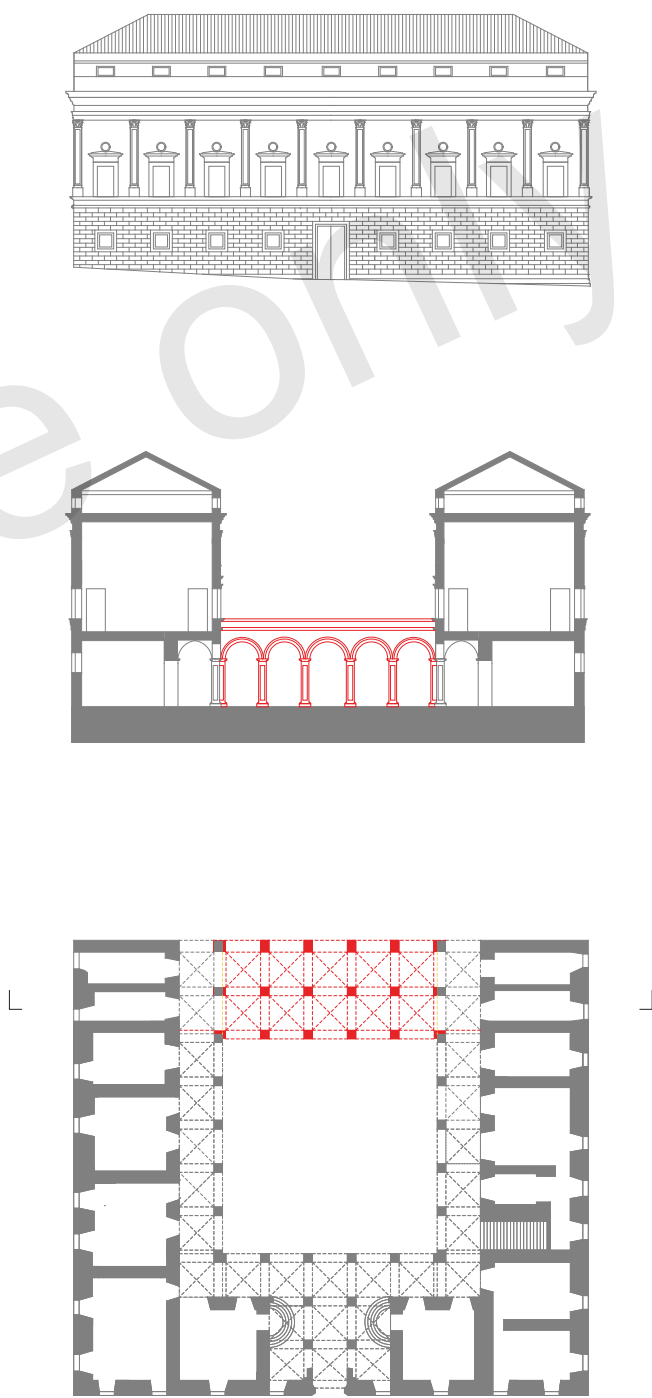
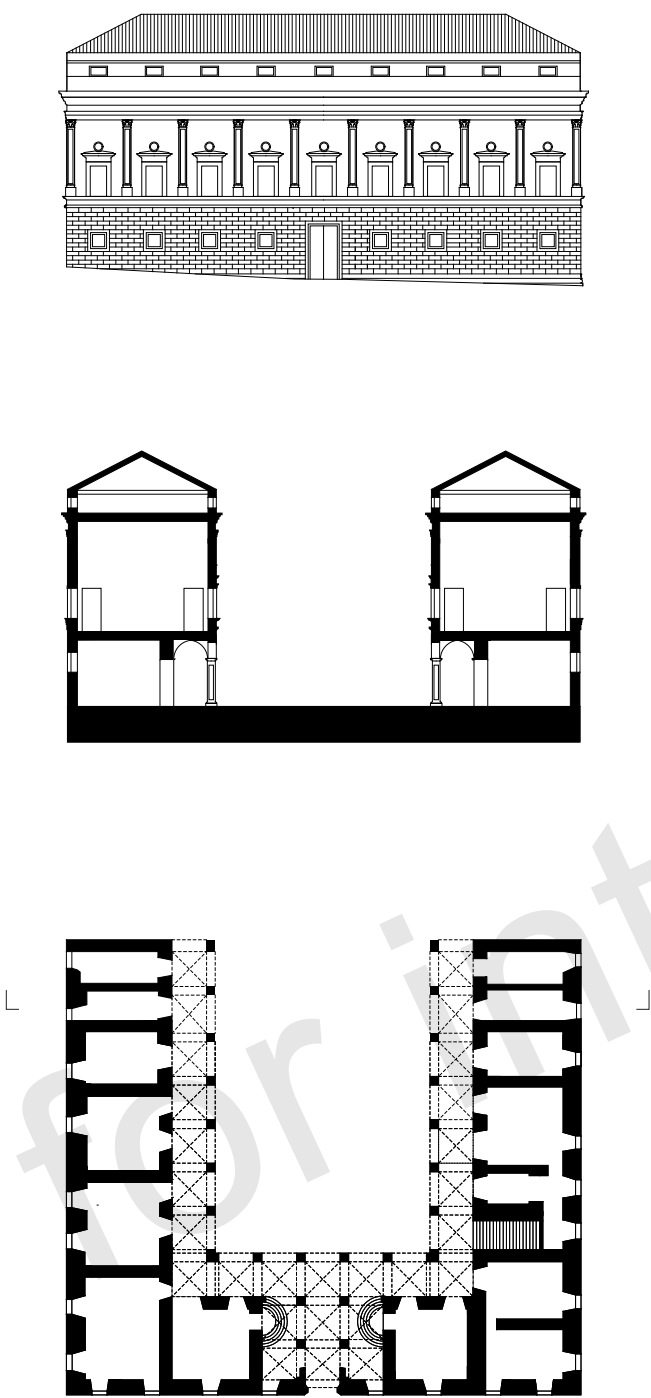
Palazzo Gravina
 Naples, Italy

- 1549: Palazzo Orsini di Gravina –architect: Gabriele D’Agnolo
- 1566-1765: fourth side addition
- 1766: main portal addition –architect: Mario Gioffredo
- 1837: immeuble à loyer –architect: Nicola D’Apuzzo
- 1848: restoration –architects: Gaetano Genovese, Benedetto Lopez Suarez
- 1851: public building
- 1936: Royal School of architecture –architects: Alberto Calza Bini, Camillo Guerra
- 1948: Faculty of Architecture –architects: Marcello Canino, eng. Ferdinando Chiaramonte

1549 Palazzo Orsini di Gravina 1948 Faculty of Architecture

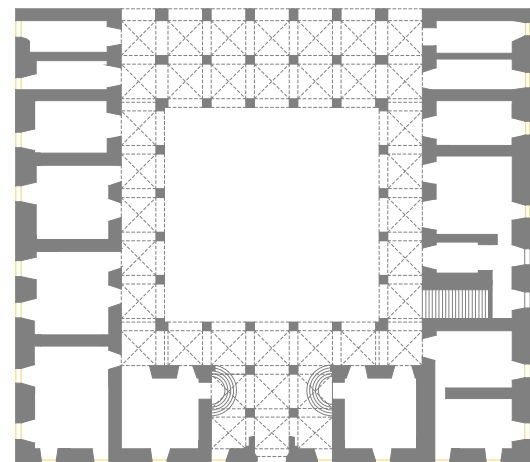
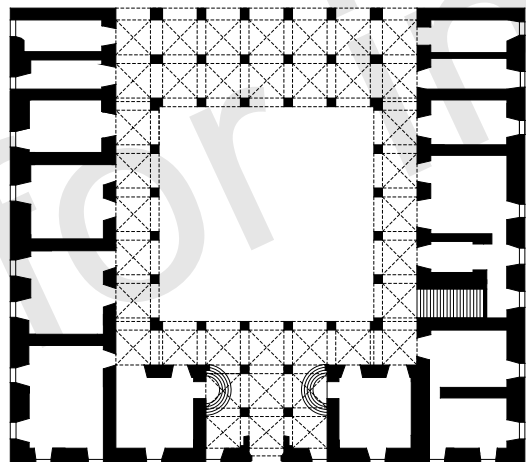
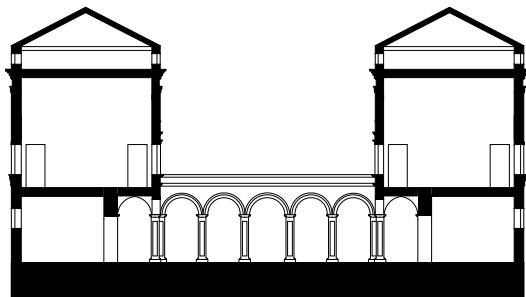
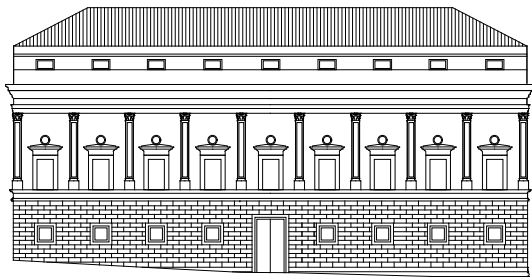
Palazzo Orsini di Gravina was built in 1549 as the main residence of Duca Orsini. Originally, it had a “U” shape footprint, and the portico on the fourth side was added between ca. 1566-1775. The Main Entrance Portal was realized much later, in 1766, by marble worker Luva on a design by architect Mario Gioffredo. In 1837, Palazzo Gravina was sold to Giulio Cesare Riccardi, and architect Nicola D’Apuzzo was in charge of transforming it into an Immeuble à loyer (housing block). He increased the number of floors to have more dwellings to rent. He also transformed the windows on the ground floor to accommodate new shops along the street. In 1848, a large fire destroyed many parts of the building, and in 1851, Palazzo Gravina was acquired by the city’s Public Administration which assigned its restoration to Gaetano Genovese and Benedetto Lopez Suarez. They transformed the housing block into a public building hosting the Royal Post Office, some municipality offices, and the School of Engineering. In 1936, Palazzo Gravina was transformed into the Royal School of Architecture by Alberto Calza Bini and Camillo Guerra. Since then, with the exception of a short period during the war (1943 to 1945), when it hosted the 5th Army of Allied Forces, Palazzo Gravina has been the home of architectural studies in Naples.

Drawings Chronology'
1549 / 1566-1775: The portico on the fourth side was added to the building between 1566 and 1775².
1566 / 1755-1837: The main entrance portal was realized in 1766 by the marble artist Luva on a design by Mario Gioffredo³. In 1837, Nicola D’Apuzzo transformed the Palace into an Immeuble à loyer (housing block) and the building underwent several alterations⁴: new openings were added in the basement to open shops along the streets; a mezzanine was added on the Piano Nobile to have a second floor with residences; an attic with windows is added on all three wings of the building, to have a further floor with residences.
1837 / 1851: In 1848, a large fire destroyed many parts of the building and, in 1851, Palazzo Gravina was acquired by the city’s Public Administration which assigned its restoration to Gaetano Genovese and Benedetto Lopez Suarez. They transformed the housing block into a public building, hosting the Royal Post Office, some municipality offices, and the School of Engineering. The building underwent several alterations⁵: he fourth wing was completed by adding two volumes: one over the double portico, and one attached to it towards the street; a second staircase was introduced in the left wing of the building, in a symmetrical position to the first; the original staircase was extended up to the third floor; the attic is completed over the whole third floor.
1851 / 1936: In 1936, Palazzo Gravina was transformed into the Royal School of Architecture by Alberto Calza Bini and Camillo Guerra, and the building underwent major restoration interventions⁶: the third floor was completely demolished with the only exception of the fourth wing (built in 1851), and skylights were installed to give natural light to drawing rooms; the main elevation was brought back to its original design (second floor windows were closed); at the third floor, a terrace roof was made accessible all along the courtyard.
1936 / 1948: From 1943 to 1945, Palazzo Gravina hosted the fifth Army of Allied Force; however, no relevant building alterations were made. In 1948, the School of Architecture returned to Palazzo Gravina, where it is still operational. During these years, small interior alterations were made to adapt the building to more current uses⁷.



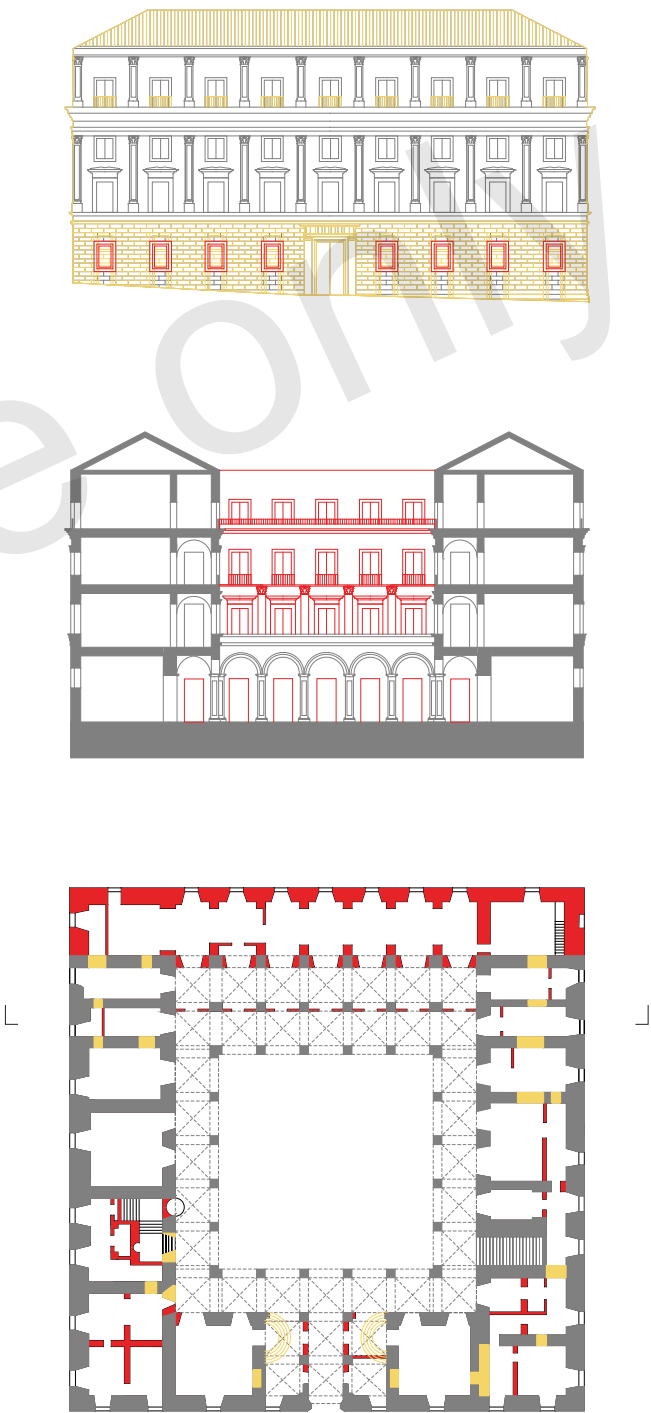
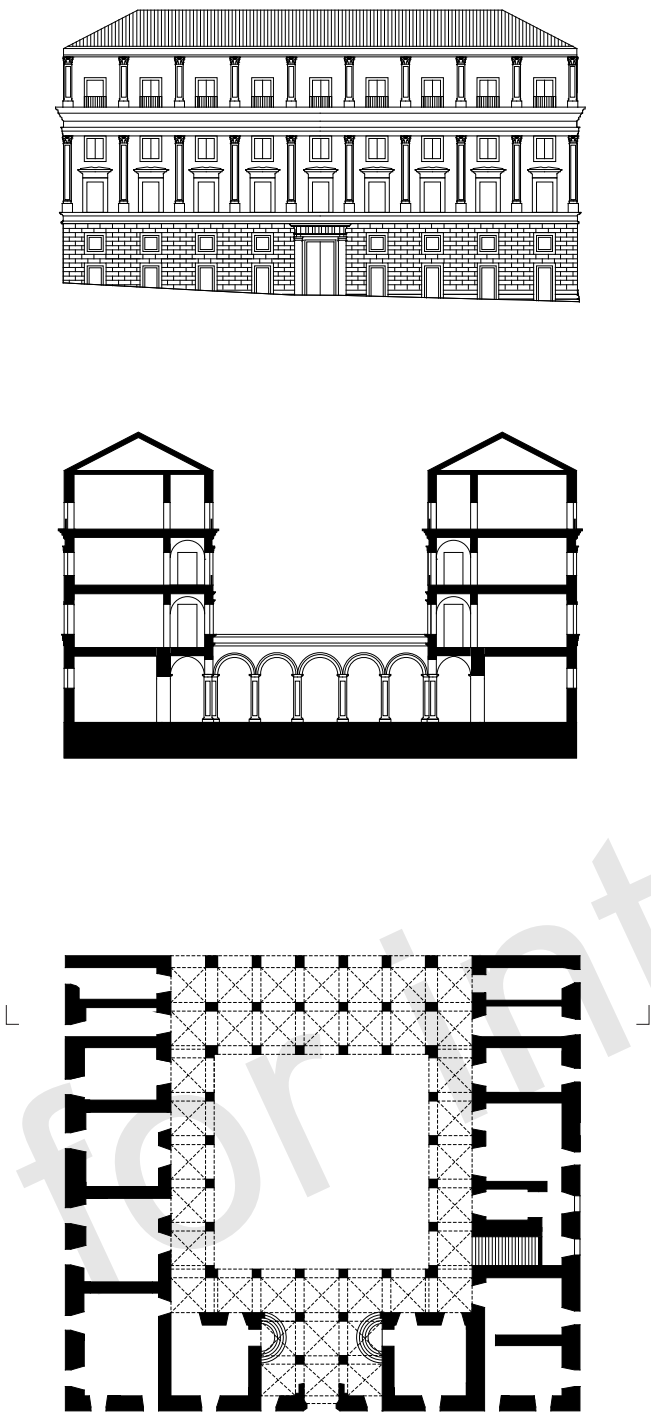
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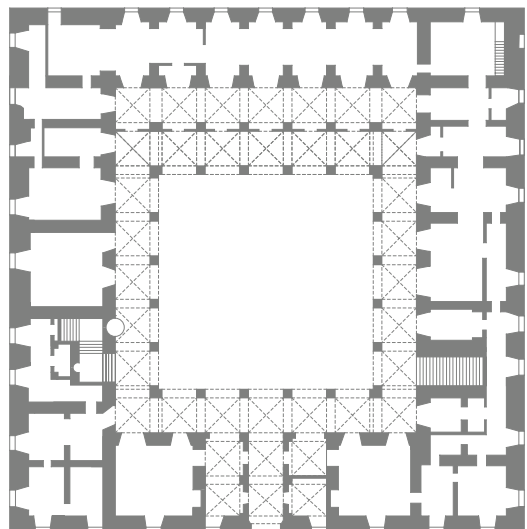
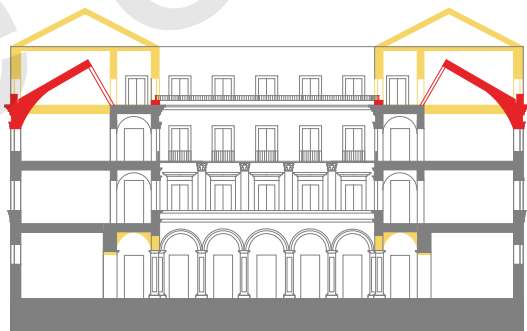
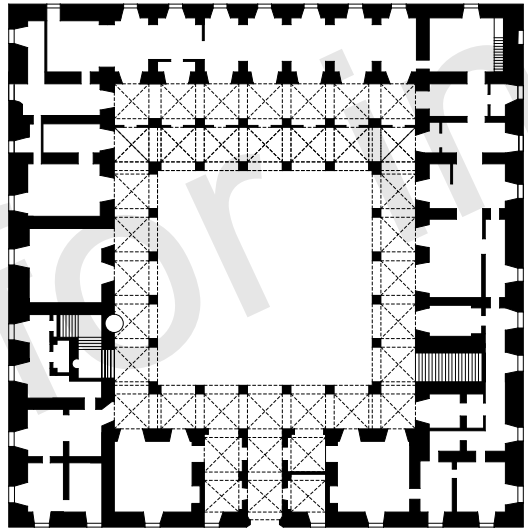
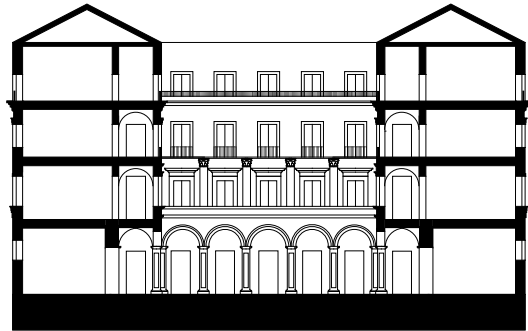
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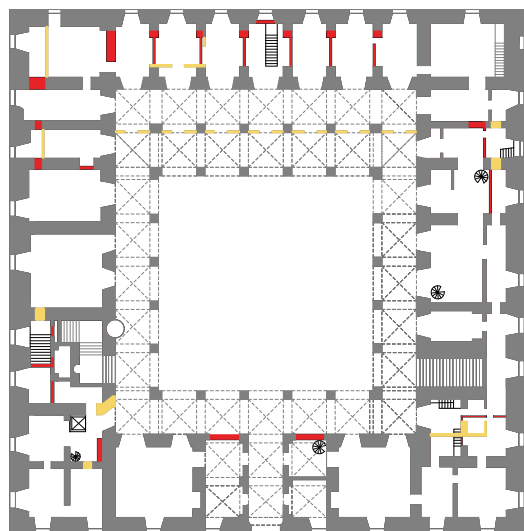
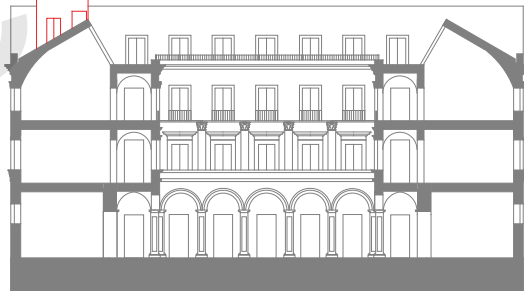
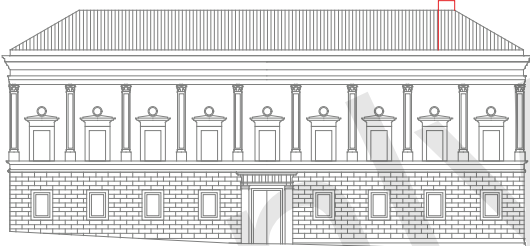
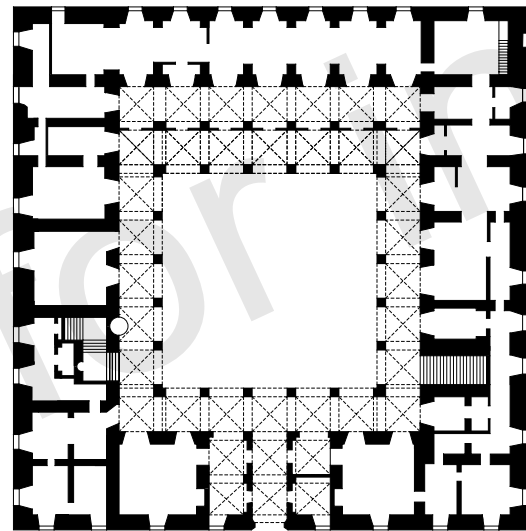
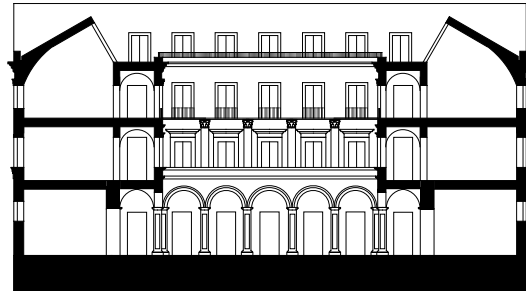
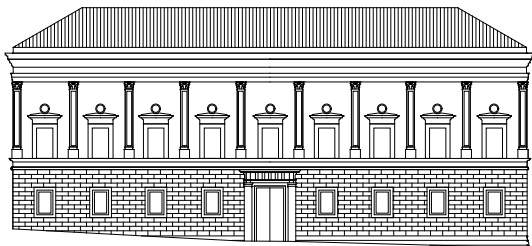
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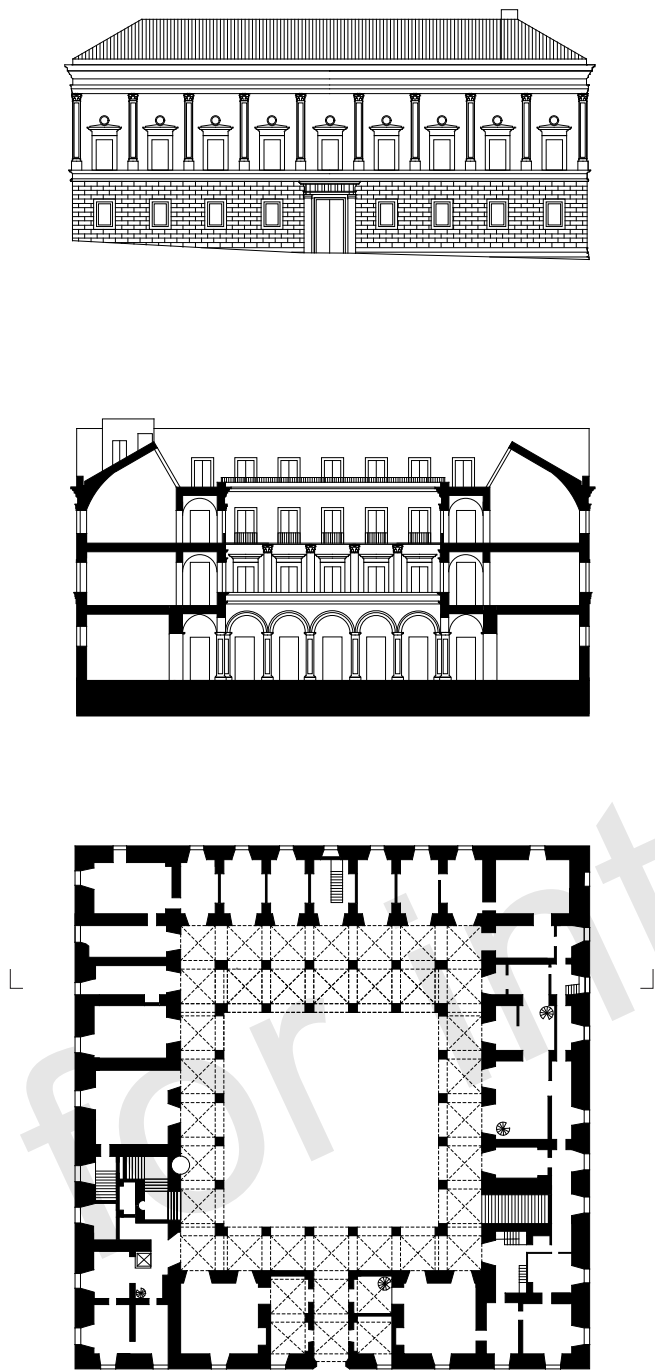
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Notes

1. Palazzo Gravina in Naples was built in 1549, allegedly by Gabriele D'Agnolo (in: B. Gravagnuolo, "Palazzo Orsini di Gravina", in Arturo Fratta (ed.), *Il patrimonio architettonico dell'Ateneo Fridericiano*, Arte Tipografica Editrice, Napoli 2004). With no original drawings at hand, the ground floor and the section have been edited retrospectively, starting from the actual configuration of Palazzo Gravina. The plan as presented in this stage was drawn based on the assumption that the courtyard was originally squared. To redraw its elevation, authors used the reproduction of the 1713 hatching by P. Petrini (in: R. Picone, *Palazzo Gravina: da ufficio delle Poste a facoltà di Architettura*, in B. Gravagnuolo et al., (ed.), *La Facoltà di Architettura dell'Ateneo fridericiano di Napoli*, Clean Edizioni, Napoli 2008, p. 62).
2. The fourth side was added to the building in 1566-1775, according to views of the city produced by Alessandro Baratta (1628 and 1670), Pietro Miotte (1648), Bastien Stopendael (1653) and Duca di Noja Map (1775) (in: B. Gravagnuolo, op. cit.). With no original drawings at hand and looking retrospectively at the actual configuration, the authors assumed that the portico was originally a double portico and its volume was added to the "U" shape footprint of the building. This is was deduced from the 1924 plan (in: C. Guerra, *Le sottofondazioni di Palazzo Gravina*, Opuscoli di Architettura Tecnica, Napoli 1924, and reproduced in: R. Picone, op. cit., p. 76), where we can see that the bearing wall of the added three floors volume (in 1851) lies along the edge of the double portico. If the portico had been a single portico, this wall should have been laying along the middle line.
3. Palazzo Orsini gets finally its Main Entrance Portal in 1766. The work is realized by the marble artist Luva on a design by Mario Gioffredo (in: R. Picone, op. cit., pp. 56-57). After the revolutionary movements in 1799 (The "Parthenopean Republic"), Palazzo Gravina became the private residence of French General Thiébault. However, there are no records of relevant alterations (in: B. Gravagnuolo, op. cit.).
4. In 1837, Nicola D'Apuzzo transformed the Palace into an *Immeuble à loyer* (housing block) and the building underwent several alterations (in: R. Picone,

op. cit.). With no original drawings and looking retrospectively at the actual configuration, the authors assumed that: a mezzanine was added, dividing the Piano Nobile into two floors while keeping its pre-existent ceiling; an attic was added, starting from the edge of the cornice; corridors were introduced in each floor as a means for distribution and circulation. To redraw its elevation, authors used the reproduction of Palazzo Gravina elevation published in C. N. Sasso, *Storia dei monumenti a Napoli*, Napoli 1856-58, tav. 9, fig. 1 (in: R. Picone, op. cit., p. 65).

5. In 1848, a large fire destroyed many parts of the building, and as a consequence, in 1851 Palazzo Gravina was acquired by the city's Public Administration, which assigned its restoration to Gaetano Genovese and Benedetto Lopez Suarez (in: R. Picone, op. cit., pp. 67-74). With noout any original drawings and looking retrospectively at the actual configuration, the authors made assumedup the hypothesis that the fourth wing with the double portico was completed by adding two volumes, one over the portico (two floors) and one attached to it towards the street (three floors), both with flat roof terraces. This intervention gave the building a final clear palazzo typology, with four wings and a squared courtyard.

6. In 1936, Palazzo Gravina was transformed into the Royal School of Architecture by Alberto Calza Bini and Camillo Guerra, and the building underwent major restoration works (in: R. Picone, op. cit., pp. 80-87). Redrawing was made based on the documentation published in the above-mentioned book.

7. In 1948, the School of Architecture returned to Palazzo Gravina, and Marcello Canino and engineer Ferdinando Chiaromonte, both professors at the School, coordinated the return of the School to the Palazzo. Since then, small interior alterations were made to adapt the building to more current uses (in R. Picone, op. cit., pp. 87-91). Redrawing was made based on the documentation published in the above-mentioned book and the survey of the actual configuration accessible at Department of Architecture of Scuola Politecnica e delle Scienze di Base-Università di Napoli Federico II.

1650 Dominican Monastery

2019 City Library

The Dominican monastery was built starting in 1650. In 1798, the monastery was sold to the board of the Almshouses and converted into a retirement home. The church continued to be used by the French as a training ground until 1814, after which it was converted into a military arsenal. During the transformation, the tower of the church was removed, partition walls were added in the corridor to divide it into several rooms, the windows on the top floor were simplified. Some of the windows on the groundfloor were blocked with bricks. The monastery remained a military hospital till 1975¹. In 2011, the city decided to restore the historic landmark building and turn it into a public library, which was designed by Korteknie Stuhlmacher Architecten, Bureau Bouwtechniek and Callebaut Architecten and opened in 2019. The architects developed the design in such a way as to respect the particular characteristics of the existing building. They removed the partition walls to form the circulation of inner corridor and to create continuity with the outer ring. The abandoned top floor was transformed into a large reading space by enlarging the windows. The programming, the spatial design, the concept for the restoration as well as the design of the technical installations, and all structural interventions are intended to preserve and reinforce the quality of the space. Over the years, the structure has been entirely preserved. This architectural structure and the character of the spaces were the leading principles for the programmatic setup².

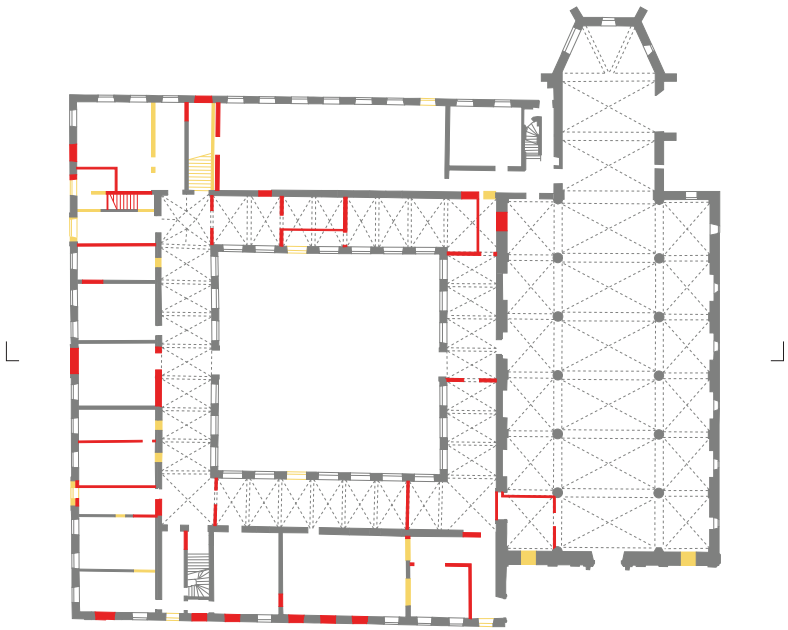
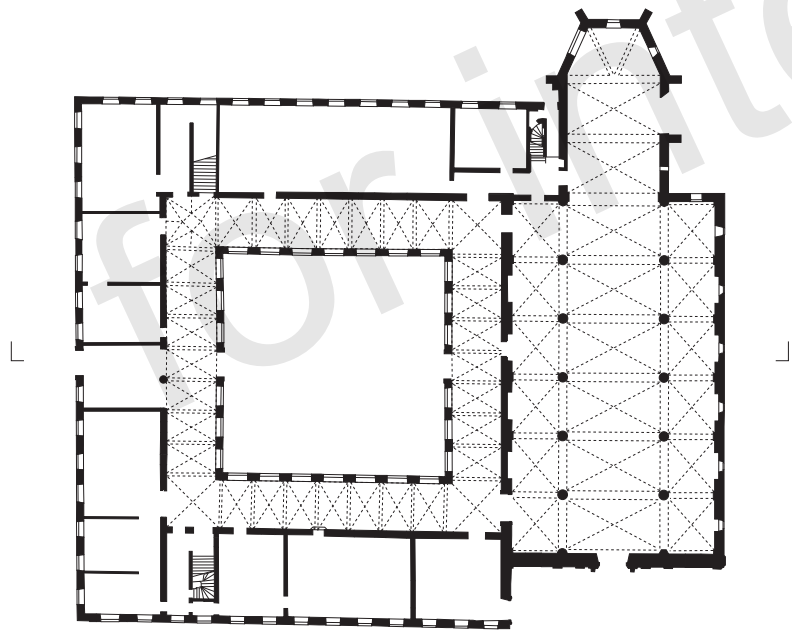
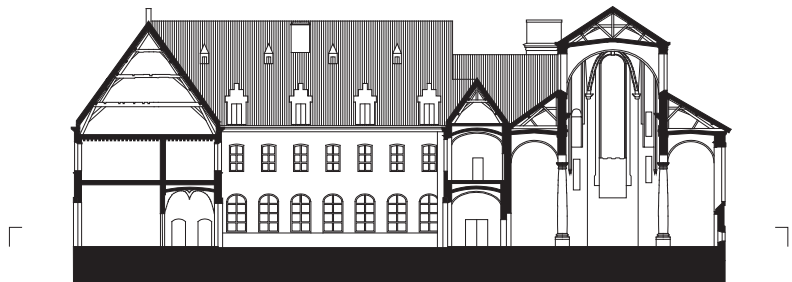
Drawings Chronology³

1650 / 1790-1900: The tower of the church was demolished. The corridor was divided into several rooms by partition walls. The shape of top floor windows was changed, while the windows on the first two floors were mostly blocked⁴.

1900 / 2019: Most of the partition walls were demolished. Staircases were added. The abandoned top floor was re-activated as a library with a timber structure. Windows on the top floor were enlarged. The blocked windows were reopened.

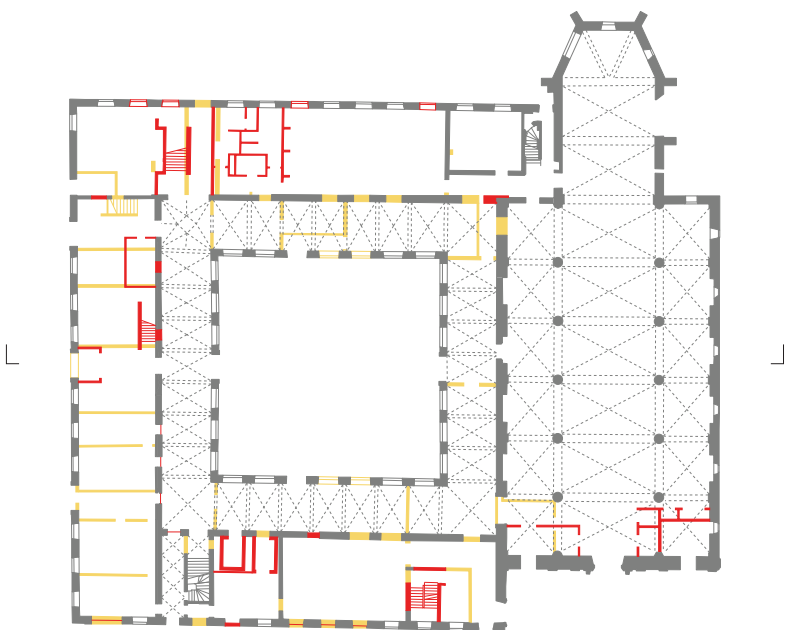
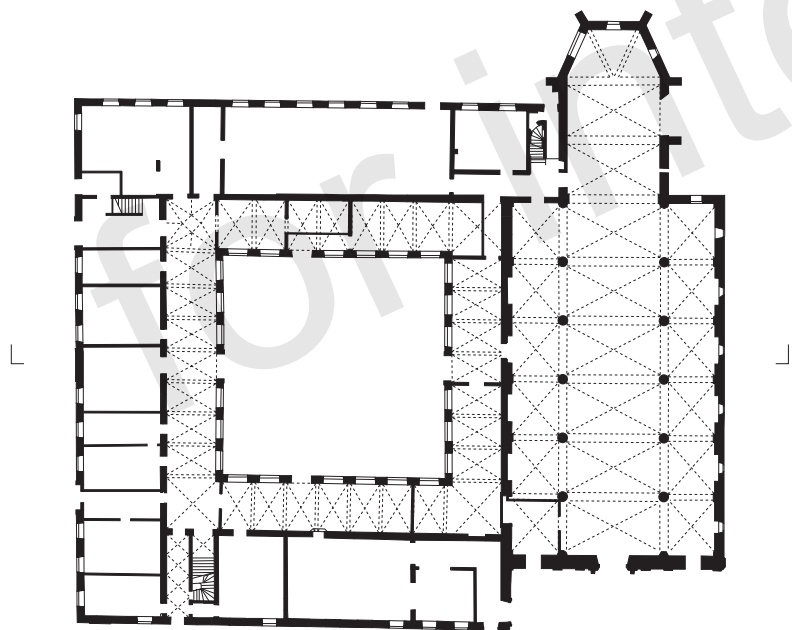
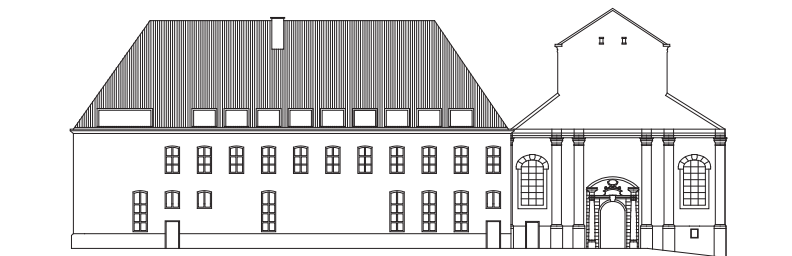
Het Predikheren
 Mechelen, Belgium

1650: Dominican Monastery
 1900: military hospital
 2019: public library –architect: Korteknie Stuhlmacher Architecten, Bureau Bouwtechniek and Callebaut Architecten



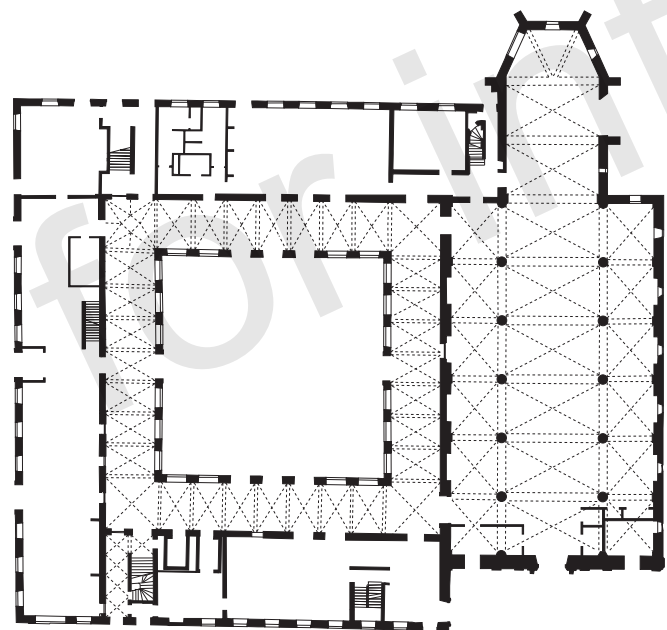
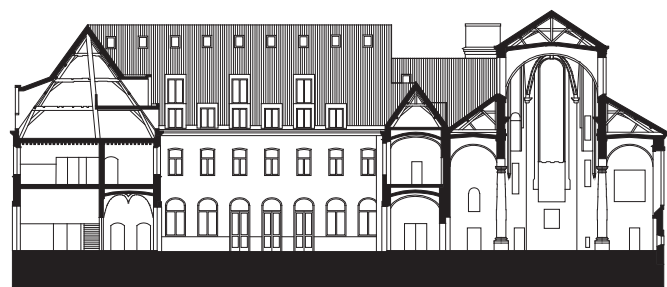
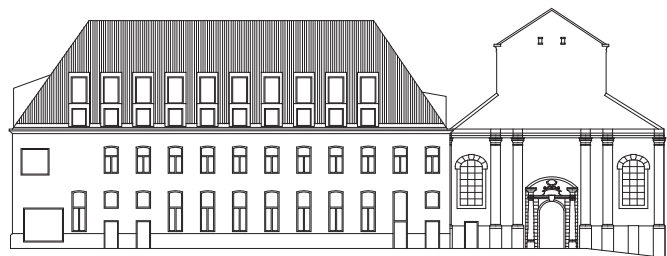
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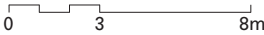
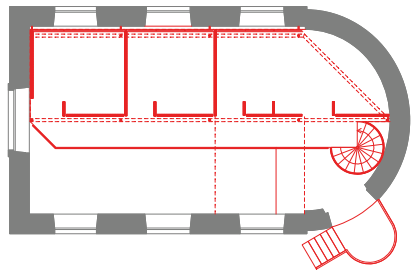
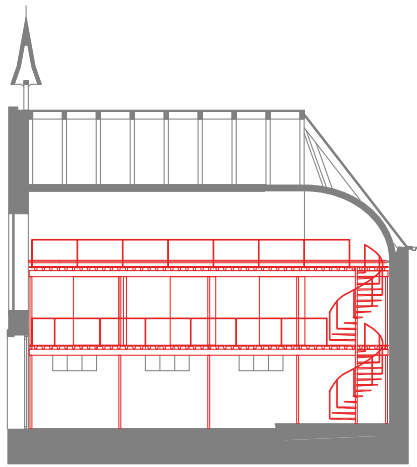
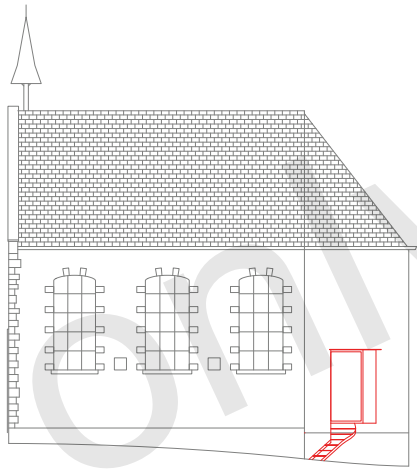
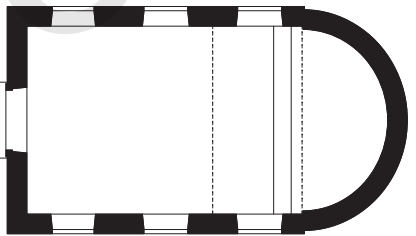
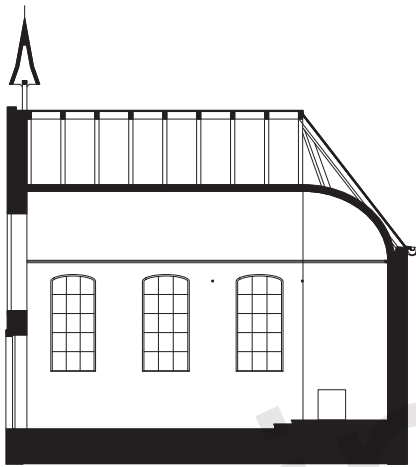
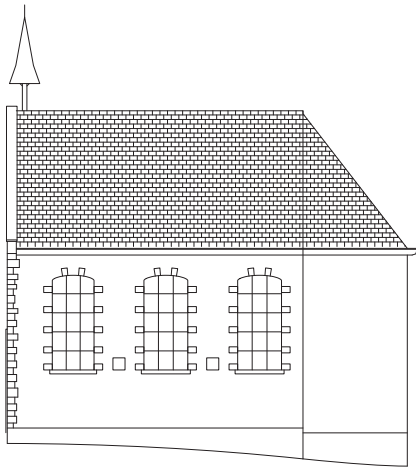
Notes

1. Sophie Mortier, *Dominicanenklooster*, in «Inventaris Onroerend Erfgoed», 16 / 11 / 2023, <https://inventaris.onroerenderfgoed.be/erfgoedobjecten/3618>.
 2. Mechthild Stuhlmacher, *Het Predikheren-Mechelen Public Library*, 16 / 11 / 2023, <https://ksa.nl/en/projects/public-library-mechelen/>.
 3. «Regionale Beeldbank», 16 / 11 / 2023, <https://www.regionalebeeldbank.be/>.
 4. Mechthild Stuhlmacher, *Public Library Het Predikheren | Korteknie Stuhlmacher Architecten* | Archello. (o. D.), in «Archello», 16 / 11 / 2023, <https://archello.com/project/public-library-het-predikheren>. *Dominicanen-of-predikherenklooster*. Abandoned and Lost Places. (2022, September 30), in «UrbEx-Nl», 16 / 11 / 2023, <https://www.urbex.nl/predikherenklooster-dominicanenklooster/>.
 5. Mechthild Stuhlmacher, *Het Predikheren-Mechelen Public Library*, cit. Sofie De Caigny, *Stadsbibliotheek Het Predikheren*. (o. D.), in «VAi», 16 / 11 / 2023, <https://www.vai.be/en/buildings/publieke-gebouwen/het-predikheren-public-library>.
 6. Mechthild Stuhlmacher, *Het Predikheren-Mechelen Public Library*, cit.
 7. *Ibid.*
 8. Mechthild Stuhlmacher, *Public Library Het Predikheren | Korteknie Stuhlmacher Architecten* | Archello, cit.
- A. Luco, *City Library Het Predikheren | Korteknie Stuhlmacher Architecten + Callebaut Architecten + Bureau Bouwtechniek*, in «ArchDaily», 16 / 11 / 2023, <https://www.archdaily.com/944248/city-library-het-predikheren-korteknie-stuhlmacher-architecten-plus-callebaut-architecten-plus-bureau-bouwtechniek>.

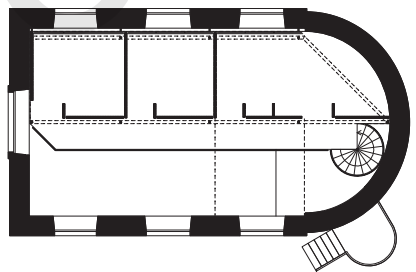
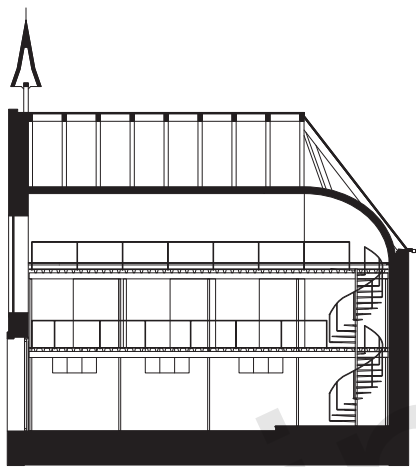
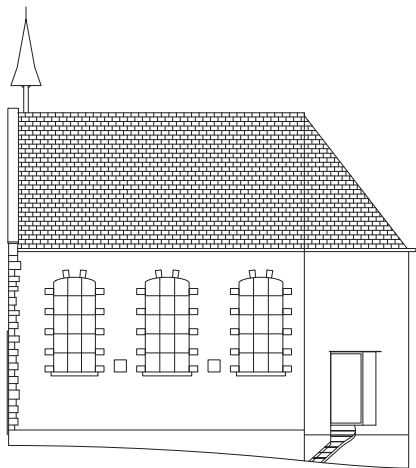
1661 Chapel of Our Lady 2022 House

The Chapel of Our Lady ten Beukenboom in Ninove has been converted into a home. The project is unique in several respects. The reconversion ensures that an important piece of heritage can be preserved. Dealing with the existing is an essential sustainability strategy: after consultation with the heritage service, a contemporary approach was chosen to accommodate a home in the Chapel. The available space is very efficiently arranged with compact rooms that are spatially connected by means of a loft. The footprint of the chapel has been respected and the pre-existing greenery has been preserved. Apart from the furniture, nothing has been removed from the original chapel. The original volume is therefore intact, one additional opening provides a view of the landscape and a second access. The original tiles have been cleaned and replaced in the new floor. All pre-existing elements have therefore been reused or restored. Custom-made secondary windows on the inside provide a continuous windproof shell while retaining the original stained glass windows. The design of the rational steel structure follows the principle of an intelligent hull and is adaptable and flexible, which in the future will allow for new possible rearrangement. The structure is made up of standard steel sections and can be disassembled. Even the floor finish consists of dry-mounted wooden fiberboards with underfloor heating in a click system. No glues have been used.

Drawings Chronology¹
1661 / 2022: The chapel was converted into a residence by adding floors in a light steel structure in 2020-2023².



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Notes

1. Simple chapel, beautifully placed in the middle of the cornfields at the intersection of three country roads. Surrounded by conifers, cypresses and a dense hedge; floating. Supposedly erected in front of an existing statue of Our Lady previously hanging from a beech tree. The current chapel was built in 1661 at the expense of M.F. Van der Meere, lord of Voorde; it was completely restored in 1959 under the direction of Raymond Marie Lemaire. Whitewashed hall church of three bays with semicircular choir. Brick and sandstone construction on sandstone plinth. Saddle roof (slates) with bell rider, the latter conceived as the pinnacle of the gable. Gabled gable delineated by sandstone neg blocks and finished with roof, braids and shoulder pieces. Basket arch door in a partly renewed, checkered sandstone frame. Cross-

arched upper window with sandstone corner blocks flanked by two sandstone cartouches. Facing stone with the year carved 1661 in it. Side elevations lit by simple stab arched windows with sandstone corner blocks. Windows with iron rod division.

2. The Chapel is being converted into a home. A light steel structure is pushed against the eastern wall and makes this wide space habitable. Two profiled steel intermediate floors cantilever over a portico structure on the central axis of the chapel. They are precisely trimmed by the semi-circular choir, the old front door and a slender spiral staircase that connects the different floors. A single new doorway in the choir breaks open the closed character of the chapel and offers a wide view of the fields behind.

Bourse de Commerce
 Paris, France

1763: Halle aux blés et farines –architect: Nicolas Le Camus de Mézières
 1808: metal dome addition –architect: François-Joseph Bélanger
 1885: Bourse de Commerce –architect: Henri Blondel
 2021: Bourse de Commerce-Pinault Collection –architect: Tadao Ando

1763 Halle aux Blés et Farines
 2021 Bourse de Commerce Pinault
 Collection

In 1763 Nicolas Le Camus de Mézières, a French architect and theoretician begins the design and construction of “Halle aux blés et farines” (the hall of grain and flour). Designed with a rather uncommon archetype for the French architecture of the time, this solid circular volume with the proportions of a Pantheon was a clear attempt by Le Camus’ to follow his architectural ideology, according to which a building’s character should reflect its function. This firm circular mass encloses an inner courtyard, which results in a dynamic interplay between the solid and the void, compressing and expanding to form a building that acts as a catalyst of exchange between its users. The firmness of this typology has outlived all subsequent transformations, including the addition of a dome on top of the courtyard by J. Molinos and F. J. Bélanger in 1783 and 1802 respectively, and the transformation of Halle aux Blés into the current Bourse de Commerce in 1885 by Henri Blondel, to celebrate France’s global commercial ventures.

The Bourse de Commerce is a sublime manifestation of the development of architecture and art through five centuries. It embraces the pre-existing 15th century Medici Column within the circular layout of the remnants of the 18th century Halle aux Blés; the later additions of impressive domes of wood and Iron; and the triumphal ornaments of Blondel. It is therefore a true testament to a rich stratigraphy of architectural heritage. Respecting its heritage and strong circular typology, Tadao Ando’s contemporary intervention in 2021 juxtaposed a cylindrical concrete volume to adapt the building to its contemporary function, as a museum of art and culture of the Pinault Collection. With the original typology ever so strong, to this day the building serves as a catalyst of exchange of culture, of arts and of social interaction between the visitors.

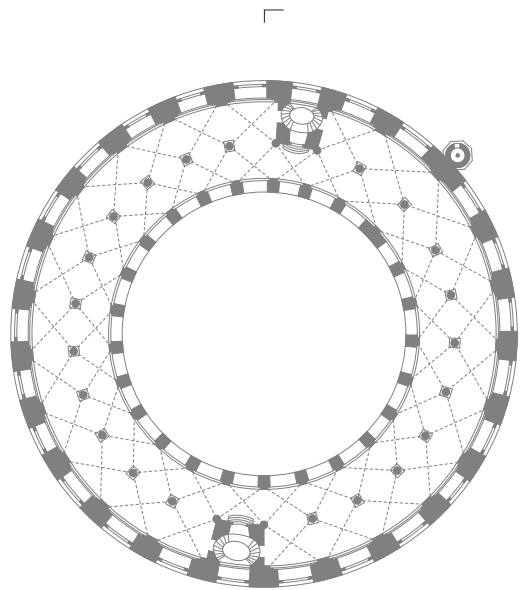
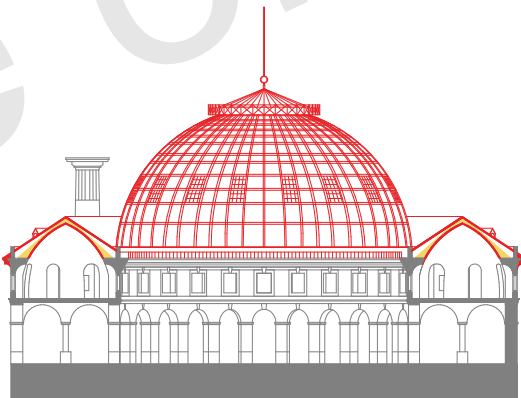
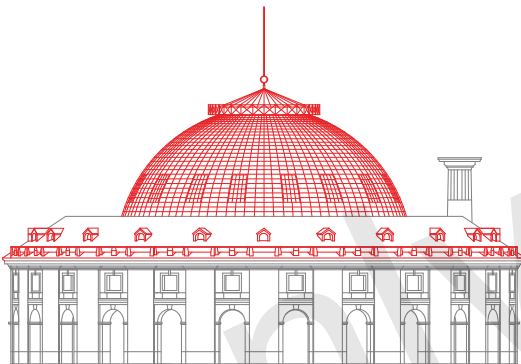
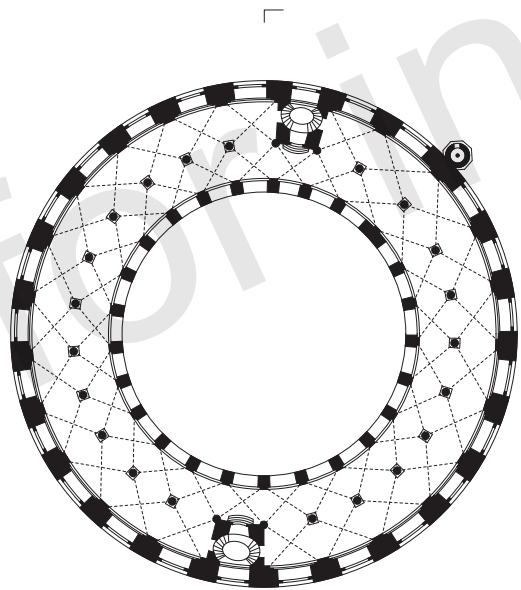
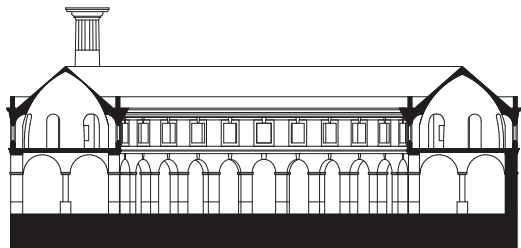
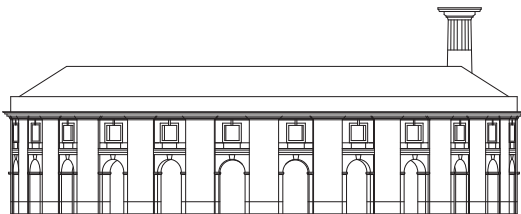
Drawings Chronology

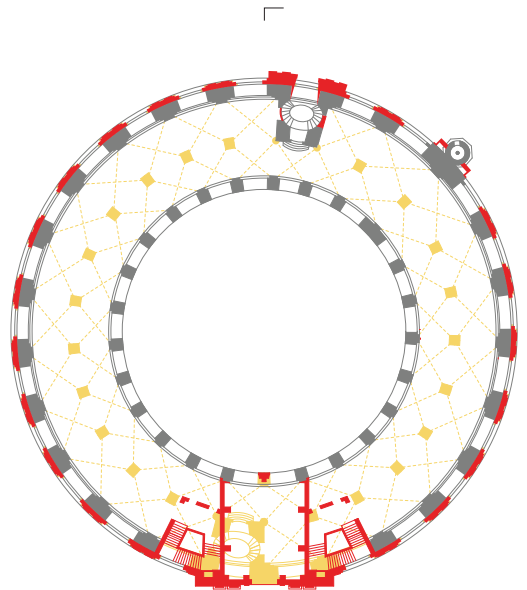
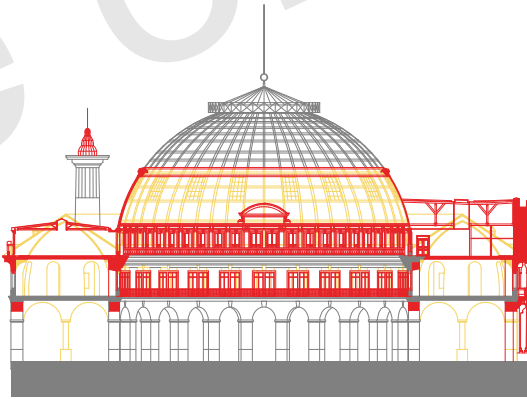
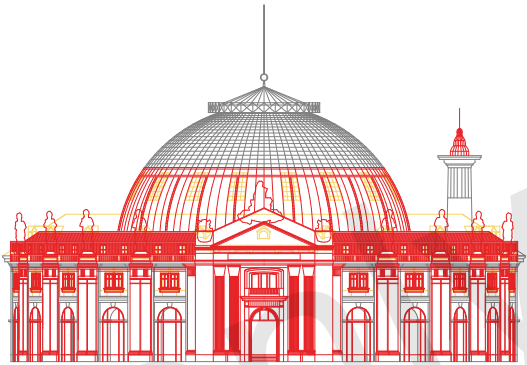
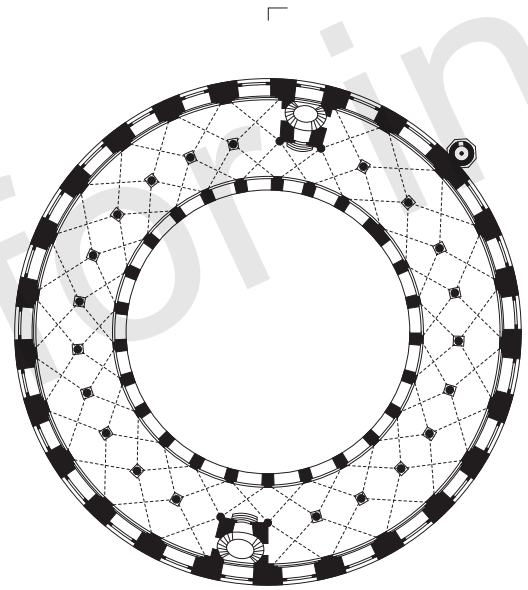
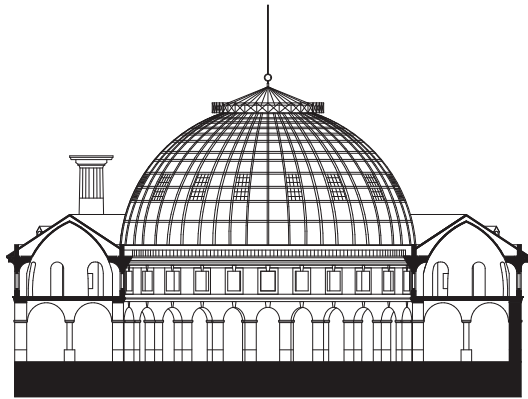
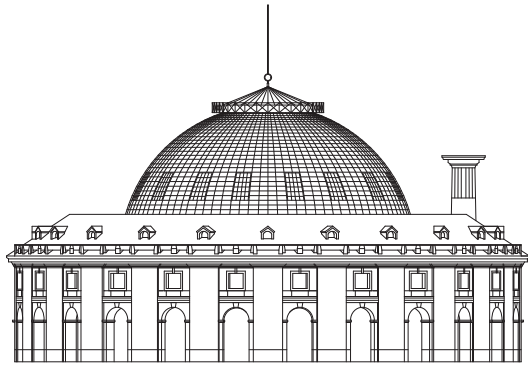
1763: Intepreted original drawings by the authors based on an original drawing of Le Camus¹.

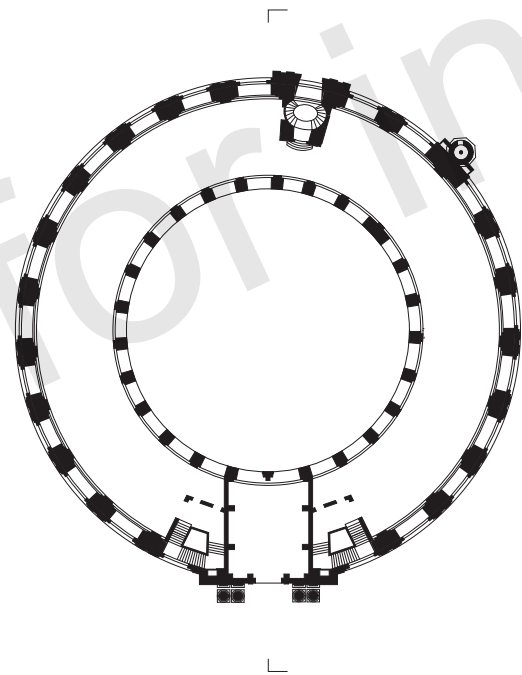
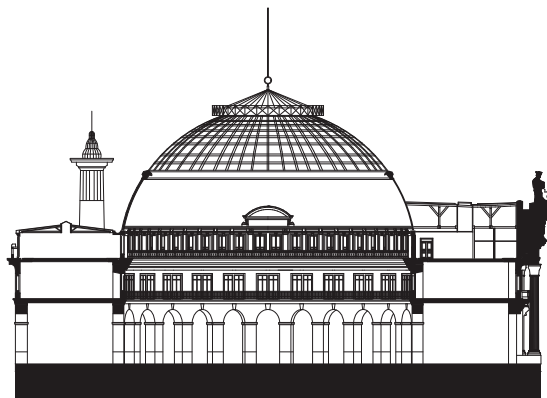
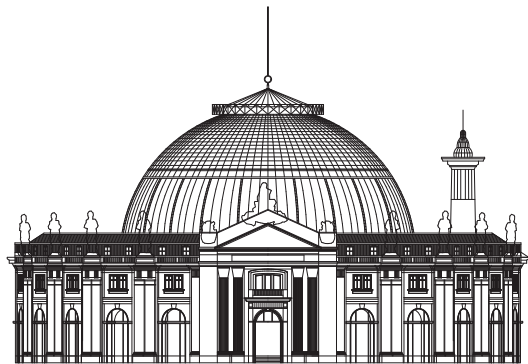
1763 / 1808: A metal dome was added to cover the central courtyard and the roof was reconstructed to help bearing the load of the dome². Dormer windows are also added to the roof.

1808 / 1885: In 1885, Henri Blonde restored the building and made it a monumental expression of neoclassical architecture, transforming it into what we know today as Bourse de Commerce³: the lower part of the metal dome structure was covered in masonry along the entire circumference and was decorated with a fresco⁴; the dome was modified to include a new floor and mezzanine; a monumental neo-classical entrance was added⁵; the entrance leading to the hall was encased in a neo-classical portico with four columns; two new staircases were added in both sides of this portico.

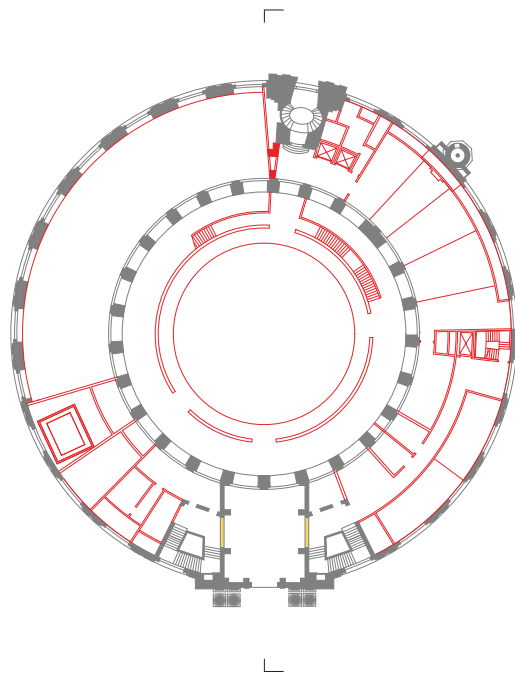
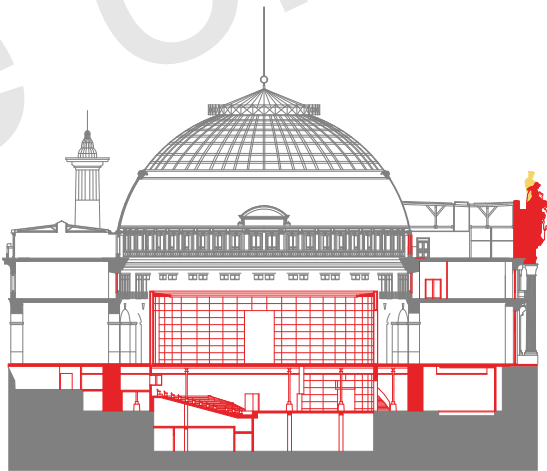
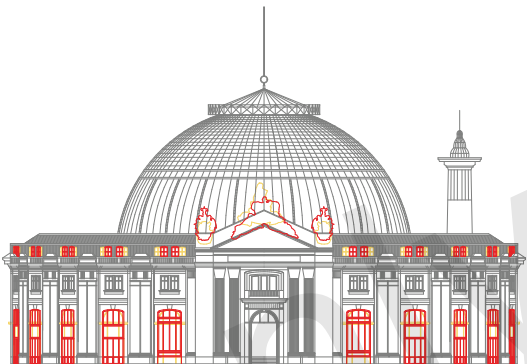
1885 / 2021: In 2016, Bourse de Commerce became part of the Pinault Collection. As early as in 2017, a restoration project headed by Tadao Ando was presented. The main focus of Ando’s project was a new concrete cylindrical structure to be carefully put in the middle of the building, respecting Le Camus’ Euclidean geometry⁶: the concrete cylinder hosts 12 new exhibitions areas; a basement level with an auditorium was added, accessed by a circular passage that runs along the wall of the cylinder; the passage ascends towards two ramps that lead to the second floor where a circular walkway connects to the other exhibition spaces.



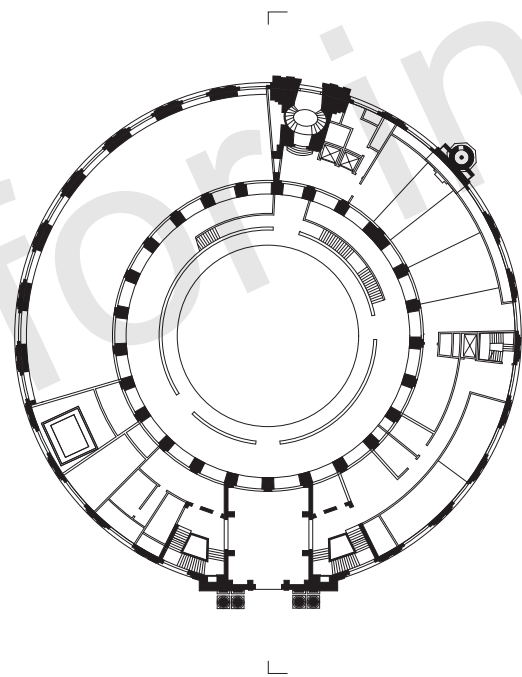
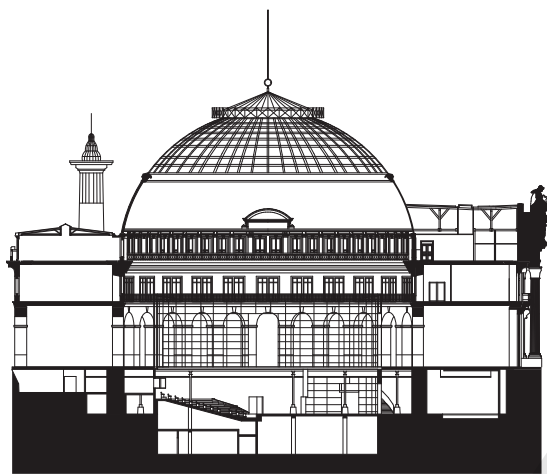
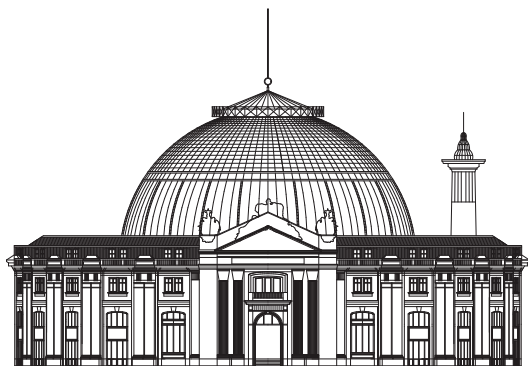




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Notes

1. Halle aux Blés et Farines was built in 1763 by Nicolas Le Camus de Mézières. The original design belongs to a typology group known as *halles découvertes*, or uncovered markets, i.e., buildings shaped around an open-air court. The underlying idea was that of the free market and the ventilation of goods, in this case grain and flour. Symbolically, reference is made to ancient monumental buildings with a strong character, such as the Pantheon and the Colosseum (A. De Rosa, F. Bergamo, A. Calandriello, *History, Geometry and Stereotomy in the Vaults of the Halle au Blé*, Nexus Network Journal, n° 22, 2020, p. 876). An original drawing from the architect has survived in the form of a 3D axonometric drawing, sectioned in certain parts and projecting the floorplan. This eloquent drawing allows us to reconstruct the strong argumentative base which was used to redraw the original floorplan, elevation and section.
2. To facilitate the recreational use of the central courtyard of the Halle aux Blés and stress its growing importance as a place of trade, it was proposed to add a dome to cover the building's courtyard and further expand its function. In 1783, the decision was made in favor of J. Molinos' and J. G. Legrand's design of a wooden cupola, which was preferred to the metal cupola proposed by F. J. Bélanger. This wooden cupola was burnt by a fire in 1802, hence in 1808 a new dome was built made of iron, based on the previous design by F. J. Bélanger (Viel 1809; Wiebenson 1973; Pérouse de Montclos 1989). The phase of the addition of J. Molinos and J. G. Legrand's dome was not considered as the available data is not sufficient to argue for a unique quality of that certain phase. Thus, the decision was made to only present F. J. Bélanger's metal dome for the phase of covering the building's courtyard, as the typology of the building in fact remains the same regardless of the type of dome applied to it.
3. In 1854 another fire ravaged the building. The Halle aux Blés, or Wheat Market, was closed in 1873, and in 1885 it was decided that it would become the new Bourse de Commerce. In that same year, Henri Blondel was commissioned to transform the old building in the new Bourse de Commerce, a trade exchange commemorating France's commercial achievements. During Henri Blondel's transformation, historical imagery shows the building's structure stripped bare and only preserving the dome and its support walls. Hence, Blondel's transformation is in essence a restoration as he sought to integrate the existing typology with a new and elevated neoclassical vein.
4. Henri Blondel modified the dome by adding a new floor and a mezzanine, covered the lower part in masonry along the entire circumference and decorated it with a fresco (A. Colling, *La Prodigieuse Histoire de la Bourse*, SEF, Paris 1949).

Blondel commissioned famous artists of the time to depict this paintingfresco with on themes of commerce trade and exchanges on all continents and to the glory of a triumphant France, with in a folkloricist and colonial visions. Four different artists represented different parts of the world under the direction of the painter Alexis-Joseph Mazerolle: Évariste Vital Luminais (the Americas), Désiré François Laugée (Russia, the North), Georges-Victor Clairin (Asia and Africa), Hippolyte Lucas (Europe), and Alexis-Joseph Mazerolle signed the allegories of the four cardinal points (in Bourse de Commerce-Pinault Collection, 11 Jan 2021. Accessed on 16 Dec 2023).

5. Henri Blondel redesigned the exterior walls to include a monumental entrance, among other ornamental additions. The pediment of this monumental entrance is supported by four Corinthian columns and surmounted by three allegorical figures, works of sculptor Aristide Croisy, representing the City of Paris flanked by Abundance and Commerce (J. Hillairet, *Connaissance du Vieux Paris*, Le Club Français du Livre, Paris 1978). The entrance opens to a neoclassical portico with four columns that frame the space, ultimately revealing the central hall. The addition of this monumental entrance is a testament to Blondel's idea of elevating the new Bourse de Commerce as a monument to the triumph of France in global commercial enterprises.

6. Tadao Ando's work in the Bourse de Commerce is a contemporary intervention that profoundly respects the historical values of the building. The intervention seeks to exist in different scales by creating a dialogue between architecture and the context, between heritage and the contemporary, and ultimately between the museum and the user. Ando's intervention follows the geometrical order that was already put in place by Le Camus. He introduces a central cylinder made of concrete that acts as a tool to interpret and measure the existing space, while at the same time offering new ways to approach these existing spaces (F. Privitera, *Tadao Ando. Collezione Pinault, Bourse de commerce, Parigi*, in «Firenze Architettura», n° 25, 2021). A circular path runs along the double walls of the cylinder, forming a ramp that provides an uninterrupted movement that takes the user downward to the basement auditorium. Along this path two staircases ascend leading to the second floor where a circular walkway connects with other exhibition spaces. The walls of this path suddenly and only open to revealing these specific places, introducing a different way to approach them. Thus, the circle is not only a typology and a spatial order, as it is also an experiential movement that takes user through the space.

Architectural Association
 London, United Kingdom

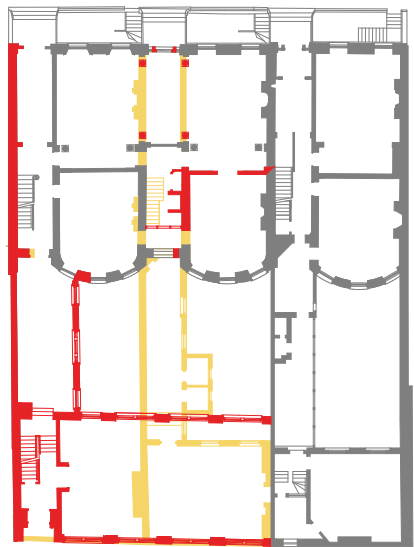
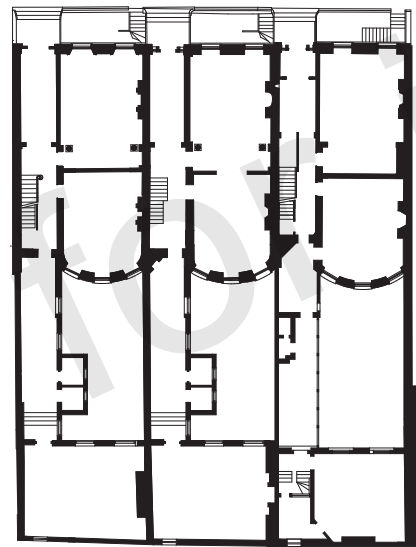
1775: Georgian Terraced Townhouses –architect: Robert Grews and William Scott with the involvement of the architect Thomas Leverton
 1919-1926: Architectural Association –architect: Robert Atkinson
 1927-1973: Architectural Association additions –architect: Easton & Robertson, C. Lovett Gil, Michael Patrick, John Winter
 1980: Architectural Association alterations –architect: Michael Patrick, Rick Mather
 2009: Architectural Association new leases
 2011-2021: Architectural Association new leases –architect: Wright & Wright

1775 Georgian Terraced Townhouses 2021 AA School of Architecture

The Architectural Assocation (AA) at the School of Architecture in London is arguably one of the most prolific architectural schools in the world. Today it conducts its educational activities in a labyrinthine terrace of grand Georgian townhouses. These houses were erected from 1775 and 1783 and initially housed the upper middle class. Later, the Bedford Estate, immersed by the city, gradually turned into a commercial quarter. For the AA, the main changes to its typological origin seem superficial at a first glance but in fact, they are subversive. They express themselves through torn-down party walls, Doric columns, inserted steel girders, remodelled bays, lightweight partition walls, and Esavian screens. Adaptations occurred continuously throughout the last century, oscillating between deliberate visual treatments and stark spatial reconfigurations. They all aimed at manifesting the AA as a domestic, non-institutional association with diverse agendas permeating contemporary architectural discourse worldwide. Although the AA derives power and fate from its iconic front toward Bedford Square, the life-saving organs play out in the rear. The representative compartmental structure of the terraced houses, which were historically reserved for auxiliary units and mews across Morwell Street, have been complemented by more undetermined spaces that are truly necessary for the school’s flourishing. The grand theatre, the studio spaces, the delivery area, and the disabled access were previously situated at the back. Since its early years at Bedford Square, the AA had allowed at the same time for a succession of tightly interconnected spaces giving intimacy and character, and generous open rooms ideal for wild productivity. It is the simple spatial adjustments that flip the building’s former typology. Previously a set of residential buildings, the AA now borders on an institution; however, it will never be quite like one.

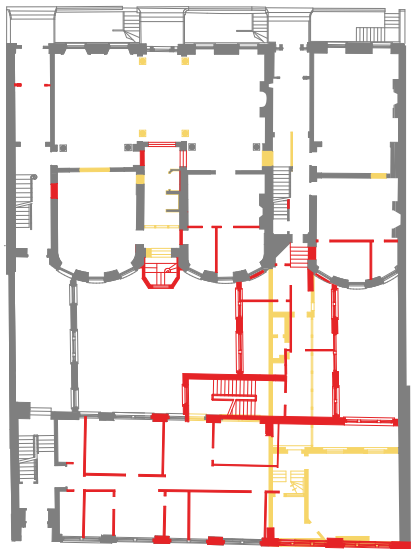
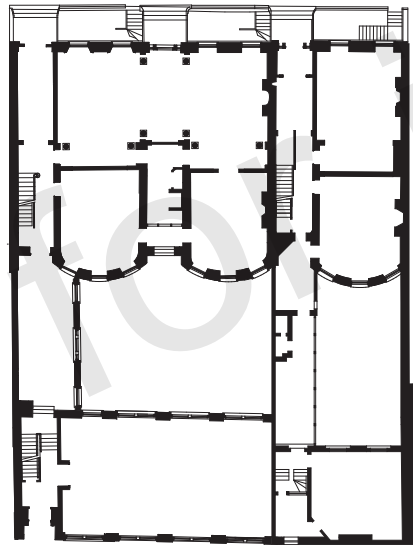
Drawings Chronology

1775: The original configuration of each Georgian townhouse encompassed a basement, three storeys above ground, and an attic with dormers. The ground floor contained a more formal room toward Bedford Square and a less representational room facing the rear with a staircase to its side. At the back it was usual to find outbuildings such as coach houses and stables – all similar in size and form. They close off the terrace toward Morwell Street (formerly known as Bedford Mews)¹.
1775 / 1919-1926: The AA was founded in 1847 but it moved to Bedford Square only in 1917. Shortly after the occupation of Nos. 34-35, a series of significant internal modifications were made. Concurrently, and under the guidance of then director Robert Atkinson, the School turned from an Evening to a solely Day School with a five-year program. Thereby, the front rooms of ground and first floors got merged to create unified spaces that today serve as the well known lecture hall and main library. Due to the changes made, key interior pieces such as fireplaces and the staircase and hallway to No. 35 were removed. Both the outbuildings on the rear got demolished to allow for a significant expansion of the School and the provision of more flexible studios and associated teaching spaces. Its rough, gritty, industrial character reflects the freer, wilder educational convictions of Robert Kerr and Charles Gray, official Founders of the AA. Building No. 36 was acquired circa 1926 and completed the AA’s main premises at Bedford Square².
1919-1926 / 1927-1973: Further adaptations were made during and after the war years. While the more representational spaces toward Bedford Square experienced only minor changes, such as the addition of other compartmentalizations through the creation of doors and the implementation of lightweight walls, the subsequent re-modelling and construction work at the rear included the extension of the Studio Block (1926-28). In the late 50s, the characteristic “Barrel Vault” was added on top. It was initially erected to enlarge the studio spaces and currently serves as a venue for more informal lectures and workshops. Due to its extension toward Morwell Street, the AA’s back facade became ever more grand compared to the adjacent outbuildings. A further, yet temporary expansion occurred after World War II, when the AA used the bombed properties in the street (Morwell Street No. 4) as a practical training yard³.
1927-1973 / 1980: The 70s and 80s were dominated by the almighty figure of Alvin Boyarski. He was rigorous and firmly believed in the School as an independent institution, which led him to a quasi-merger of the School with the public Imperial College to be cancelled last minute. Only minor alterations were made to the built substance – simply some leightweight walls were moved and removed – but profound changes occurred in the dynamic of the School: the AA’s unit system was born. The most formal spaces such as the lecture hall, its annexes and the exhibition space were enlarged, fostering their representative status, while more studio spaces were added on the back – their number was increased but not their size. The passages between the front and the back turned into more communicative spaces, and a basement bookshop, a bar and a restaurant were added. Together with the caretaker flat, which is still inside the building, the alterations fed into the myth that the AA is the successor of Georgian Townhouses⁴.
1980 / 2009: At the beginning of the 21st century, the AA extended its premises at Bedford Square by leasing No. 37 and No. 39. Notable aspects of No. 37 are its layout, which is repeated yet reduced in scale – doors, windows, parapet height and rooms are all smaller. No. 39 is tremendously different, as it features bay windows toward Bedford Square and an internal staircase in a different position. These two buildings are iconic, but it is the newly occupied facilities at the rear (Morwell Street No. 16), established in the 80s, that enabled the School to house most graduate programs as well as a computing workshop, and a printing and scanning center. The ground-level entrance on Morwell Street plays a crucial role in securing equal access for all, guaranteeing accessibility for the disabled and an indepentent functioning of the rear parts. Between the 90s and 2020, the AA leased Morwell Street No. 4, a former office building then demolished, to have additional rooms for seminars⁵. v[text continues on page 133]



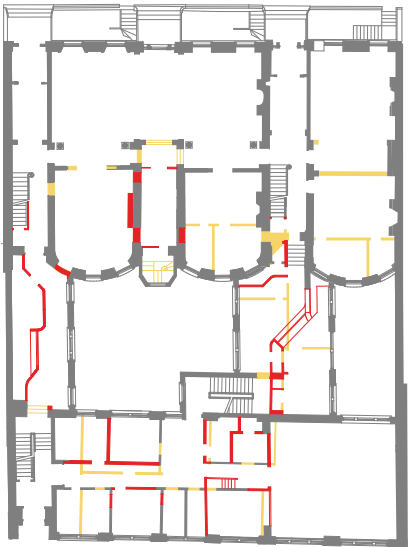
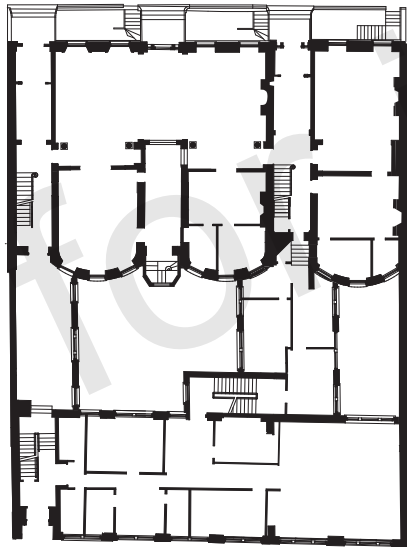
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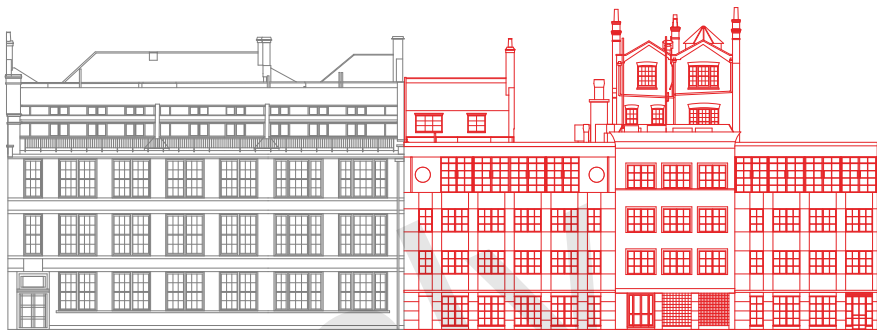
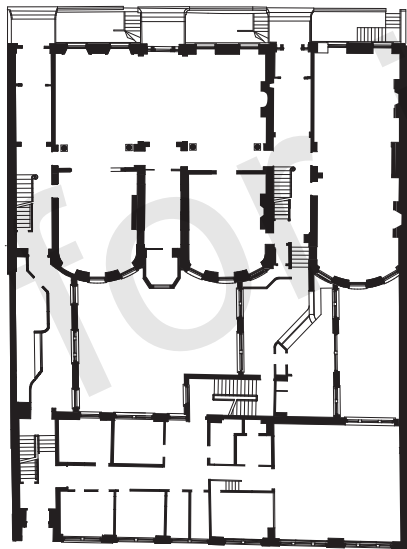
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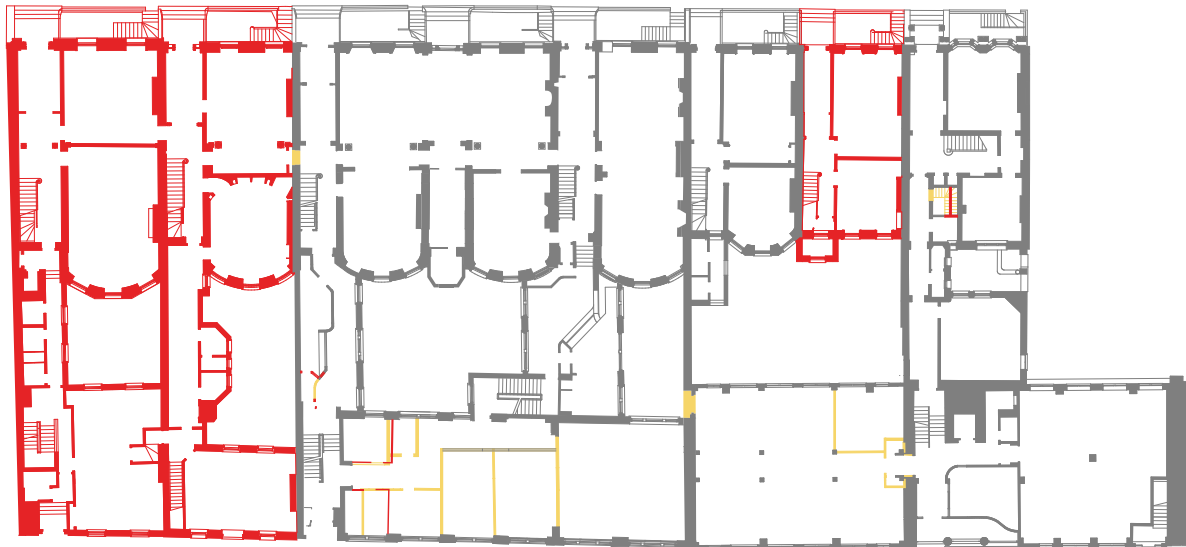
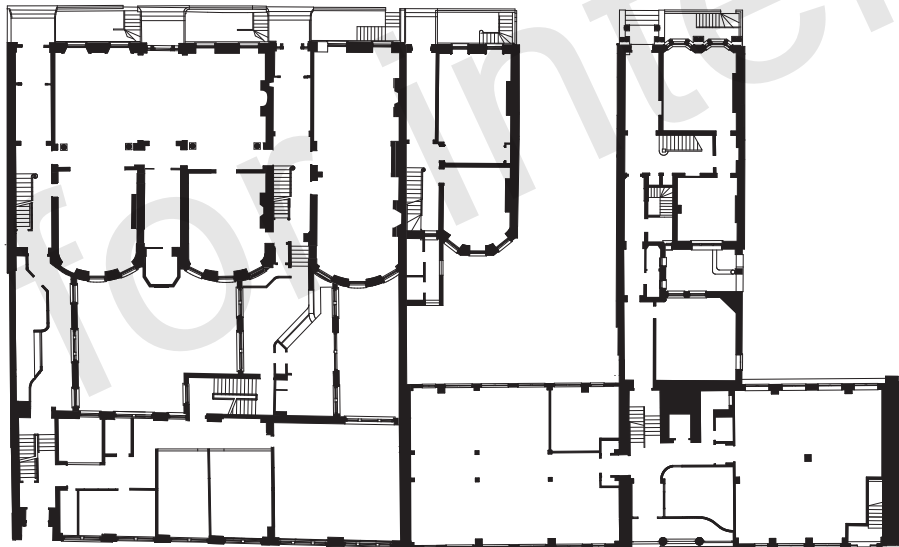
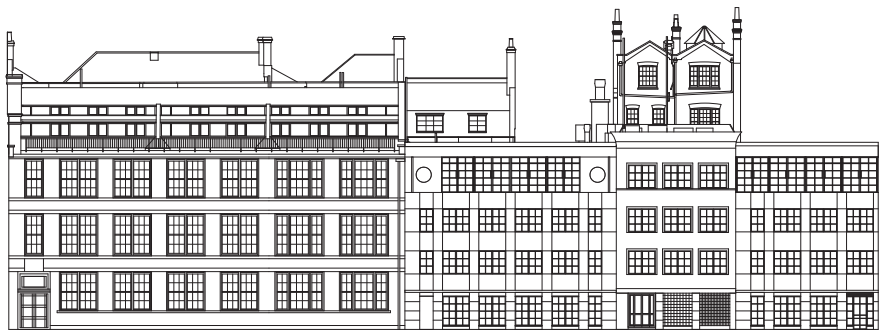
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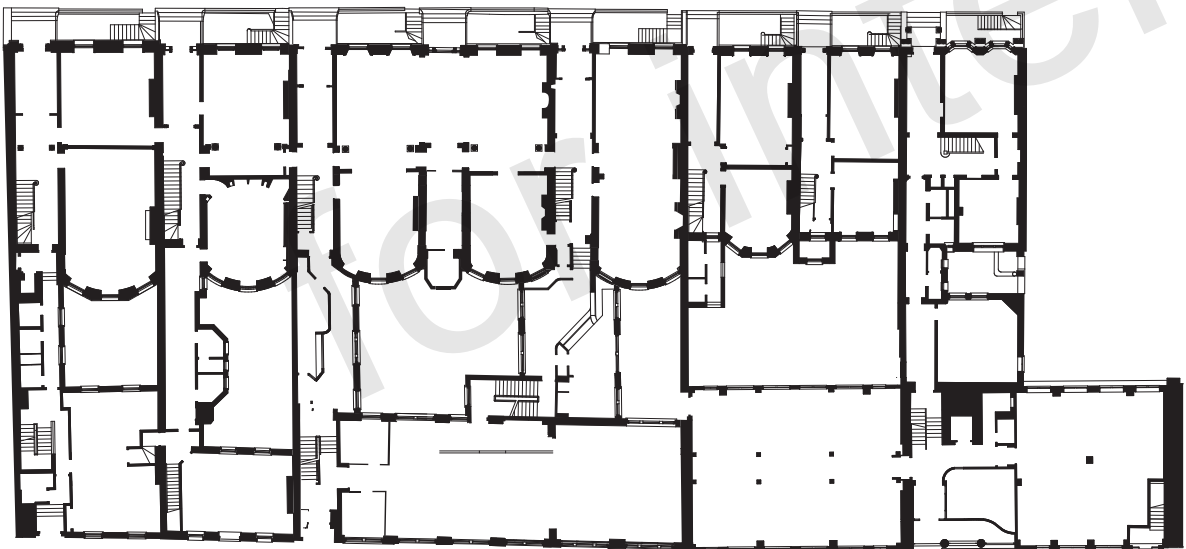
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2009 / 2011-2021: The last addition to the AA's campus is the lease of Bedford Square Nos. 31, 32 and 38. No. 32 is notably similar to the building of Robert Adam's Royal Society of Arts in John Adam Street. Another peculiar aspect is the retention of the plot width to the rear onto Morwell Street. This is significant, as the rear plots were merged and as such, the original plot configuration has been lost. The newly acquired Georgian Townhouses retained its original domestic compartmentalized structure, while the studio spaces' internal walls, at the rear of Nos. 34, 35, and 36, were removed. In 2021 the studios on Morwell Street (No. 4) had to be given up; however, some studios have been recently relocated to Montague Street 1 and 1A; therefore, AA's demand for more space has become even more pressing⁶.

Notes

1. Bedford Estate. The Bloomsbury area, north of London's Inner City, was mainly used for agriculture and sheep herding use until the mid to late 17th century. The principles for the development of the Bloomsbury area were established with the creation of Bedford square and its uniform street layouts. It is considered that after the death of 4th Duke of Bedford in 1771, the development of the area was sponsored by his widow Duchess Gertrude and by Robert Palmer. The builders were probably Robert Grews and William Scott, and architect Thomas Leverton was also involved. However, there is no evidence about the extent to which each of them informed the Bloomsbury area. Although the layout of Bedford square and its streets is unique and exemplary, the treatment of the facades is not stylistically unique. The detailing of the facades draws from Palladian features already used some years before, by Robert Adam in particular, with similar details replicated on the adjoining streets. The doorcases and Coad stone elements, although having aesthetic value, are all 'off-the-shelf' units coming from the artificial Coad stone manufactory at Lambeth, and this makes it quite unlikely that the works for the entire estate were assigned to and performed by a single, renowned architect (Bernadette Bone, *Conservation Statement 33-37 Bedford Square*, Architectural Association, 2011).
2. Britain's first full-time school of architecture. The AA was established in 1847 by a group of young students dissatisfied with the limited architectural education opportunities, and its origins were transient. Its first home was Lyon's Inn, followed by Conduit Street in 1859, a set of rooms in Great Marlborough Street in 1891, and the Royal Architectural Museum in Westminster in 1902. When the latter proved unsuitable, in 1917 the AA took up an inexpensive lease for No. 34-35 Bedford Square - where it has remained to this day, surrounded by some of the most prominent research institutions in the world. The AA grew from an occasional Night School to a self-governed educational facility. By the beginning of the twentieth century, it had become the first full-time, professional Day School for architectural studies in the country, and provided one of the first specialised diplomas of its kind in Europe. Also women played their part in it, as the AA started admitting woman students years before Oxford or Cambridge, and this boosted the number of students while men were away fighting in the war. When men returned, they brought with them friends from overseas. The new AA was thus radically egalitarian and international, and the changes made to the building by then director Robert Atkinson from 1919 to 1921 reflected this political approach (Bernadette Bone, *Conservation Statement 33-37 Bedford Square*, Architectural Association, 2011; Elizabeth Darling and Lynne Walker, *AA Women in Architecture 1917-2017*, 2017).
3. Post-war Years. The extension of the studio block in 1926-28 was designed by Easton & Robertson and amalgamated No. 36 with the rest. After World War II, the AA recorded the unprecedented of 461 students, following the gradual decommissioning of servicemen, and this required larger and more adapted facilities. Internally, walls were removed away, most likely to reflect AA members' desire for openness and collaboration. At that time, the AA erected a 40 foot Nissan hut for practical training at Morwell Street No. 4, which was opposite the street and had been bombed during the wars. The buildings adjoining Bedford Square certainly are lucky survivors of WWII bombings (Chat with Edward Bottoms, Head of Archives AA, 15.08.2023).

4. Electric Decade. Alvin Boyarsky was chairman of the AA from 1971 until his death in 1990. Under his guidance, the AA became the international and globally oriented institution we know today. Since it lost financial support from the government, the School had to change from mostly having British, grant-aided Students to having over ninety percent international students by the end of Boyarsky's tenure. Boyarsky's main contribution was the establishment of the unit system, an educational model that is now followed in architecture schools across the world. Instead of a standard curriculum, the AA allowed tutors to construct their own educational structures, with students free to choose the approach that most interested them. The AA thus heralded the shift from modernist orthodoxy to a much more pluralist system. The new system encouraged debate, and sometimes conflict, between the units, so that work was always subjected to a variety of opinions. Also hosting key architectural lectures and debates in the 70s and 80s, the AA had become an international hub for the development of architectural discourse (Chat with Edward Bottoms, Head of Archives AA, 15.08.2023).
5. Participatory Democracy. The School's extension in the early 21st century was essential for the School's dynamic. Until today, the AA remains the only private architecture school in the UK and operates as a participatory democracy with students, staff, and members electing a Governing Council and taking an active role in the selection of the AA Director. The AA's fiercely guarded independence has permitted the School great freedom and flexibility, nurturing a climate of experimentation and cutting-edge architectural practice, which maintains the AA's reputation as one of the leading international architecture schools. This preserved independence and flexibility was demonstrated, e.g., by the occupation of No. 37. Occasionally listed as part of the AA's premises since 1932, it suggests that the AA every now and then took some rooms in neighboring shared offices and added them to its main premises. Only in the last years proper and truly independent occupation started. Acquiring and occupying the back of No. 37, Morwell Street No. 16, has tied the AA into a sensitive debate in the Bloomsbury area. Up to today, only a few buildings have been equipped with a ramped access, and none of the properties in Bedford Square have it so far. The provision of disabled access is an important issue which should be carefully considered in relation to the School's participatory democracy (Bernadette Bone, *Conservation Statement 33-37 Bedford Square*, Architectural Association, 2011).
6. Instigator or Myth?. Over the last century, the buildings at Bedford Square proved to be able to be, shifting from their original residential use to being used as offices, educational and institutional facilities. In some instances, such as Nos. 34-36, the demand for new use, both programmatically and politically, have led to interventions that significantly altered the original spatial configuration. However, this has also increased the potential viability for a further surviving of the built fabric. Seven bourgeois family homes have underwent a continuous metamorphosis in order to provide new educational teaching spaces for around 1,000 among staff and students. However, future growth of the School will require a different approach to adaptation to retain the inherent domestic qualities of the buildings. The Wright & Wright architectural studio is in charge to further explore AA's heritage and built legacy (Clare Wright, *Revolution and Evolution - The Architectural Association*, in «Architectural Design», vol. 87, Issue 5, pp. 106-113, 2017).

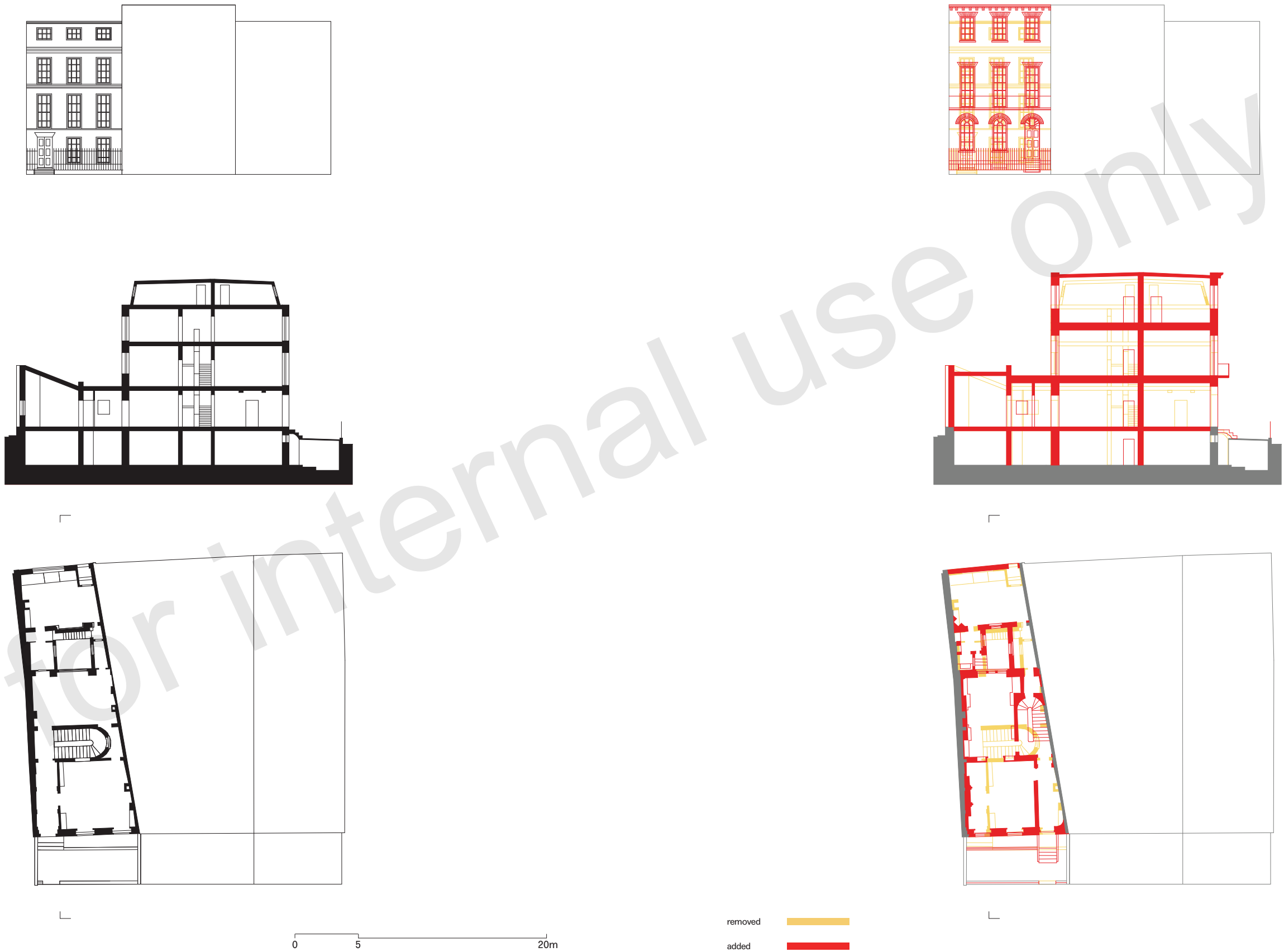
Soane Museum
 London, United Kingdom

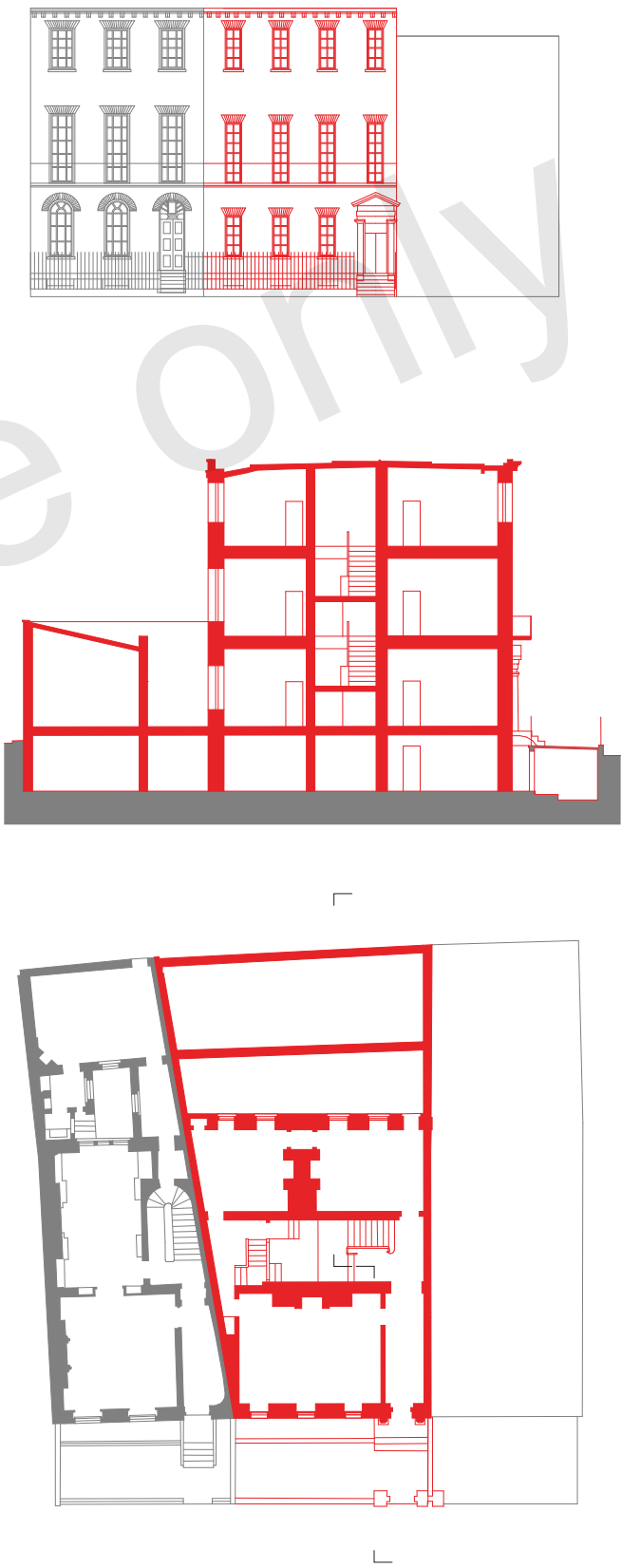
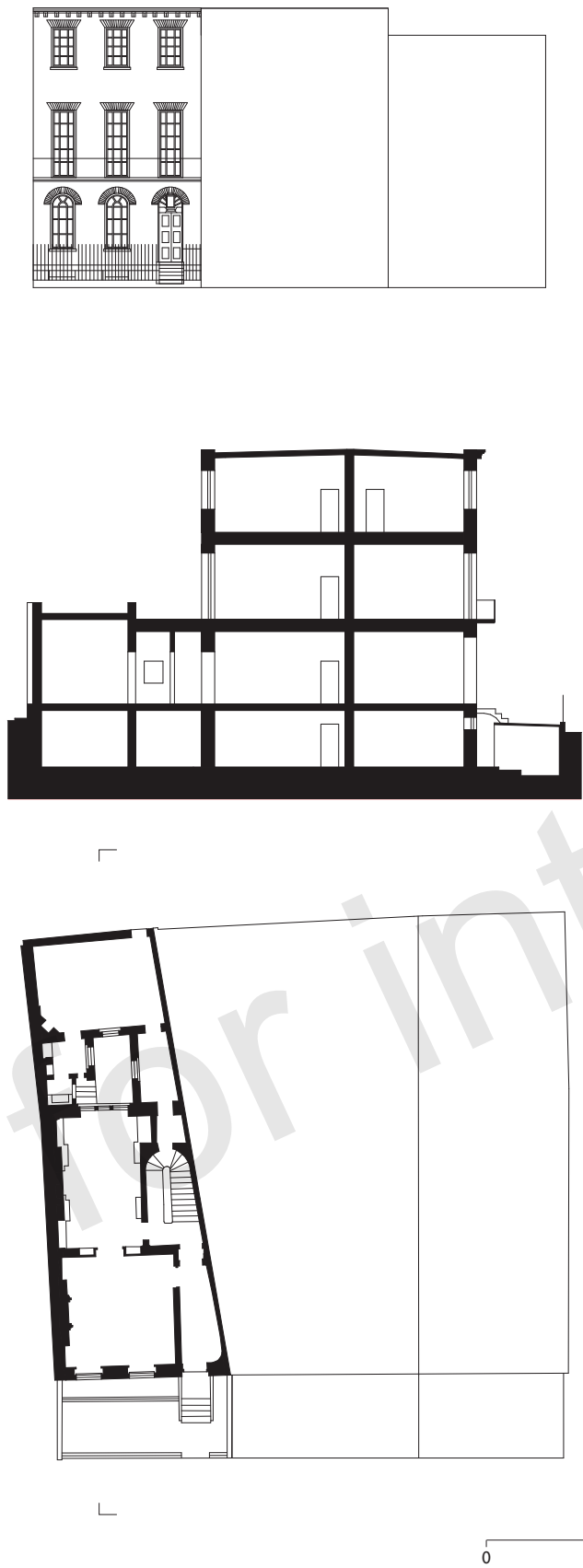
1792: House at no. 12, Lincoln’s Inn Fields
 1794: House at no. 12, Lincoln’s Inn Fields reconstruction
 1809: Sir John Soane’s House at nos. 12, 13, Lincoln’s Inn Field (1st phase)
 1813: Sir John Soane’s House at nos. 12, 13, Lincoln’s Inn Field (2nd phase)
 1833: Sir John Soane’s House and Museum at Lincoln’s Inn Field

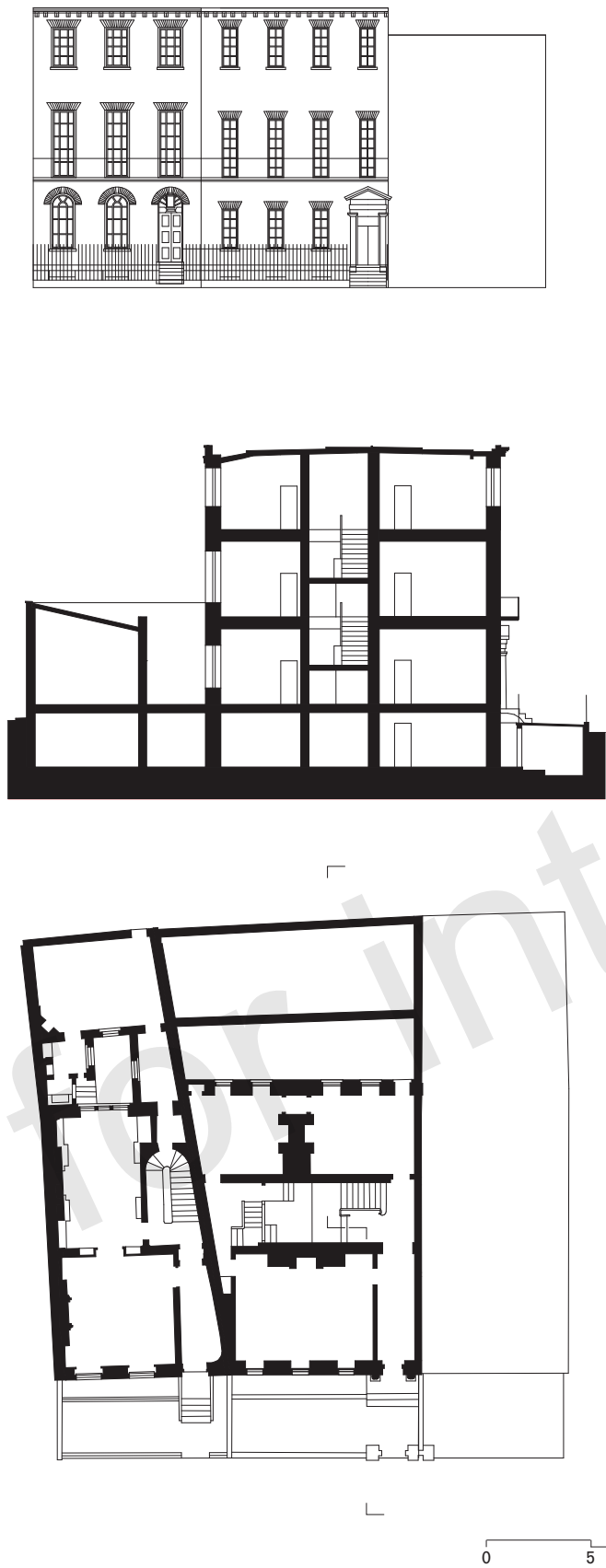
1792 House at Lincoln’s Inn Fields 1833 Sir John Soane’s House and Museum at Lincoln’s Inn Field

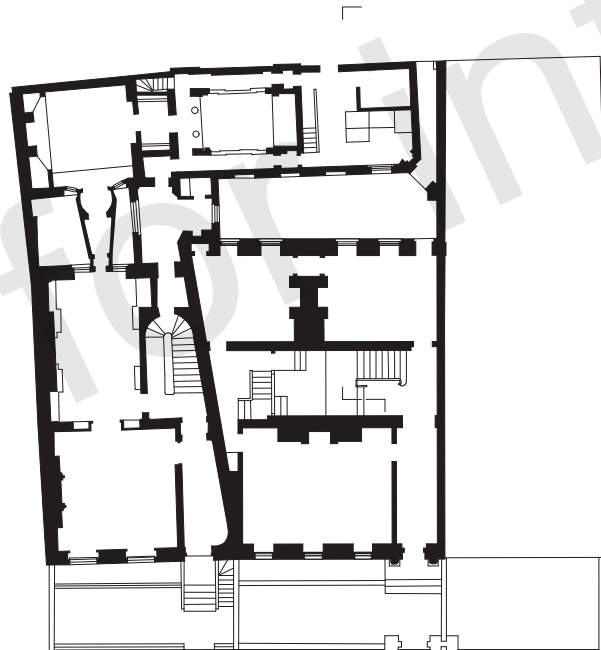
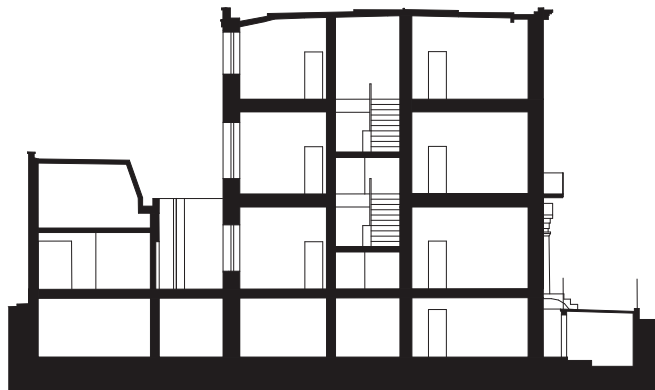
In 1792, John Soane bought a property at 12 Lincoln’s Inn Fields, on the north side of the square. The preexisting 17th-century building, a terraced house typical of Georgian London, was intended to house his family and, at the rear, his studio with the first core of the collection of ancient books and archaeological findings he had acquired during his journey in Italy. From that moment on and for about forty years, Soane undertook a long and continuous process of remodeling the building, which was to end only a couple of years before his death. The first demolition and reconstruction works lasted several years. In 1808, Soane bought the adjacent property – number 13 – and established its studio on the back. A few years later, the architect-teacher felt the need to open his house to people from the Academy public, and his students in particular. Thus, his private home began a profound transformation towards a hybrid model of personal wunderkammer, museum, and study rooms, exhibiting one of England’s most impressive art collections of that time. To endorse his desire to influence the academic culture of the period through talent and experience, in 1824, Soane, close to his seventies, bought the third adjacent lot – number 14 – and once again demolished, rebuilt, and modified the house layout, adding new stairways, a series of rooms for displaying models, paintings, and also his updated archaeological collection. At the end of his life, Soane donated his house-museum to the city of London for it to preserve his house as intact as possible. Through a legislative act that was quite unusual for the time – the Soane’s Museum Bill of 1833 – the English Parliament approved the conversion of the house into a museum while preserving its integrity.

Drawings Chronology¹
1792 / 1794: The demolition and reconstruction works involved a radical transformation of the property, in both plan and elevation. Soane reversed the entrance axis on the right side, consequently rotating the direction of the staircase by 90 degrees. The main three-story building was used as a dwelling. In contrast, he reconnected the smaller backyard to the main building by remodeling the inner court, which now housed his studio and the first nucleus of his collection. The façade and the internal heights of the floors were also revisited while maintaining their material characteristics and regular layout according to the then current building regulations².
1808 / 1809: In 1808, John Soane purchased the adjacent property at no. 13. This building was also pulled down and rebuilt in two different phases. The first phase concerned the expansion and remodeling of the backyard spaces, where he extended the exhibition area for his growing antiquity collection. He introduced an external smaller entrance to the second court from the opposite road, remodeling the threshold between the main building and the first backyard, and creating a double-height space with the Doom room.
1809 / 1813: The second phase of the renewal of the property at no. 13 concerned the remodeling of the main building. Soane wanted to open his private antiquities collection to the public of the Academy, and in particular his students, by transforming the building into a place for “real-life study” of antiquities, making it available his vast collection of fragments and casts of ancient buildings, models, and architectural drawings, books, sculptures, paintings, and natural history specimens. The main entrance was moved from no. 12 to no. 13 to separate access to the private house and access to the public portion. In the implementation of the expansion project, this change was marked by the addition of a second façade in light stone, slightly staggered compared to the brown façades of the building curtain, which features three arches on the ground and first floors and a belvedere on the upper floor which Soane defined a “loggia”³.
1813 / 1833: To endorse his desire to impact the academic culture of the time with his talent and experience, in 1824 Soane, close to his seventies, purchased the third adjacent lot, at no. 14, and once again he demolished, rebuilt and modified the layout of the house. Soane adds new staircases to connect the different parcels and levels, a series of rooms for the exhibition of models, paintings, and new, continuous archaeological acquisitions. At that time, the overall front façade was raised to four-storeys in height, with a central belvedere on the rooftop at no. 13⁴.



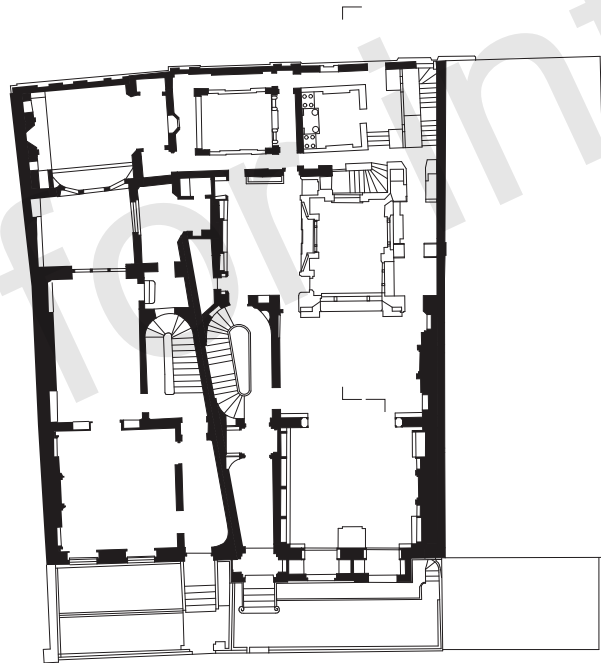
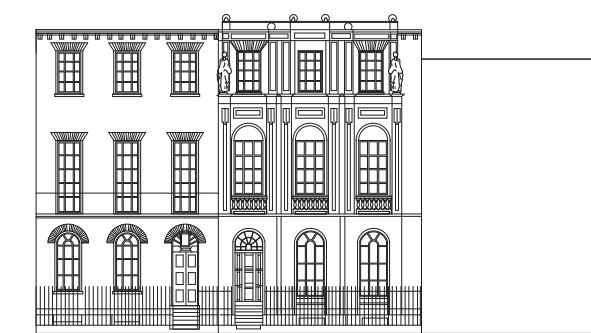






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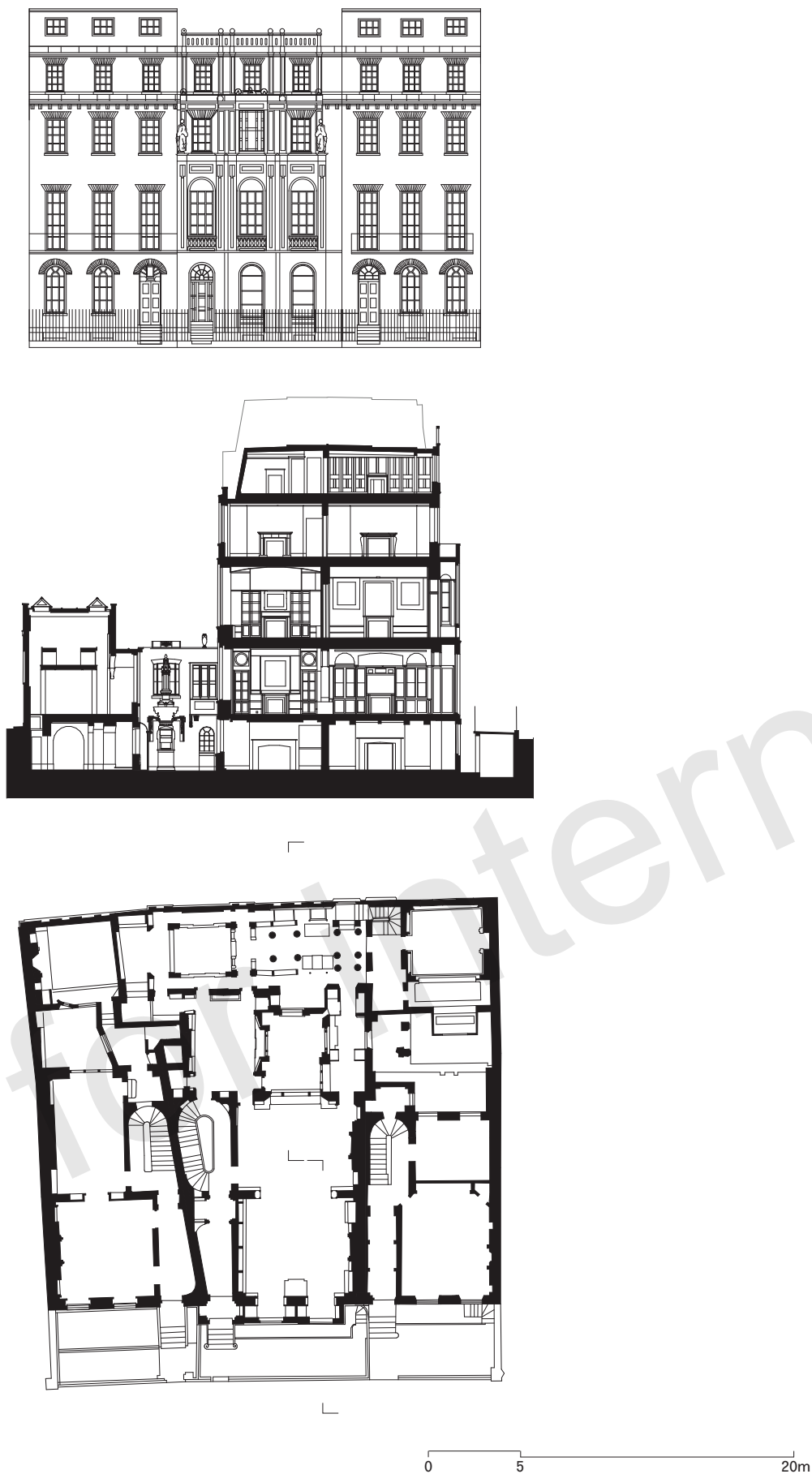
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Notes

1. The property at no. 12 was part of the double row of terraced houses built around 1660 by developer and builder William Newton. The elevation drawing is based on the work by Anthony Jackson, *The Façade of Sir John Soane's Museum: A Study in Contextualism*, in «Journal of the Society of Architectural Historians», no. 51, 4, 1992. With no original drawings at hand, the section was edited retrospectively, starting from the actual configuration and the plans reproductions reported in the article by Maria Shéhérazade Giudici, *From theater of memory to framework for memories: John Soane's museums*, in «Perspecta», n° 48, 2015, p. 94. The plan was redrawn through comparison of Giudici's work and the survey of Soane's original plan as reported by Daniela Lopes (In: Daniela Lopes, Vincent Min, Ron Adriano, Joshua Giovino, *Plan development: nos. 12-14 Lincoln's Inn Fields*, in «Arch», 100 / 110, 2014, ohn Soane House Draft, <https://arch100110foxtrot2.wordpress.com/2014/12/10/progression-of-property-development-nos-12-14-lincolns-inn-fields/>, accessed 17 / 11 / 2023). Moreover, the authors also considered the description of works and phases made by Katte Clark (In: Kate Clark Associates, *Sir John Soane's Museum. Conservation Management Plan 2008. Heritage Lottery Fund-Prepared for Sir John Soane's Museum to inform the new development plan*, https://www.academia.edu/3640015/Sir_John_Soanes_Museum_Conservation_Management_Plan).

2. Even though no source is available to validate the hypothesis on the elevation and section, the authors found ground for their considerations in the detailed study by Anthony Jackson, who stated: «The houses in the northern terrace that probably remain today from 1792 differ in overall height, the dimensions and vertical spacing of their windows, and the color of their brickwork.

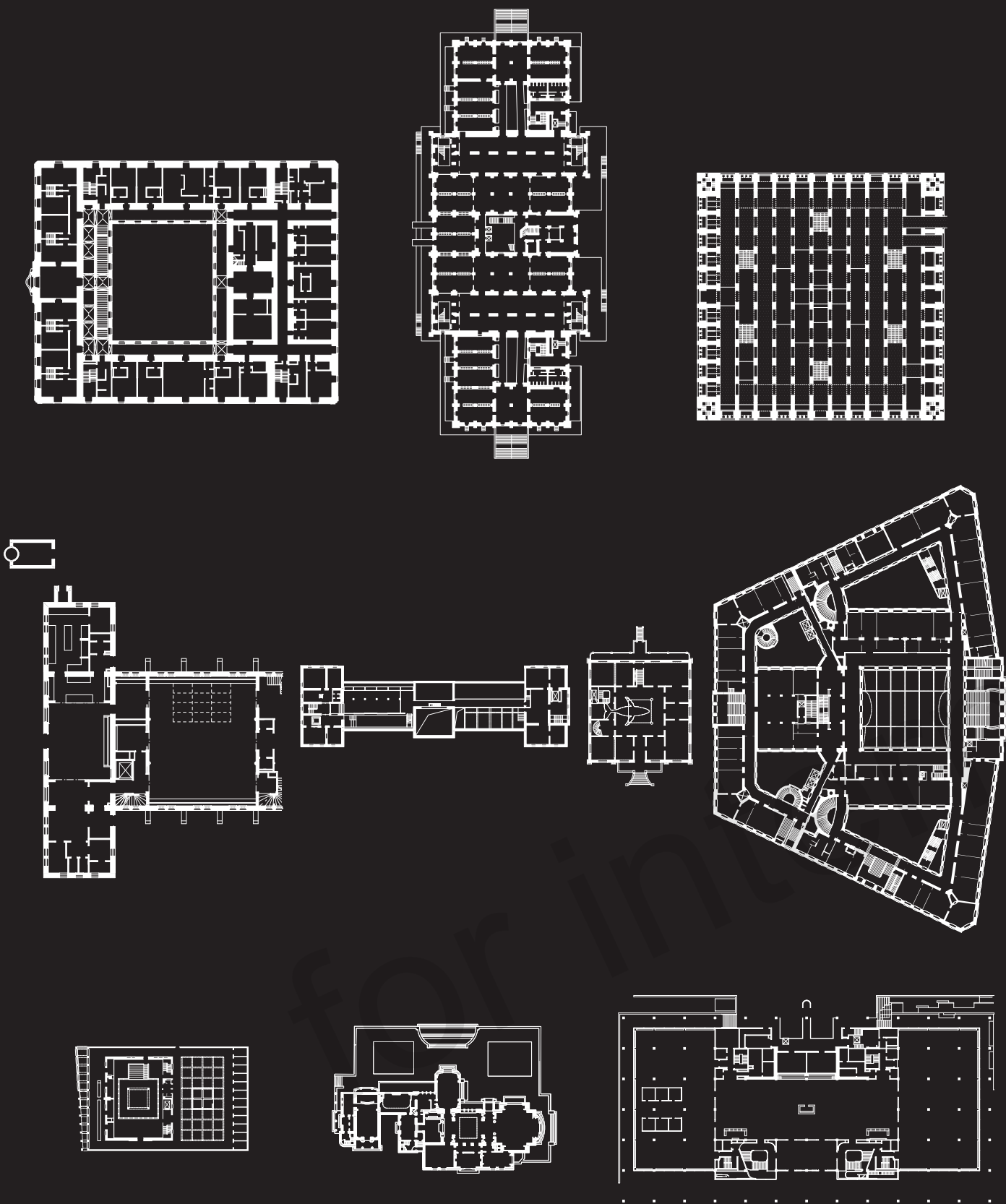
The actual context for Soane's first facade could therefore be characterized as a line of houses of a similar style but of varying size and detail» (Jackson, op. cit., 1992, p. 420). Based on this, authors argue that the height of the first facade was probably determined by the height of the adjacent pre-existing house (no. 13).

3. At no. 13, the renovation works were made in two phases and took a few years. Soane's family moved into the new building in 1813, but the renewal first concerned the expansion of the studio and then the remodeling of the main building with the design of the new house front, which marked a change in terms of architectural language in Soane's poetics of ruins. The introduction of the neoclassical loggia and belvedere was related to the initial idea to expand and open his collection to the public, then the objective was to «give to its front a consequence commensurate to the scientific purpose to which it was devoted, and to the collection which it contained» (In: Noli me tangere [pseud.], *Observations on the House of John Soane, Esq.*, in «European Magazine», LXII, 1812, pp. 381-387).

4. Regarding the several phases of the building renewal and their connection to Soane's biography as established by the considered authors, the main source is the book *Sir John Soane's Museum: A Complete Description*, London 2014. The text was reworked on the basis of the essay by Fabrizia Berlingieri, *Non finito: processo, poetica. La casa-museo di Soane a Lincoln's Inn Fields* (In: Lina Malfona, et al. (eds.), *Unfinished. Sul non finito*, Pisa University Press, Pisa 2023, pp. 62-67). The drawings, that are partially unpublished, were elaborated by Lucia La Giusa and Fabrizia Berlingieri.

Second Category Representational

Buildings with a robust typological footprint, mainly from the 19th century, that originated from typologies newly formalized during that period, dressed to represent the new uses appropriately. The selected cases show the minimal efforts necessary to harbor new uses through affordances provided by the underlying type. Additionally, examples with a new spatial quality that complete and/or replace the previous building stages are featured.



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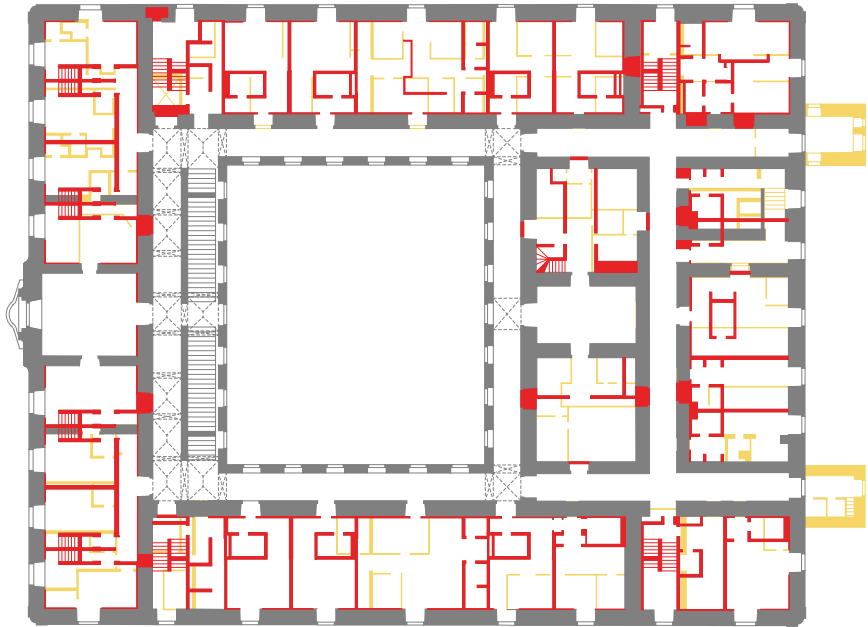
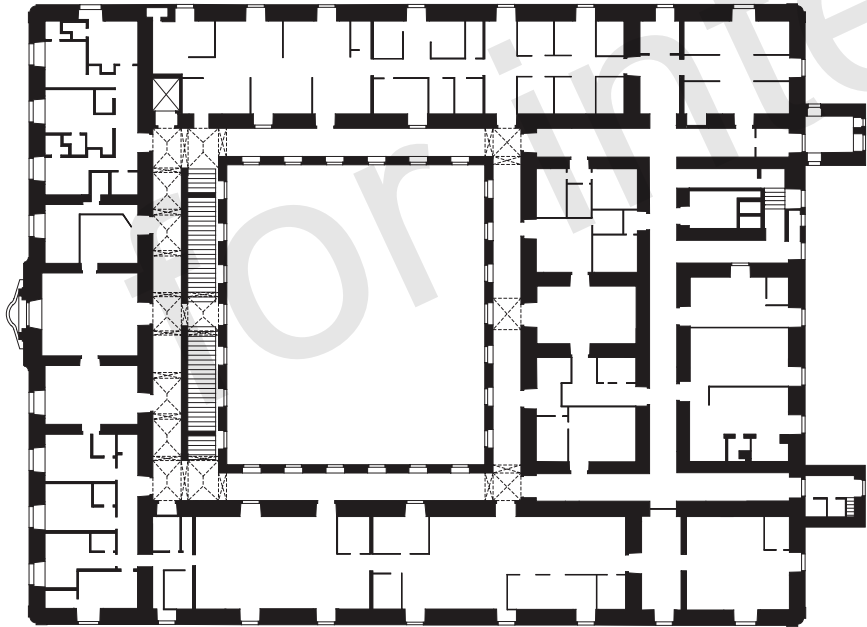
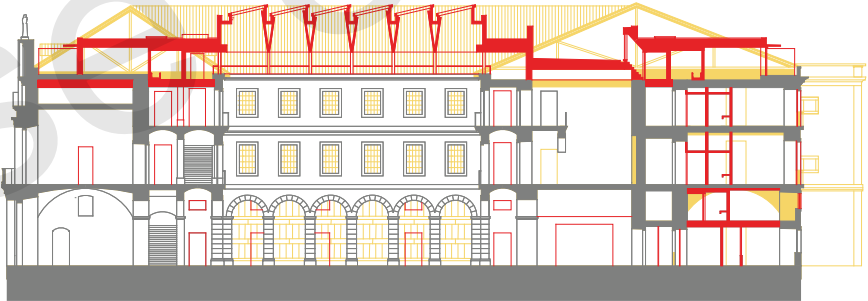
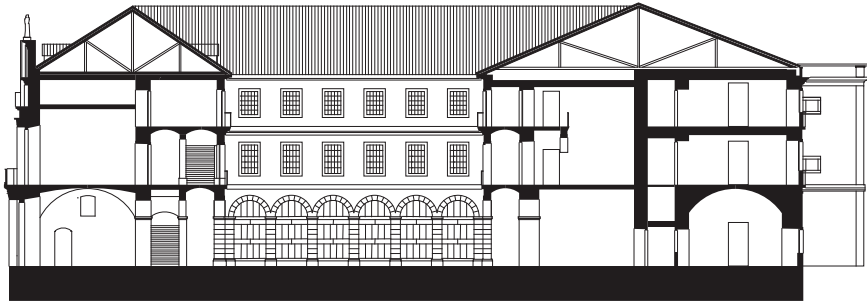
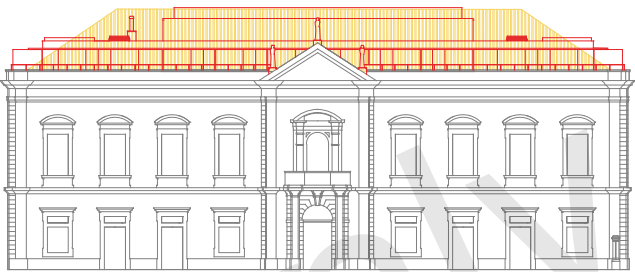
Pousada de Viseu p. 148	Hospital de São Teotónio / Pousada de Viseu Hotel 1842 / 2009 Viseu, Portugal
Provianda Santa Marta p. 154	Provianda di Santa Marta / Polo Santa Marta Department of Economics 1863 / 2014 Florence, Italy
UPF Library p. 162	Diposit de les Aigues / UPF Library 1874 / 1992 Barcelona, Spain
Mötesplats Mariatorget p. 168	St Paul's Church / Mötesplats Mariatorget 1876 / 2022 Stockholm, Sweden
Museum of Contemporary Art of Republic of Srpska p. 174	Banja Luka Stadt Bahnhof / Museum of Contemporary Art of Republic of Srpska 1891 / 2022 Banja Luka, Bosnia-Herzegovina
Casa Andresen p. 182	Casa Andresen / Galeria da Biodiversidade 1895 / 2017 Porto, Portugal
Postsparkasse p. 192	Postparkasse / University Campus 1904 / 2022 Wien, Austria
Deutsches Architekturmuseum p. 198	Geldmacher Villa / Deutsches Architekturmuseum 1912 / 1984 Frankfurt am Main, Germany
Casa de Serralves p. 204	Chapel and private house of Quinta de Serralves / Casa de Serralves Museum 1925 / 2021 Porto, Portugal
Martin Luther King Jr. Memorial Library p. 214	Martin Luther King Jr. Memorial Library / Martin Luther King Jr. Memorial Library extension 1972 / 2020 Washington D.C., USA

1842 Hospital de São Teotónio 2009 Pousada de Viseu Hotel

The Hospital de São Teotónio, located in Viseu, Portugal, opened in 1842. Belonging to the NGO Santa Casa da Misericórdia, it served the city until 1996 when the state regional hospital was built. It was then sold to become part of the national chain of heritage hotels “Pousadas de Portugal”, under a design by Gonalo Byrne Architects, opening its doors in 2009. The architect preserved the building’s skeleton with its thick granite structural walls, the main staircases in stone and the entire cloister area, adding for functional reasons and compliance with the safety regulations, four columns of equidistant stairs, two lifts and another one for hotel services only. The design proposed replacing the existing roof with a very horizontal floor creating a line of shadow on the four sides. The central cloister was covered with a system of skylights for interior comfort. This allowed the perimetral windows to be removed from the corridor wings, recreating an open circulation overlooking the old cloister, now turned into a large lounge area lit from above, enhancing its centrality.

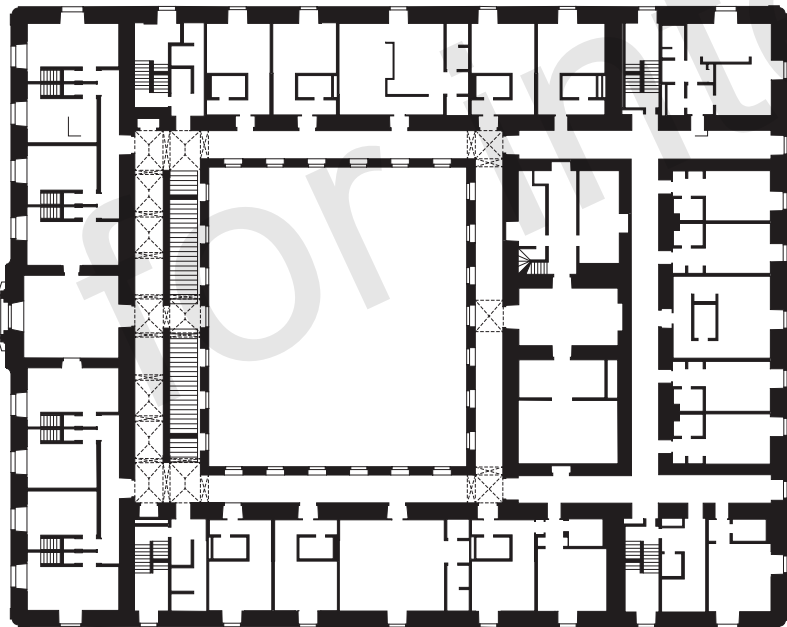
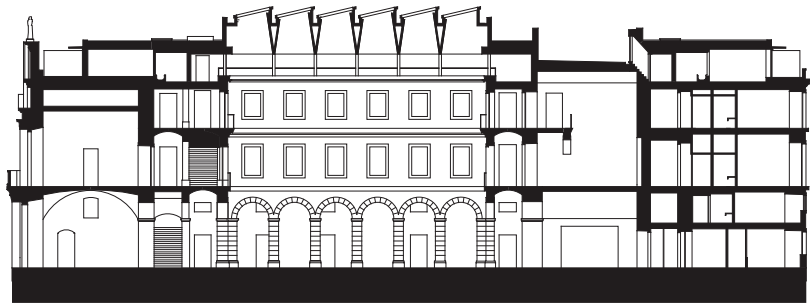
Drawings Chronology

1842 / 2009: The new functional program meant a global reorganization of the building, with major demolition works of all non-structural interior partitions, the wooden floors, the two protruding volumes attached to the south façade and the pitched roof¹. The ground floor was dedicated to the social areas featuring the central lounge. The upper floors were subdivided into hotel rooms, adjusted to the granite skeleton and to the façade openings. In the circulation corridors most doors were kept but some new ones needed to be opened in the granite walls. All windows were removed from the patio inner façades². Safety regulations were responded to by placing four columns of equidistant stairs at the four angles of the bedroom corridors, therefore enhancing the global concept of the building’s circulation flow.



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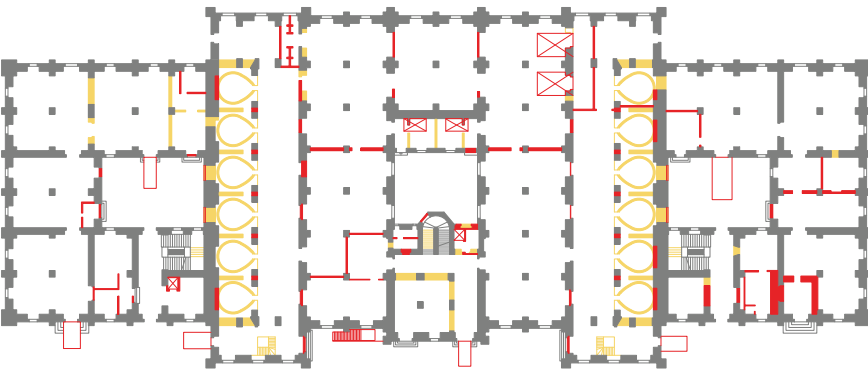
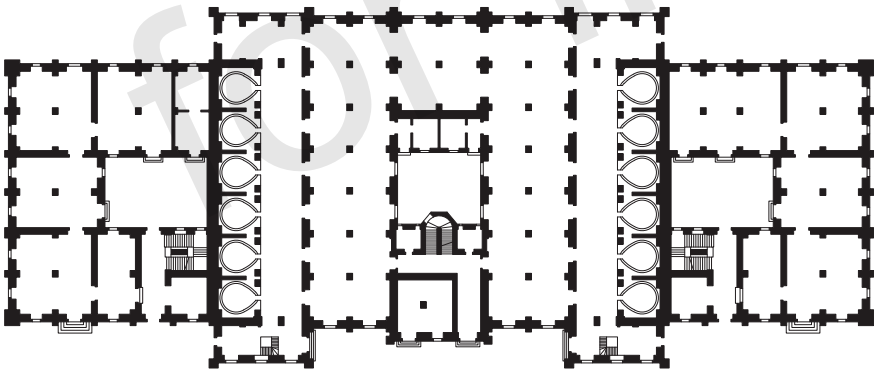
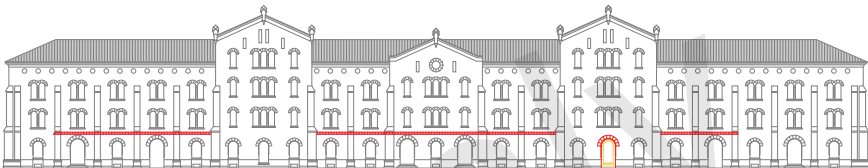
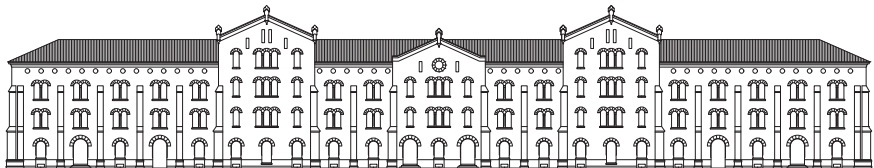
1. The first phase of the works consisted of the demolition of all non-structural interior partitions and wooden floors, clearing the big granite modular spaces from all secondary interruptions. The impressive granite skeleton of the building was thoroughly registered on a photographic reportage by Luís Ferreira Alves, commissioned by the architect (<https://www.goncalobyrnearquitectos.com/charm-hotel-in-viseu-home>). The two protruding volumes attached to the south façade were also demolished, restoring the original reading of the four elevations of a free-standing building concept. All external façade openings were kept intact. The heavy mass of the pitched roof was fully demolished and replaced by a low floor of hotel suites with panoramic terraces in the four elevations. According to Gonçalo Byrne, this was intended to reinforce the cornice of the building, its corporality and compactness, in a

contemporary attempt to comply with the values of neoclassical architecture, <https://www.goncalobyrnearquitectos.com/charm-hotel-in-viseu-home>.
2. Gonçalo Byrne's interpretation of the old building's basic concept was that of a convent-type with a cloister. Therefore, he decided to remove all windows from the patio inner façades, to recover the feeling of an open cloister, recreating the depth and interplay of shadow and light in the corridors, from whose openings the hotel guests can look down to the central lounge or look up to the sky through the transversal skylights. To further enhance the depth of the circulation spaces when seen from or across the central lounge, the corridor walls were painted in ochre therefore offering a colourful background to the white façades of the cloister.

1863 Provianda di Santa Marta 2014 Polo Santa Marta Department of Economics

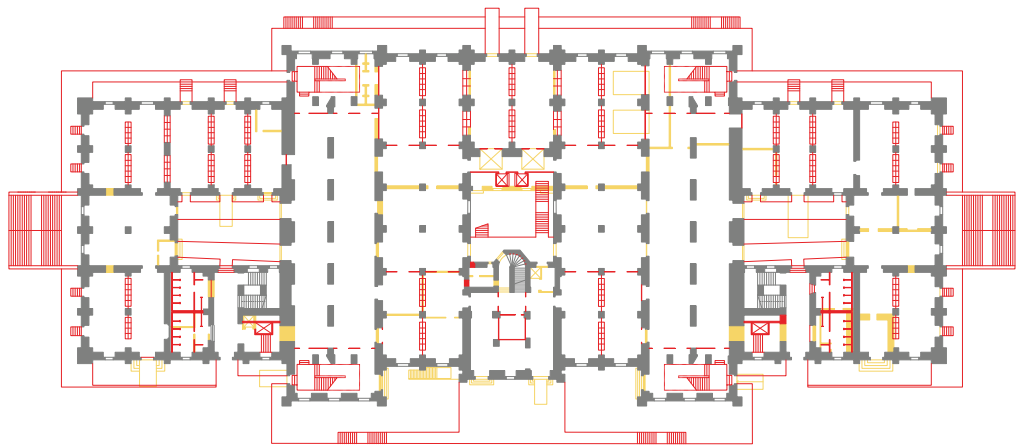
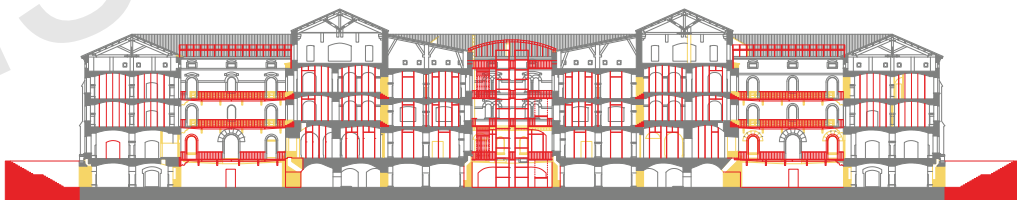
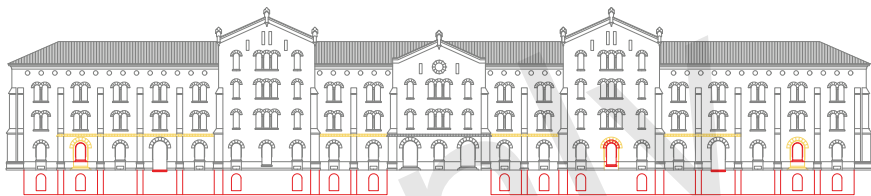
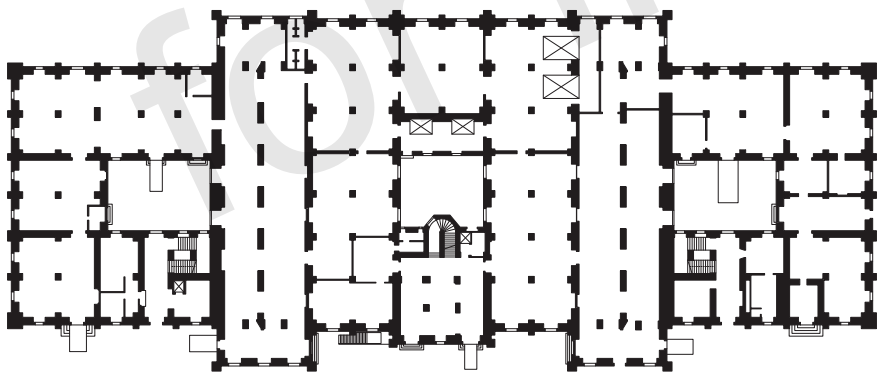
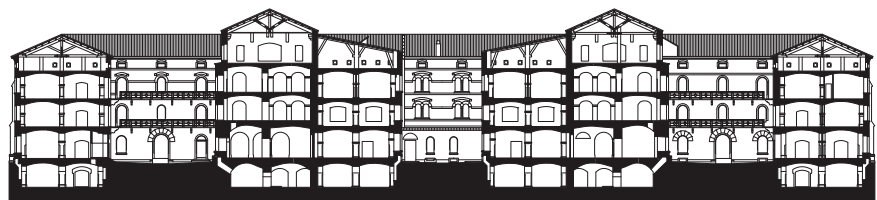
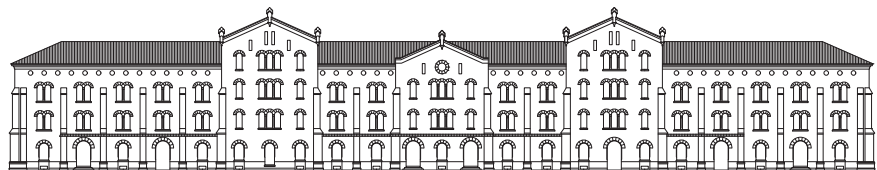
The design of Santa Marta Provianda (originally named Verpflegs Etablissement Santa Marta) dates back to 1863 and was the work of k.k. Genie-Direktion Verona, namely lieutenant colonel Andreas Ritter Tunkler von Treuimfeld and engineer Anton Naredi-Rainer. The complex involved the construction of four bodies of the building, intended for food storage, grain storage and milling, and the making and baking of “ammunition bread” (a loaf of bread, so called because it was the daily ration of soldiers). and hardtacks. The Bakery, whose construction dates 1865, was the main building, a 118-meter-long and 49-meter-wide volume consisting of three separate bodies, each with an internal courtyard. In the early decades of the 20th century, the original ovens were demolished and replaced, and some rooms were split to be used as administrative offices and apartments for families of military personnel: However, the complex continued – at least in part-to also retain its original function until 1989, when from being a State military state property it became the property of the City of Verona. Following a period of neglect, in 2003, a program agreement between the Municipality and the University established a new use for the complex as the new seat of one of the University’s departments. The recovery and restoration project was then assigned to a group of professors from IUAV University of Venice, with architect Massimo Carmassi in charge of the architectural part. The construction site was completed in 2014, and since then the building has been the new home of the Departments of Economics and Law of the University of Verona.

Drawings Chronology¹
1863-1865: The building is based on a double axis of symmetry and a system of internal courts.
1863-1865 / 1900-1915: The six pairs of brick ovens were demolished, to be replaced by more modern ovens between 1900 and 1915².
1900-1915 / 2014: The intervention focused on a philological recovery of the artifact and commenced with the earthwork in the three courtyards at the basement level. The ovens were demolished and the courtyards were excavated. In addition, the distribution system was rethought³. The double module was taken as the minimum element to accommodate spaces for teaching activities⁴.



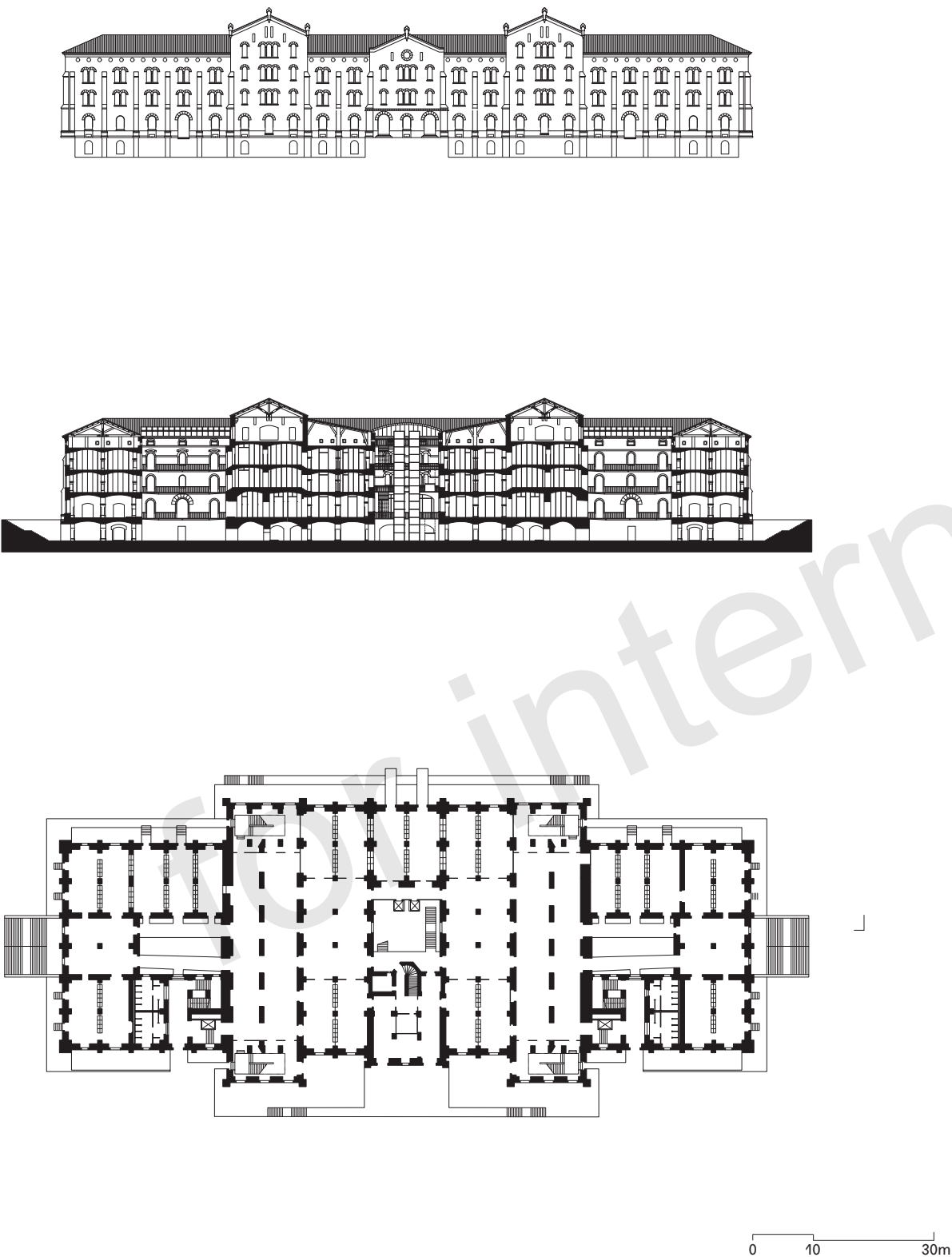
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1. In the 1865 design, the interior, with four vaulted floors and an attic, was based on a double symmetry axis and repeated spatial modules. The main body, almost square and jutting out on the north front, housed the block of twelve ovens arranged around an inner courtyard, while the side bodies also had an inner courtyard but were intended for storage and grain milling. In section, one can read the complexity of the building's geometry, with the successions of solids and voids and the modularity of the structure defining the rigid compositional system (in M. Carmassi, *Conservazione e architettura. Progetto per il campus universitario di Verona*, Marsilio Editori, Venezia 2007). All the drawings were carried out following the documentation published in the cited book.
2. The ground floor was devoted to the processing and production of bread. Demolition of the original ovens and their replacement with more modern machinery took place in around 1915. The addition of the new ovens involved the demolition of portions of the masonry (in M. Carmassi, op. cit., p. 106).
3. Between 2005 and 2014, thanks to the restoration and conversion work by Massimo Carmassi, the building became the current home of the Department

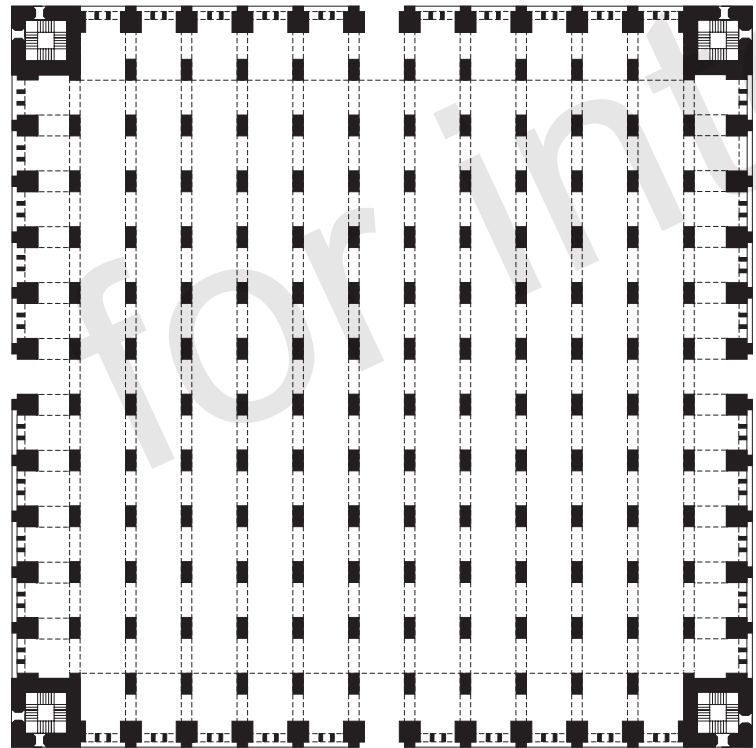
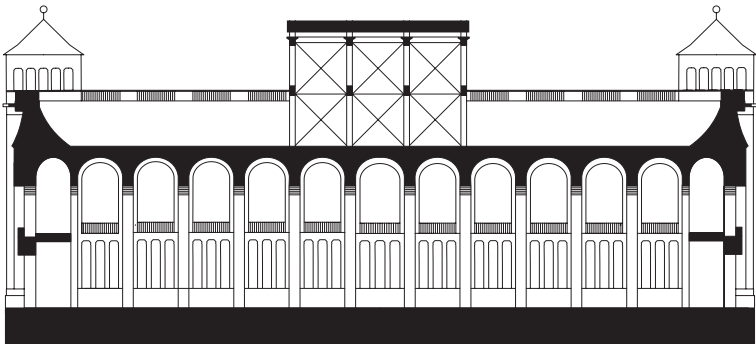
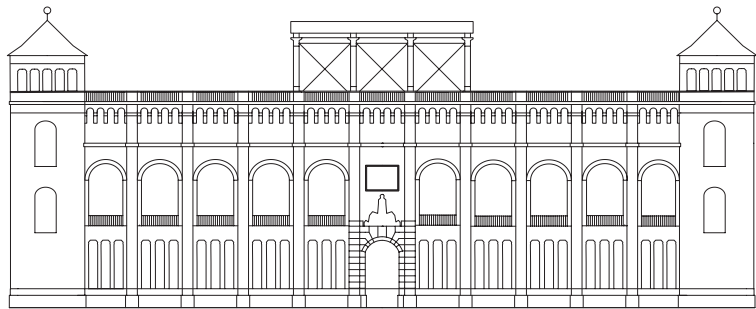
of Economics. The choice was to use the three internal, open-air courtyards as connecting elements between the various parts, with the central courtyard as the core of the vertical distribution system. The three courtyards were also excavated up to the level of the basement, allowing for greater illumination of the interior spaces. Classrooms, laboratories, meeting rooms, and office rooms were created by placing glass panels between the existing pillars as partitions, or sometimes composing independent "glass boxes" (in M. Carmassi, op. cit., p. XVIII-XIX). See also: Maria Luisa Ferrari, *Santa Marta. Past and Present*, Cierre edizioni, Verona 2016; Maddalena Scimemi, *Un restauro per Verona. Massimo Carmassi. La nuova sede universitaria di Santa Marta*, Electa, Milano 2010.

4. The rehabilitation intervention is maintained and emphasized the original typological and distributional characteristics of the building. In both plan and elevation / section, the modularity, the courtyards, and the symmetry peculiar of the former bakery are preserved. The module is maintained and emphasized through a new partition of spaces (in M. Carmassi, op. cit., 2007).

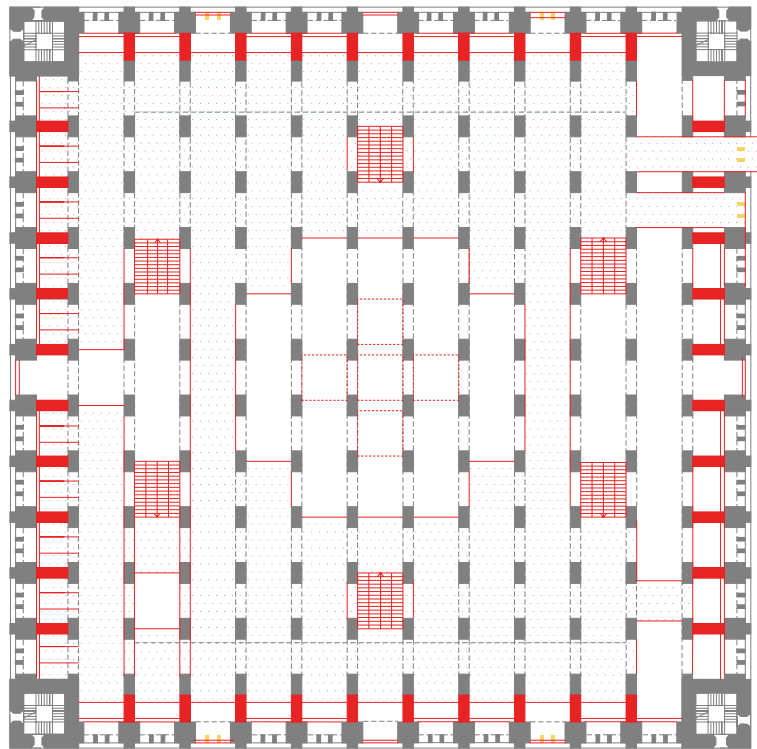
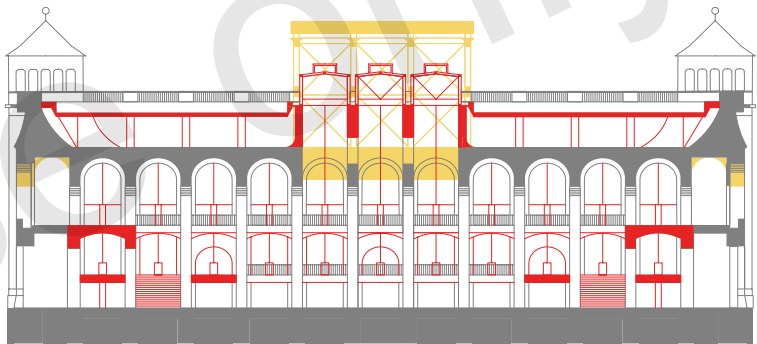
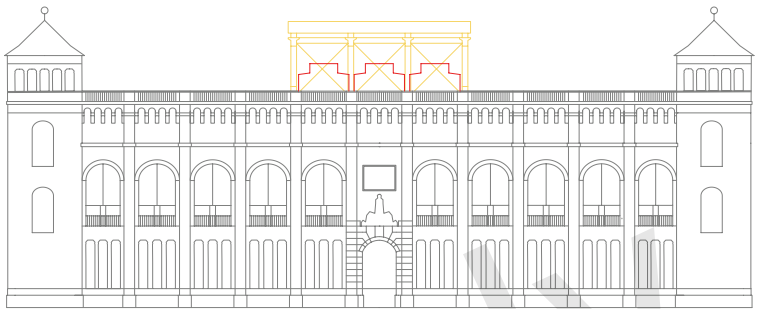
1874 Diposit de les Aigues 1992 UPF Library

The Diposit de les Aigues in Barcelona, Spain, was transformed into a modern university library by Barcelona-based architects Luis Clotet and Ignacio Paricio Ansuategui, in 1992. The building had been originally designed by Josep Fontseré and Josep Comet in 1874 as a water reservoir within the Parc de la Ciutadella, and in the 1980s was acquired by Pompeu Fabra¹. It has been said that the Diposit was used and served for various purposes over the years, including as a World’s Fair pavilion, an archive, a fire station, a film set, and a nursing home²; however we have no clue on whether or how it was transformed. Clotet and Paricio aimed to preserve the original structure’s integrity while enhancing the internal spaces’ natural lighting. Clotet and Paricio undertook four main transformation actions: first, they removed the central part of the roof and restored the original roof’s steel structure as five skylights. Second, the balconies of the original building were extended to create the first floor. Third, discontinuous mezzanines were created three meters high above the floor to increase the area of use. Four, along all four outer sides of the building, partitions were added to accommodates the functional requirements of a modern university library.

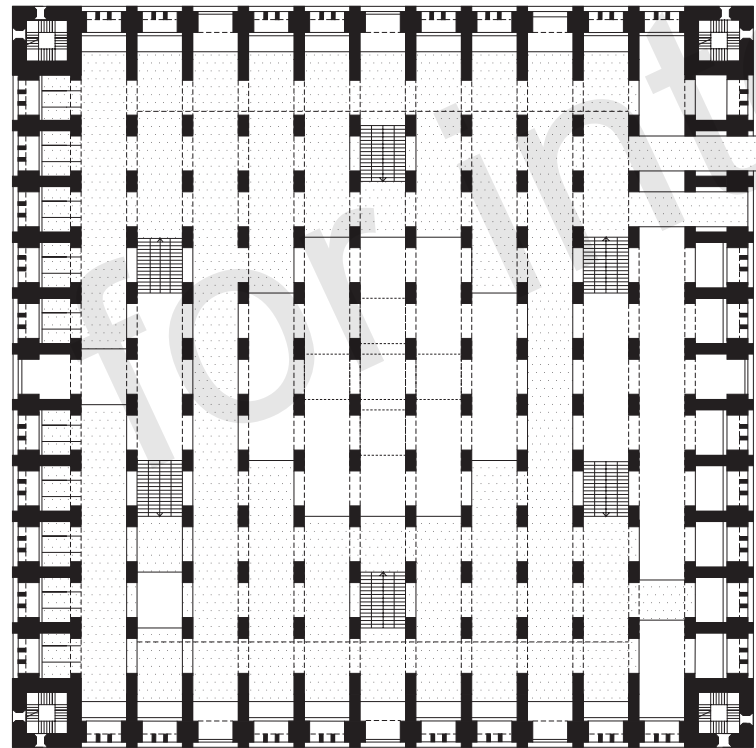
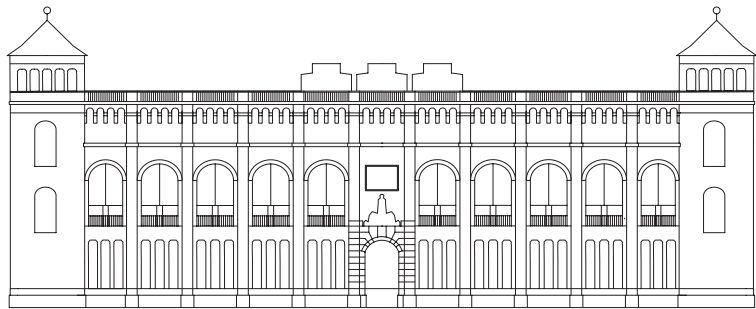
Drawings Chronology³
1874 / 1992: The architects did four main actions of transformation: removal of central part of the roof and addition of five skylights, extension of balconies, addition of discontinuous mezzanines, addition of partitions along coloumns⁴.



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Notes

- 1. *Les Aigues Library*, retrieved October 20, 2023, from <https://architectuul.com/architecture/les-aigues-library>.
- 2. *Fabra, U. P.-Biblioteca i Informatica -(UPF)*, retrieved October 20, 2023, from <https://arxiu-web.upf.edu/bibtic/expo/campus/ciudadella-b.html>.
- 3. Fredy Massad, Alicia Guerrero Yeste, *Think Tank: In Barcelona, an Extraordinary Industrial Relic from the Nineteenth Century*, EMAP Architecture, vol. 213, 2003, pp. 78-81.
- 4. *UPF Library in the Water Tower of La Ciutadella Park*, retrieved October 20, 2023, from <https://www.arquitecturacatalana.cat/en/works/biblioteca-de-la-upf-al-diposit-de-les-aigues-del-parc-de-la-ciutadella>.

1876 St Paul’s Church 2022 Mötesplats Mariatorget

St Paul’s church¹, a neo-gothic Methodist church built in 1876¹, reopened in 2022 after a transformation of its interior to house a community center for a Christian NGO organization.

The transformation project has created two new squares: an exterior square serving as a public meeting place, and an interior square where the church hall becomes a central hub around which new galleries and rooms are arranged.

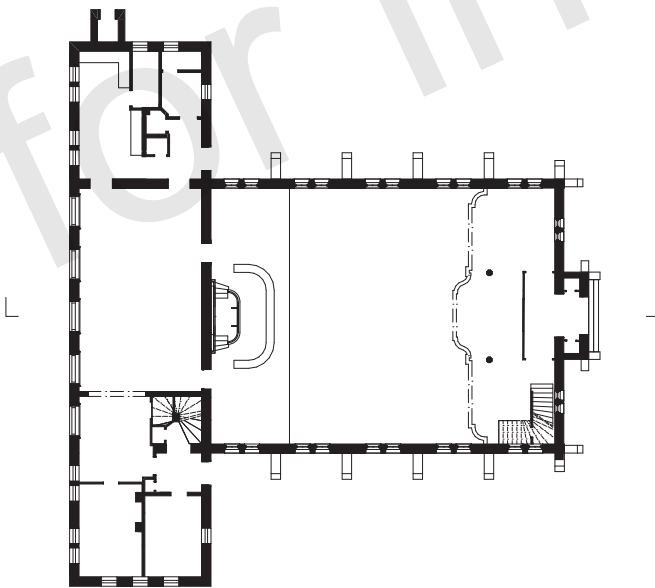
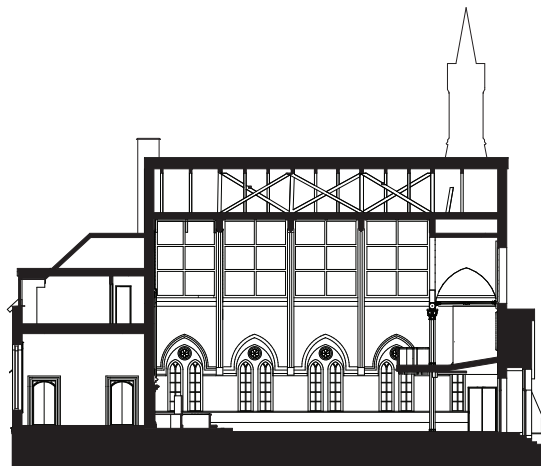
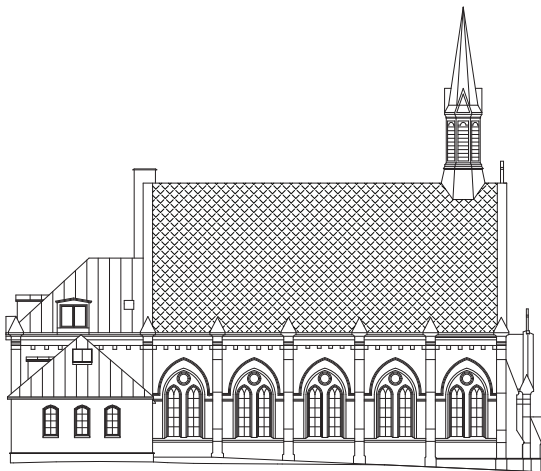
The transformation allows for the addition of flexible rooms, workspaces, and professional food service, offering great versatility to the various parts of the church’s activities. The original church design featured a clear separation between the church hall and smaller supporting rooms. The redesign utilizes the spaciousness and spiritual qualities of the church hall to create a central gathering space, transforming the nave from an isolated room into a central hub within the building. New building elements are carefully integrated with the existing architecture, with the newly constructed mirrored gallery levels reflecting the symmetric window arrangement of the church hall. The result is a new symmetrical unity, replacing the original nave with a directionless square space.

Central design choices aim to prevent dramatic encounters between existing and new building parts, rooms and surfaces. Instead, the desire has been to establish a new unity, where the new and the old are intertwined. While the interior has been dramatically transformed, externally, the original design has been restored as far as possible. Much of the qualities that were gradually lost in the heavy-handed renovations² of the 1900s have been corrected after careful investigation.

From a technical point of view, the building was reconstructed with the aim to stand for 100 years with high demands as to energy and climate performance with an FTX ventilation system. Integrated acoustic as well as sound and light systems are properly sized to house a new culture scene³.

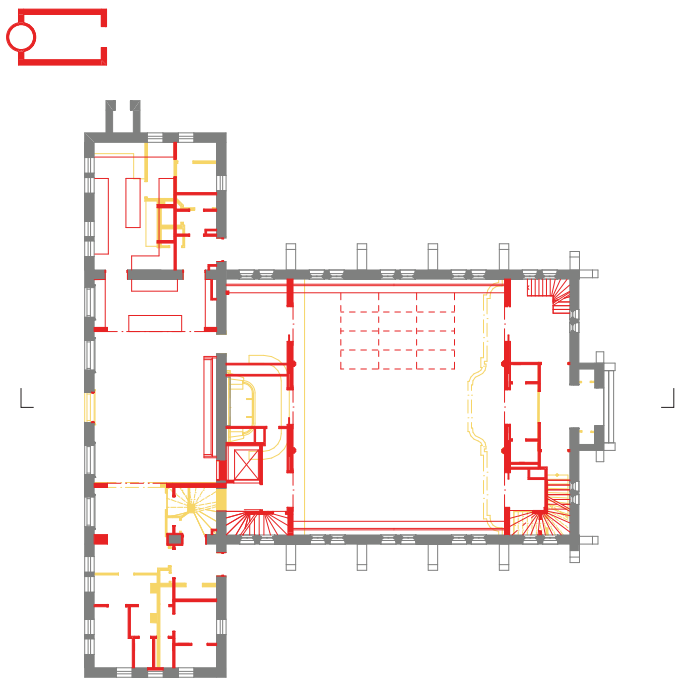
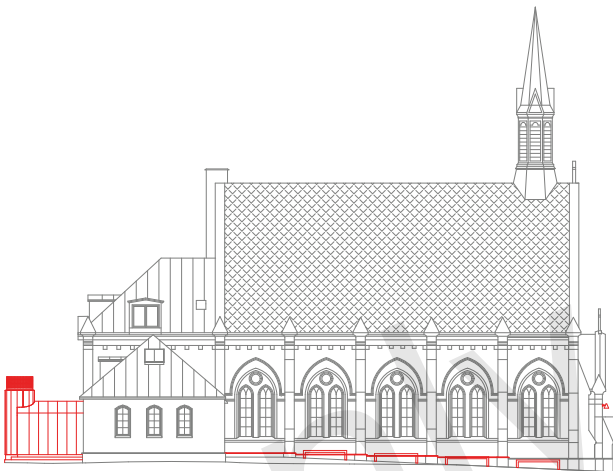
Drawings Chronology

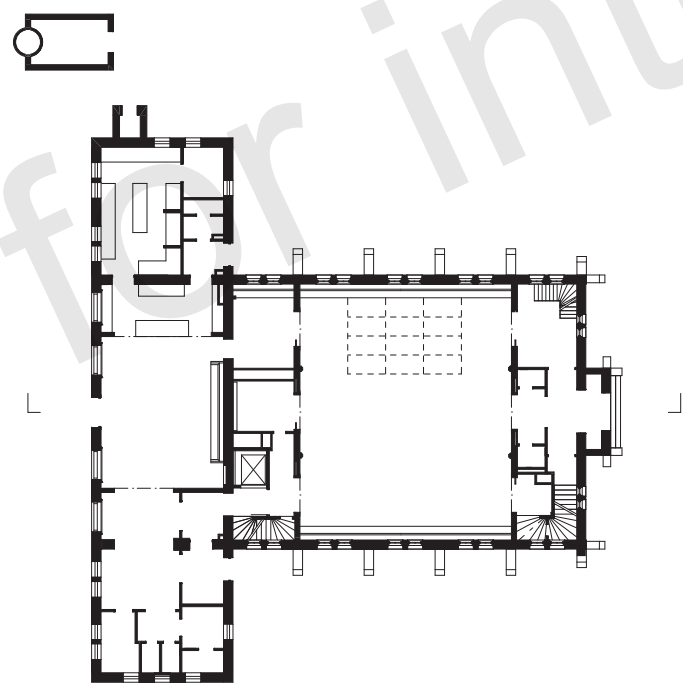
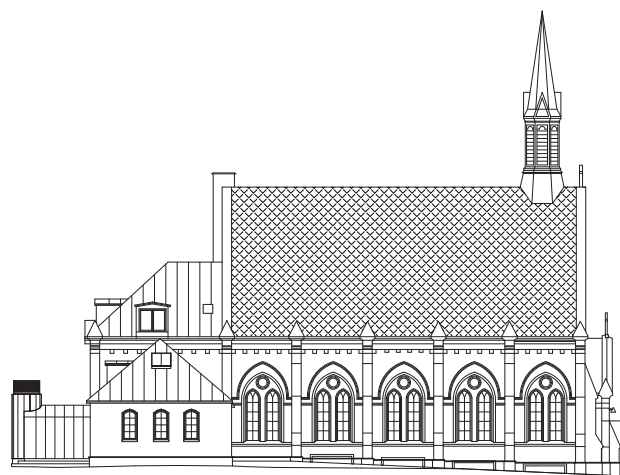
1876 / 2022: The original typology of the church nave with five bays is transformed in both plan and section resulting in a 90 degrees rotation of the direction of the space. The first bay (former choir balcony) and the fifth (former altar) are replaced by two new mirrored gallery structures in two and three floors. The former nave is thereby transformed into an interior square surrounded by galleries. The lower western part, originally used by the Methodist Sunday school, is transformed in a similar way with new added galleries around a double-height space.



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Notes

1. St. Paul's Church, the oldest Methodist church in Stockholm, was built in 1876 by the first Methodist congregation in the country. Architects Axel and Hjalmar Kumlien designed the church in an English gothic style with a modest articulation of decorative parts, partly due to the great difficulty in raising the necessary means for the construction. The exterior is characterized by a heavy English Gothic approach with the prominent gable section and the buttresses of the facades. The interior was austere and simple, with the neo-Gothic trusses being the most lavish and prominent element.

2. St. Paul's Church has undergone two major restorations since its construction in 1876. The first major restoration took place in 1897 when the decoration of the church room was completed and given a uniform neo-Gothic style that had previously been missing. The three most important additions are the new altar pulpit, the decorative paintings on the walls and the addition of the altar table. The second of the two major restorations took place in 1939. The reason for the restoration seems to have been general maintenance, but in connection with this the congregation also wanted to give the church a more modern look. At the time, this type of measure, where articulated joinery was clad in modern hardboard and decorative paintings were painted over in favor of uniform light interiors, was very common in both sacred and profane settings. In the

church room, the roof ceiling, door leaves, the stand barrier, and the underside of the stairs are covered with hardboard. The walls are painted with oil paint in a uniform yellow-grey color, while the carpentry interior is lasered in a grey-green tone. The hardboard cladding of the ceiling is painted blue, which is also repeated in the fillings of the pulpit. In 1952, a restoration was carried out and the ceiling was painted in bright warm colors. New lighting and new chairs as well as a new altar with antependium in a light green color were added. In 1973, the church underwent a facade renovation and was given a yellow color slightly lighter than before. The extents around the east facade's rose window are uncovered with sheet metal, and the text ST PAUL'S CHURCH above the main entrance disappears.

3. In 2013, the parish becomes part of the Ecumenical church and changed its name to St. Paul's parish. The following year, it was decided to sell the church due to low membership and, in the spring of 2015, St. Paul's Church was acquired by the Stockholm City Mission. In 2017 an architecture competition was organized by the new owner and won by Spridd Architects with their design proposal "Two squares". In partnership with project leader KFS, Kyrkans fastighetssamverkan, the proposal was realized and the building reopened in December 2022.

1891 Banja Luka Stadt Bahnhof 2022 Museum of Contemporary Art of Republic of Srpska

Built in 1891, the Banja Luka Stadt Bahnhof building, or Railway station Banja Luka City, stands as a significant testament to the Austro-Hungarian presence in Banja Luka. At the time it was built, the station defined the city’s first green zone and articulated public area in Banja Luka¹. In 1968, the building underwent a change in function from a railway station to a bus station due to a decrease in railway traffic. Although the bus station platforms were aligned with the previous railway configuration, no relevant alterations were made on the building itself. In 1969, a devastating earthquake struck Banja Luka, causing extensive damage to residential and public structures, including healthcare and cultural facilities. However, the unfortunate event served as a catalyst for another typological shift in the former railway building – the establishment of the Banja Luka Art Gallery, which occurred in 1971². Ten years later, in 1981, the building underwent significant modifications to accommodate the specific requirements of a new program-gallery space. The reconstruction project was led by architect Enes Kartal, while the interior space was designed by architect Božidar Lapen. In 2004, the building was renamed as Museum of Contemporary Art of Republic of Srpska, and in 2007 it was listed as a national monument by the National Monuments Commission of Bosnia and Herzegovina and is therefore entitled to special preservation measures. Finally, in 2022, the major reconstruction project for the Museum of Contemporary Art of Republic of Srpska was developed by Lopičić&Lopičić Arhitekta and Pavle Stamenović. This project, awarded at the 45th Salon of Architecture organized by the Serbian Museum of Applied Arts in Belgrade, introduces a new spatial organization that aligns with the museum’s new program and curatorial approach.

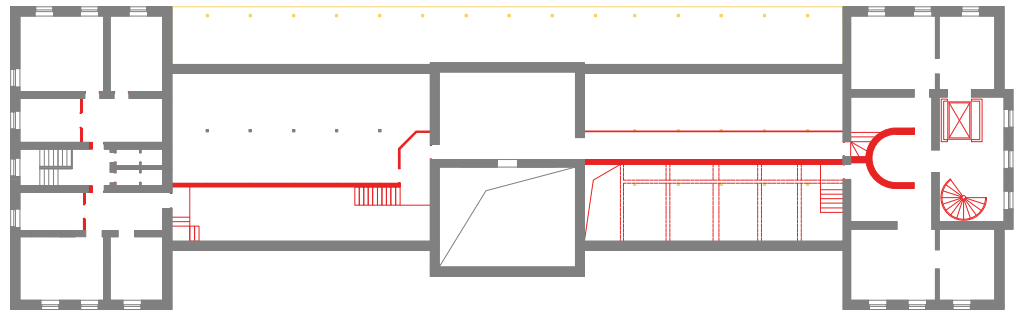
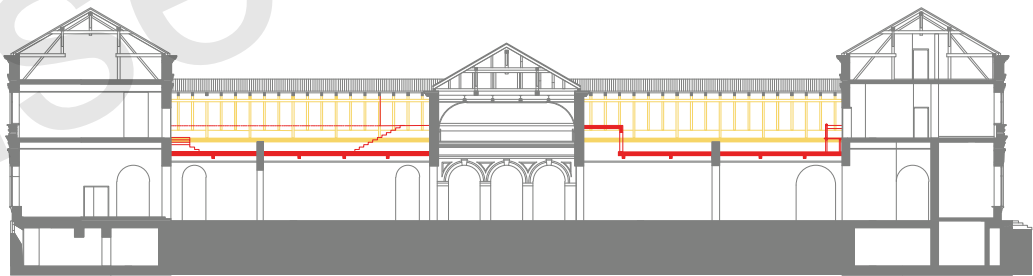
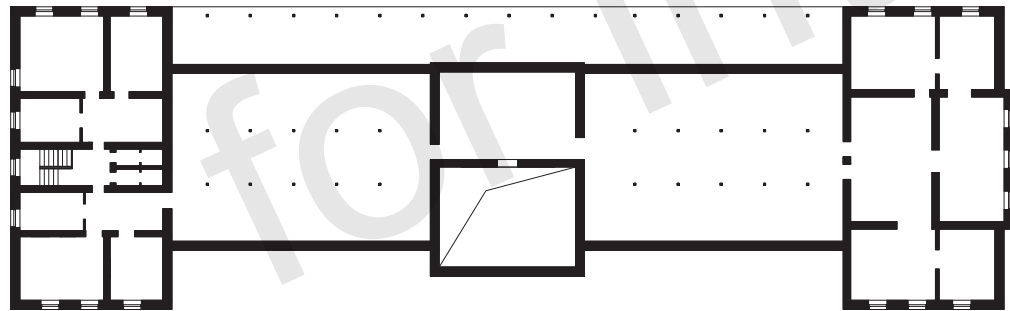
Drawings Chronology

1891 / 1981: After the establishment of the Banja Luka Art Gallery, which occurred in 1971, in 1981 the building underwent significant modifications to accommodate the specific requirements of a gallery space. In the reconstruction process, the ceilings above the side wings were leveled in order to get a higher space for the gallery display on the ground floor, and at the same time, they were replaced with ceilings made of prefabricated concrete³. To support the building’s traditional massive structure, both horizontal and vertical reinforcements were added. Furthermore, the iron canopy on the rear platform and the decorative chimney channels were removed. Despite these changes, the building’s character has been largely preserved.

1981 / 2022: In 2022, the major reconstruction project for the Museum of Contemporary Art of Republic of Srpska was developed. The project introduced a new spatial organization. Within the left tower, in the room next to the staircase, the ceiling was cut through all the floors, thus forming a vertical exhibition space. This space was specifically designed to accommodate a panoramic elevator, serving as an integrated extension of the exhibition space, and highlight the elevator’s architecture from the museum’s main entrance. Instead of restrooms, a corridor was created between the left tower and the central part of the building, facilitating fluid connectivity between active areas. The left side wing was functionally divided into two distinct sections. The upper region was designated for curators’ workspaces, while the lower area hosts a library and a reading room. The attic of the central tower above the entrance hall was exposed and comprehensively adapted. The access stairs were designed to be lightweight and movable, ensuring they do not obstruct the functional use of the meeting room on the lower level.

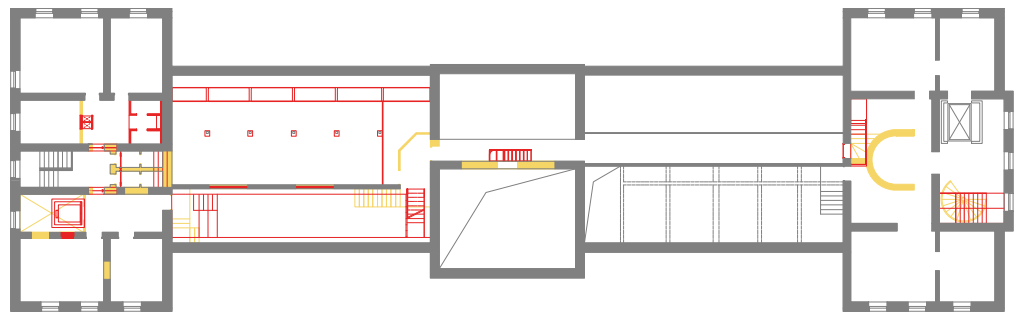
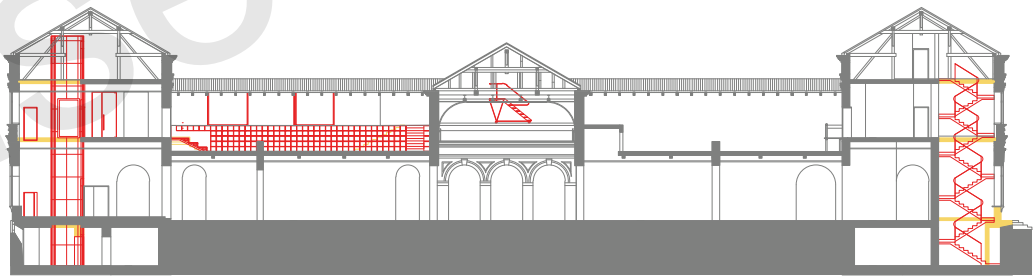
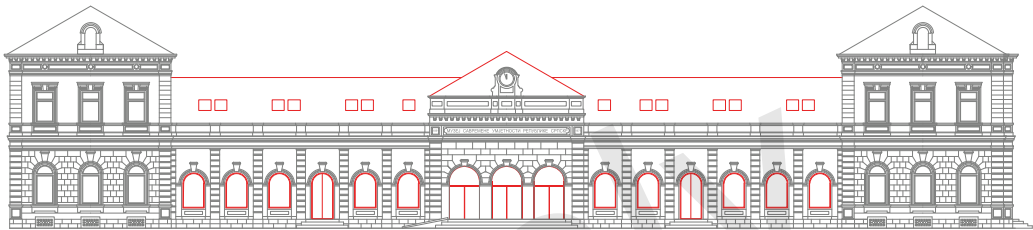
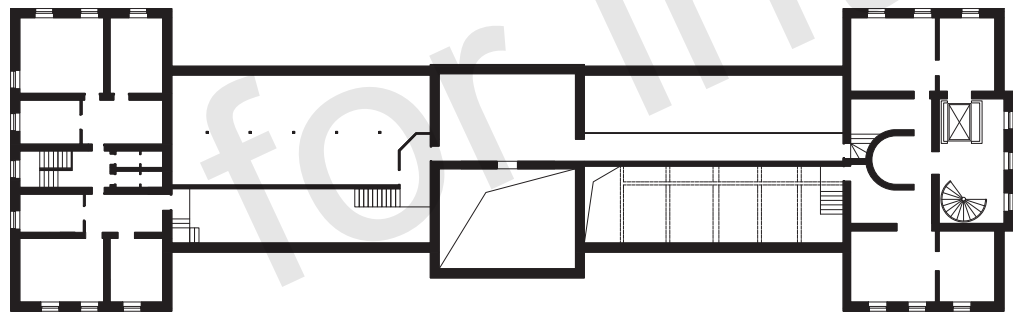
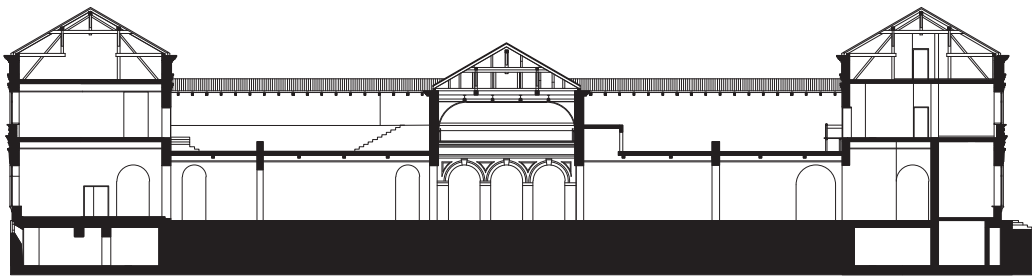
Museum of Contemporary Art of Republic of Srpska
 Banja Luka, Bosnia-Herzegovina

1891: railway station
 1968: bus station
 1971: art gallery
 1981: art gallery reconstruction project –architects: Enes Kartal (reconstruction); Božidar Lapen (interiors)
 2022: Museum of Contemporary Art of Republic of Srpska –architects: Lopičić&Lopičić Arhitekta, Pavle Stamenović



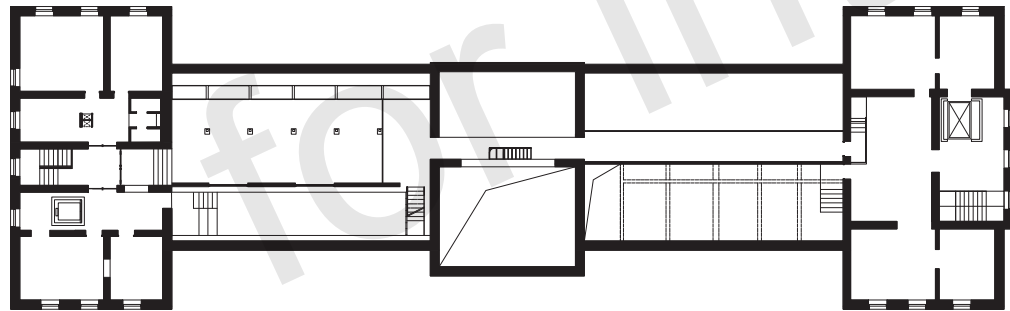
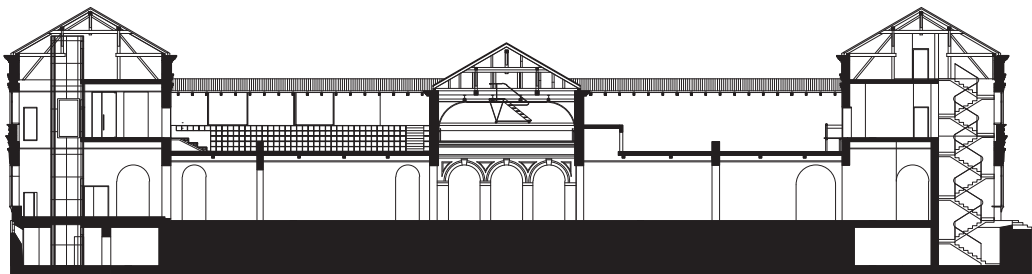
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Notes

1. After the station building in Bosanski Brod was demolished, the Banja Luka Stadt Bahnhof building remains the largest preserved station building dating back to the Austro-Hungarian era in Bosnia and Herzegovina (in M. Malinović, *A Monograph: The Architecture in Banja Luka during the Austro-Hungarian rule in Bosnia and Herzegovina between 1878 and 1978*, Arhitektonsko-građevinski fakultet Univerziteta u Banjoj Luci, Banjaluka, 2012). This station was part of the Banja Luka-Dobrljin railway line, which began construction in 1870 within the Ottoman province of Bosnia and Herzegovina. Although the railway line from Banja Luka to Vienna had been operational since April 1882, the citizens had to wait until December 1st 1891, for the completion of the construction works and the opening of new lines from the old station to the new one (in A. Horn, *Die Bahnen in Bosnien und der Herzegowina*, Ployer, Wien, 1964). The construction of the railway tracks was executed by a French-Belgian corporation owned by André Lan-

grand-Dumonceau, and the project was managed in Mainz (in S. Vidaković, *Arhitektura državnih javnih objekata u BiH od 1878. do 1992. godine*, Banjaluka: Arhitektonsko-građevinski fakultet Univerziteta u Banjoj Luci, 2011). At the time it was built, the station defined the city's first green zone and articulated public area in Banja Luka. It was the first facility designed with surrounding zones, not only for pedestrians but also accommodating horses and the early motor vehicles that had begun to arrive in Banja Luka at that time (in M. Malinović, op. cit.).

2. The Banja Luka Art Gallery changed several names over as the name of the country also changed (in M. Malinović, op. cit.). Artists from former Yugoslavia and other parts of the world demonstrated solidarity with the city by collecting approximately 750 artworks, forming the foundation of the newly established cultural institution.

3. In M. Malinović, op. cit.

Casa Andresen

Porto, Portugal

1895: Casa Andresen

1972: Faculdade de Ciências U. P.

2013: Exhibition space

2017: Galeria da Biodiversidade

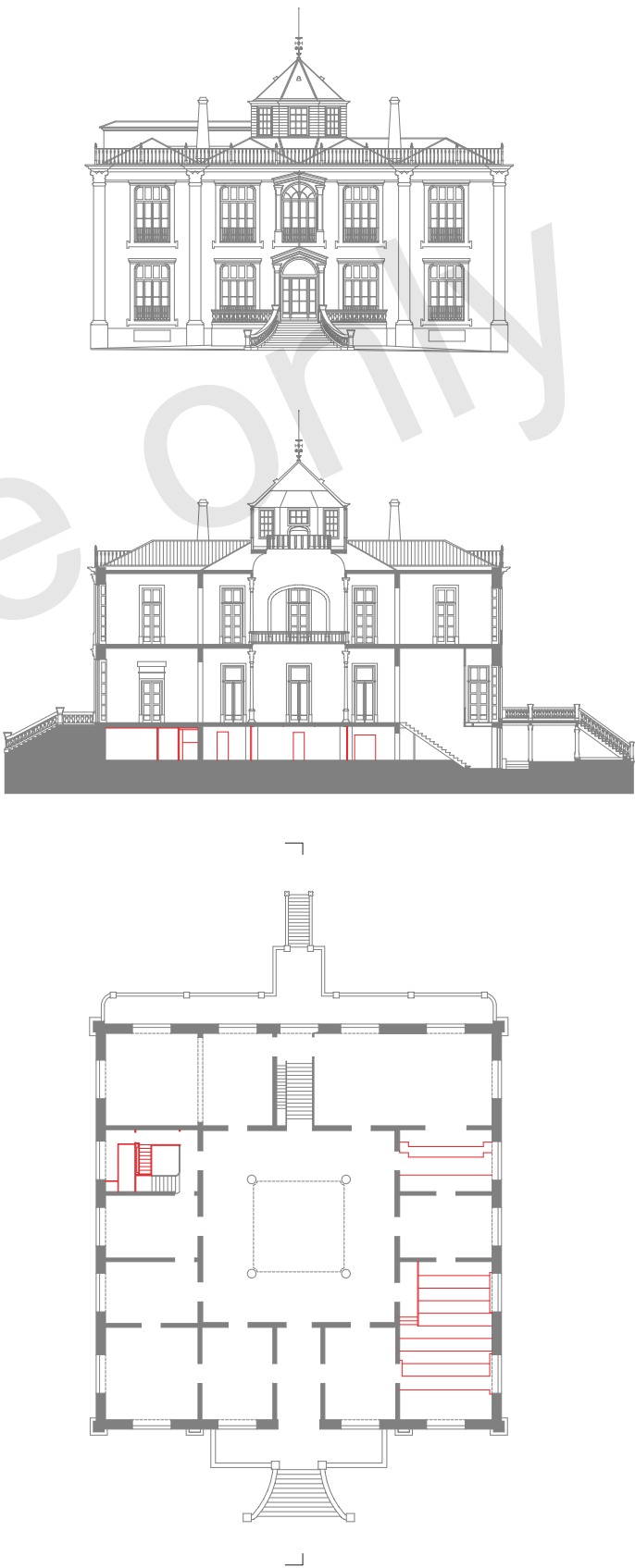
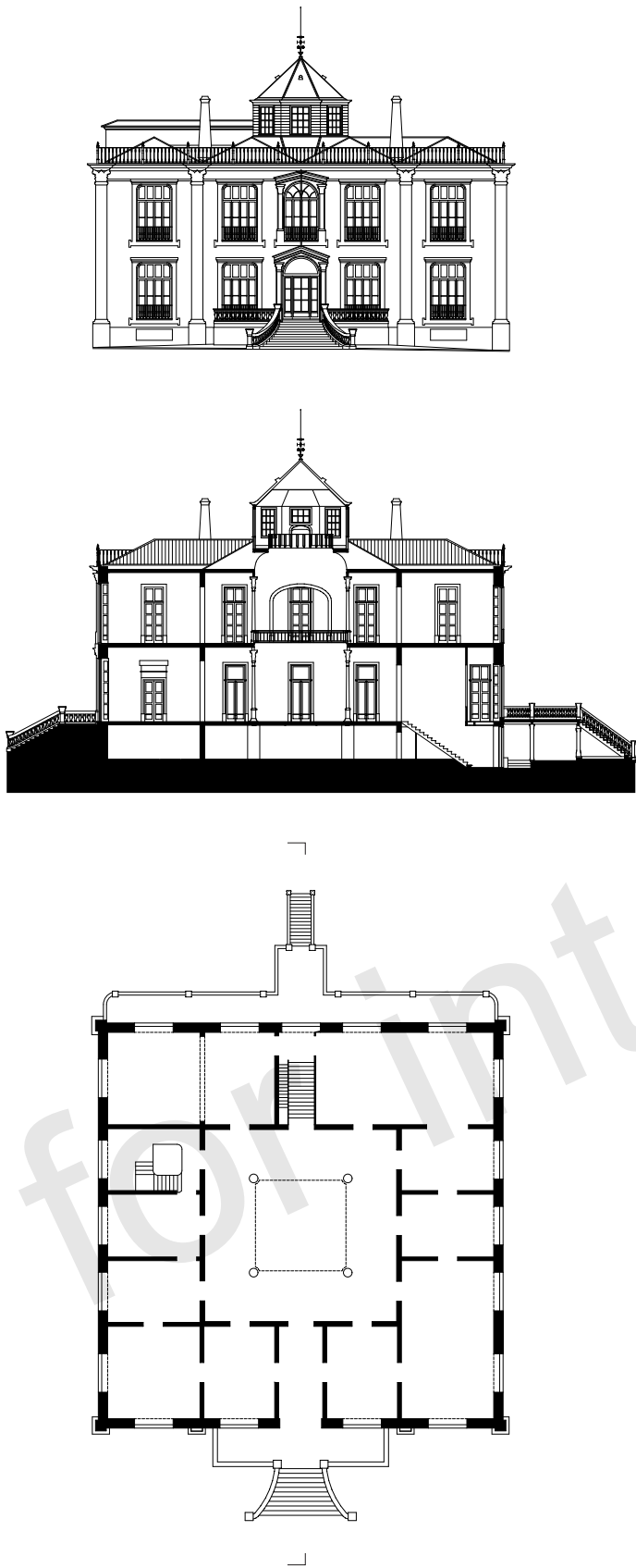
1895 Casa Andresen

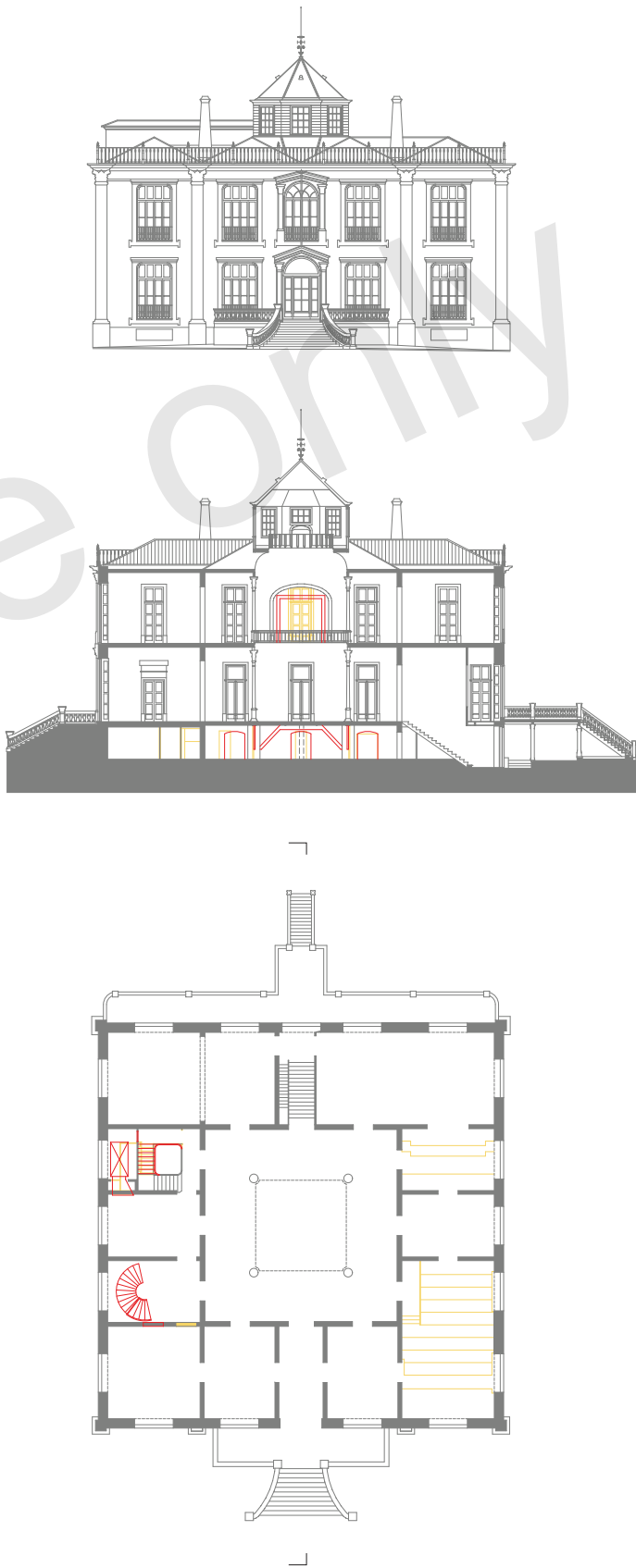
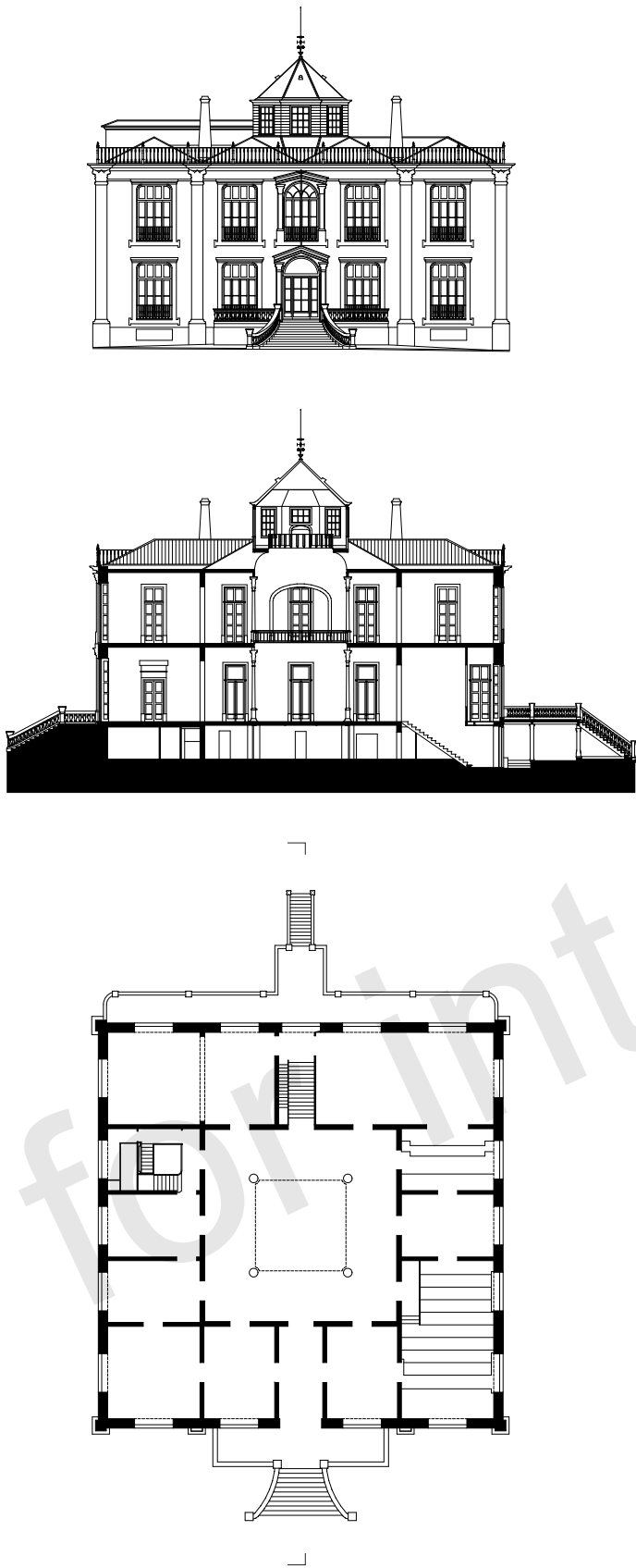
2017 Galeria da Biodiversidade

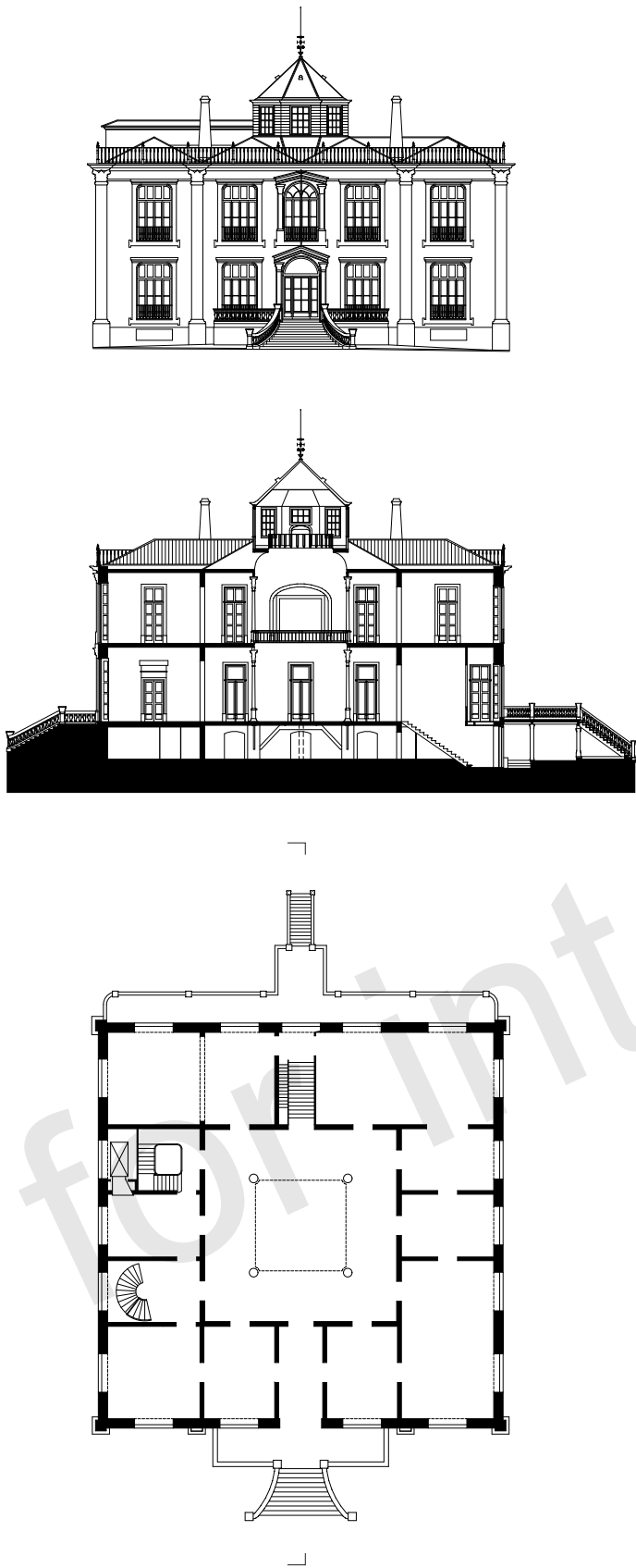
Casa Andresen, the house of the Andresen Family, was originally built in the early 1900s within the Botanical Garden, Museum of Natural History and Science of the University of Porto, Portugal. The current program – Hall of Biodiversity – stems from a very particular urban, cultural, architectural, and environmental context. The aim was to combine the unique setting of the Botanical Garden, including Casa Andersen, which is a building of extraordinary architectural and cultural value, and the Hall of Biodiversity program into a consistent Whole and system of relations, while conveying in a very authentic way key messages about the urgency of protecting cultural and environmental values. The intervention concerning Casa Andresen consisted in the adaptation of the house to an exhibition program. The first phase (2009-2013) only consisted in the performance of basic works for the building to host the international exhibition “The Evolution of Darwin: Life and Work”. In the second phase (2013-2017), works were completed so as to permanently host the Hall of Biodiversity. The span of time between the commencement and the completion of works helped developing an integrated and tailor-made design with adjustments and corrections throughout each phase. Despite its undisputed uniqueness, and surprisingly, Casa Andresen is not a listed building and has never been subject to heritage protection. Therefore, the teams took on the responsibility of carrying out a very precise historical research and diagnosis as a basis for the project. Eventually, the rehabilitation of the building and the integration of program were supported by very meticulous knowledge about the building itself, its independent elements, and its system as a whole. Architectural quality, scale, relation with the gardens, interior space, typology, construction system, materials, and decorative quality were the identified as the main values that made this rehabilitation project a particularly demanding challenge.

Drawings Chronology

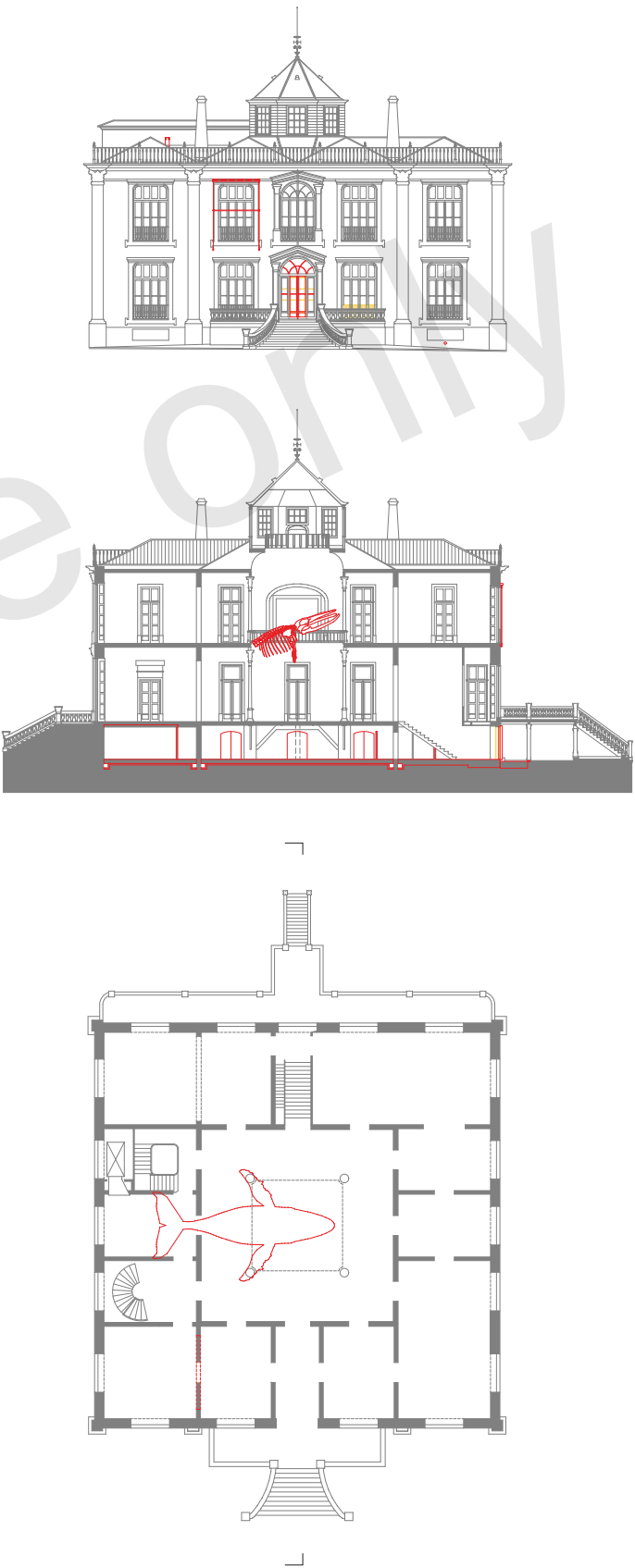
1895: Casa Andresen’s architectural peculiarity is evidenced by its exceptional interior space, natural light, scale, and rare relation with the surrounding Porto Botanical Garden¹.
1895 / 1972: In the early 1950s, the property was bought by the State of Portugal, integrated in the University of Porto, and designated as Jardim Botânico do Porto (Porto Botanical Garden). It was then administered by the Department of Science in Porto and by the Botanical Institute (Instituto de Botânica, Dr. Gonçalo Sampaio)².
1972 / 2013: Adaptation of Casa Andresen to an exhibition program³: introduction of a new staircase and elevator connecting all floors; definition of a consistent exhibition route including, where needed, the opening, closing or repositioning of interior doors; partial rehabilitation of the basement for the installation of a cafeteria and new sanitary facilities; resizing of some exterior doors on the ground floor, in order to improve the relationship between these spaces and the garden; correction of pathologies and their causes; total rehabilitation of the roof structure with the integration of thermal insulation; reparation of existing fenestration; update of networks and infrastructures.
2013 / 2017: The main changes introduced in this phase were⁴: installation of a ventilation system on the base of the walls to stop humidity from rising; increased number of sanitary facilities to respond to a more intensive use; introduction of a locker-room for employees and technical areas on the ground floor; installation of administration and educational offices on the ground floor; restoration / recomposition of adulterated fenestration in the south façade and introduction of exterior shading screens; hanging the whale skeleton from the Department of Science in Porto in the main salon; installation of Jorge Wagensberg / Nuno Ferrand Museography project.
2017: Casa Andresen at present time⁵. Museography work by Jorge Wagensberg⁶.



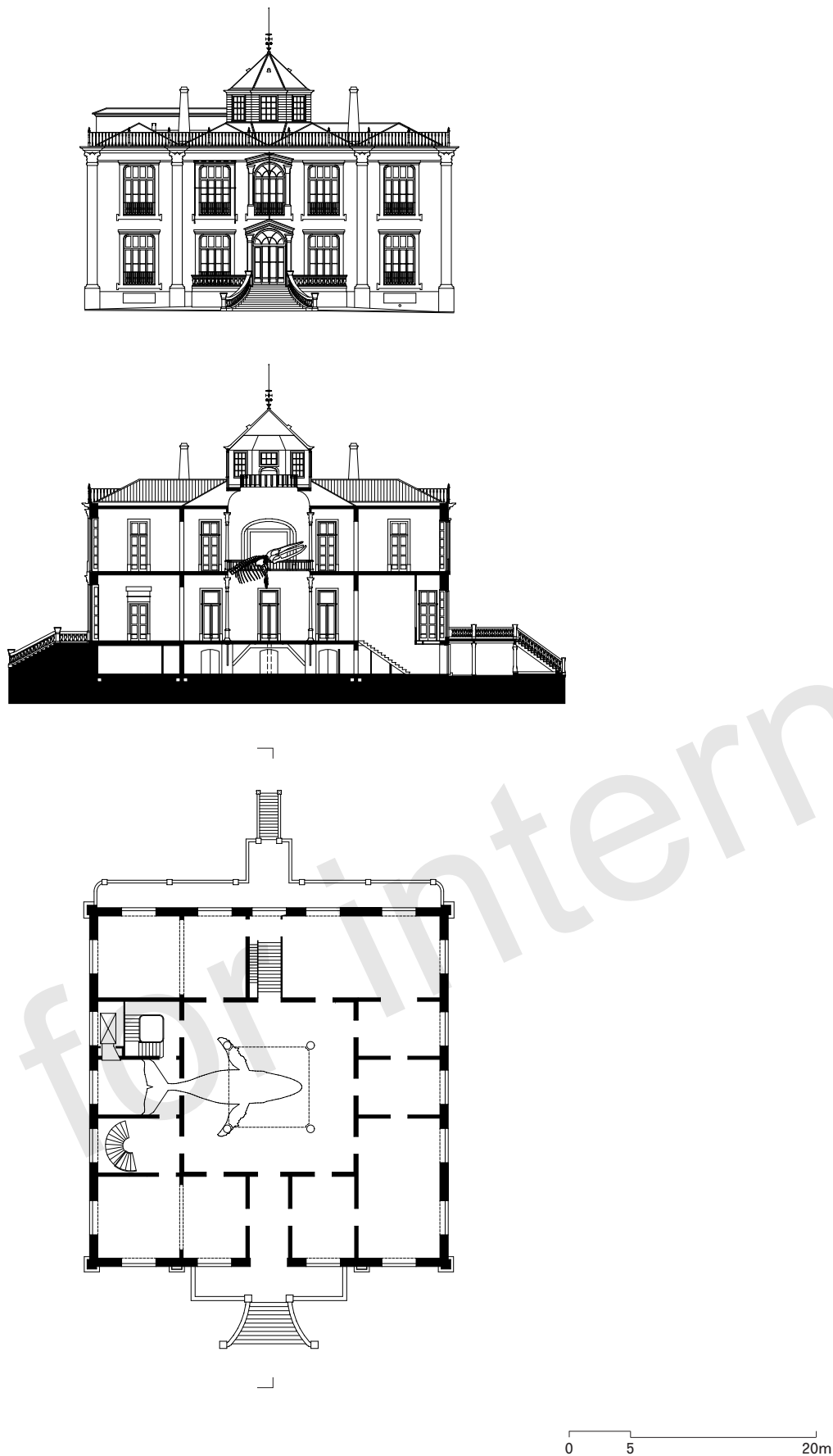




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Notes

1. Situated along the old route between the city center and the seafront, Rua de Campo Alegre, this square-plan house has a footprint area of 840 m² (29 by 29 m), adding up to a gross area of 2300 m² distributed along three floors. At present, the Botanical Garden (47.600 m²) Includes not only Casa Andresen, but also other buildings such as greenhouses, warehouses, and Salabert House (old dependency). The property formerly belonged to the Order of Christ and was later acquired by French doctor Jean Salabert. In 1875, it was bought by Brazilian entrepreneur João Silva Monteiro, who built the palatial house. Twenty years later, the house was refurbished by new owner João Henrique Andresen, trader and grandfather of poet Sophia de Mello Breyner, who often mentions both the house and the gardens in her writings.
2. In general, Casa Andresen was in a reasonable state of conservation, largely due to regular maintenance –the building was partially used by the Department of Science, with rooms transformed into classrooms and laboratories. These adaptations were somewhat superficial and limited to specific areas, but some of them also caused anomalies.
3. The aim of the intervention was to adapt Casa Andresen for an exhibition program. The first phase only consisted in the works needed to host the international exhibition *A Evolução de Darwin, sobre a sua vida e obra*. In accordance with the identified aims and taking into account the aforementioned constraints, priority was then given to the following works: -introduction of a new staircase and elevator connecting all floors and ensuring accessibility for the disabled to all spaces open to the public; -definition of a consistent exhibition route including, where needed, the opening, closing or repositioning of interior doors; -partial rehabilitation of the basement for the installation of a cafeteria (in relation with the gardens) and new sanitary facilities; -resizing of some exterior doors on the ground floor, to improve the relationship between these spaces and the garden; -correction of pathologies and their causes; -total rehabilitation of the roof structure with the integration of thermal insulation; -reparation of existing fenestration; -update of networks and infrastructures.

4. After the exhibition was dismantled, the second phase of the project began with the objective of definitively setting up the Hall of Biodiversity. The main changes introduced in this phase were: -installation of a ventilation system on the base of the walls (at the foundation level); -increase in the number of sanitary facilities to respond to a more intensive use; -introduction of a locker-room for employees and technical areas on the ground floor; -installation of administration and educational offices on the ground floor; -restoration / recomposition of adulterated fenestration in the south façade and introduction of exterior shading screens: -hanging the whale skeleton from the Department of Science in Porto in the main hall.
5. Prior to the rehabilitation, the building was (partly) home to the Department of Science. Its adaptation as a Gallery of Biodiversity being part of the Museum of the University of Porto, allowed for it to open to the general public and the exponential enhancement of its educational and cultural value. This allowed for merging in one building alone the natural science assets of the University, the significant interconnection with the Botanical Garden, and the memory of Sophia de Mello Breyner, who lived in there and in one of her works wrote: «Everything in the house was extremely big, from the rooms where children rode their bicycles, to the enormous hall where all rooms led to and where, as Hans said, one could place the skeleton of the whale that for years rested in numerous boxes in the cellars of the Faculty of Science as there was no room anywhere else», in Sophia de Mello Breyner Andresen, *Histórias da Terra e do Mar*, Porto Editora, Porto 2018 (1st ed. 1984).
6. In the interior of the Gallery stands the last museography work of Jorge Wagensberg, the soul of the “total museography» concept – a bridge between art and science – an unique testimony that the city of Porto has the privilege to host.

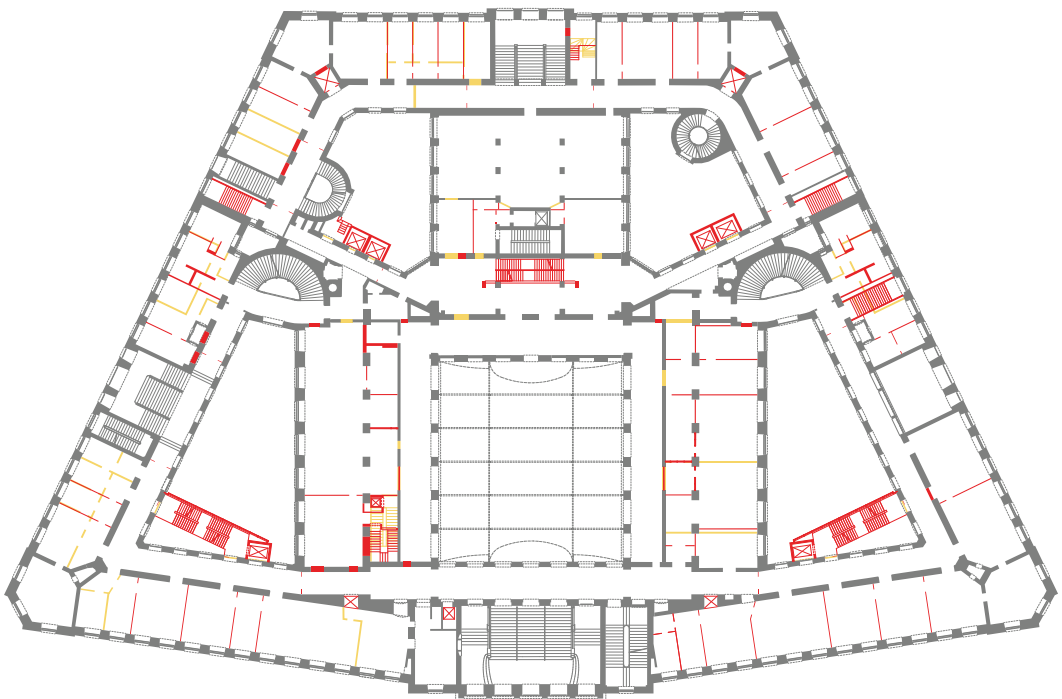
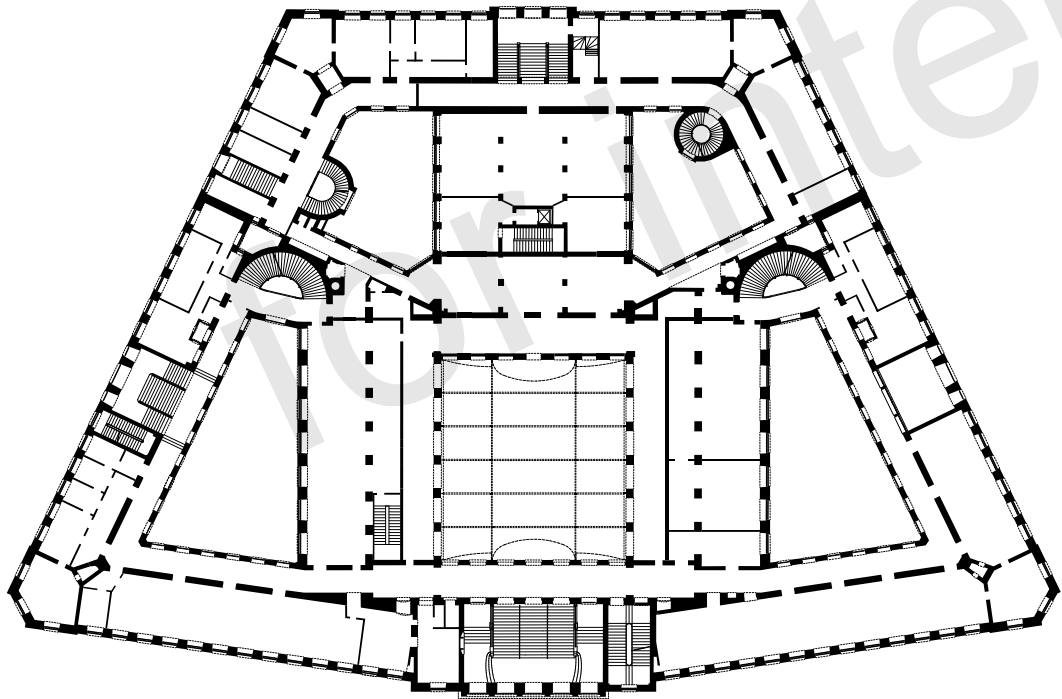
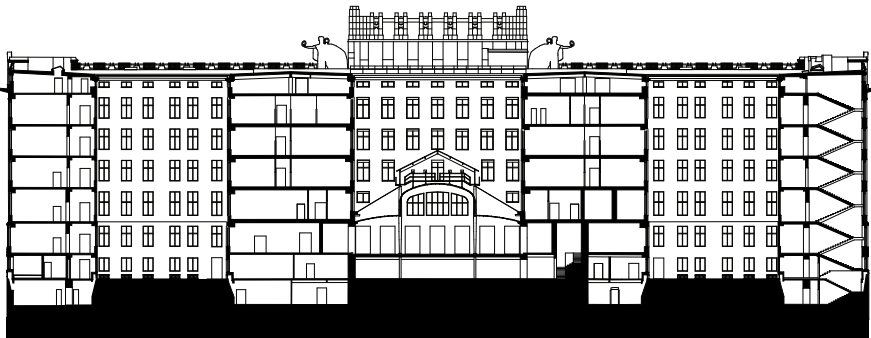
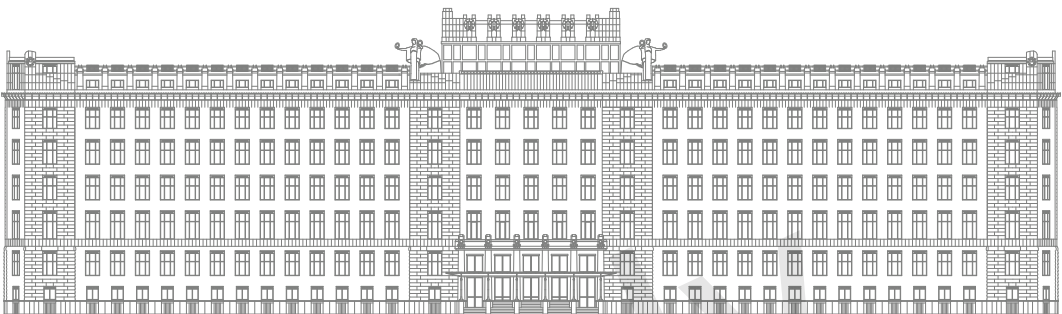
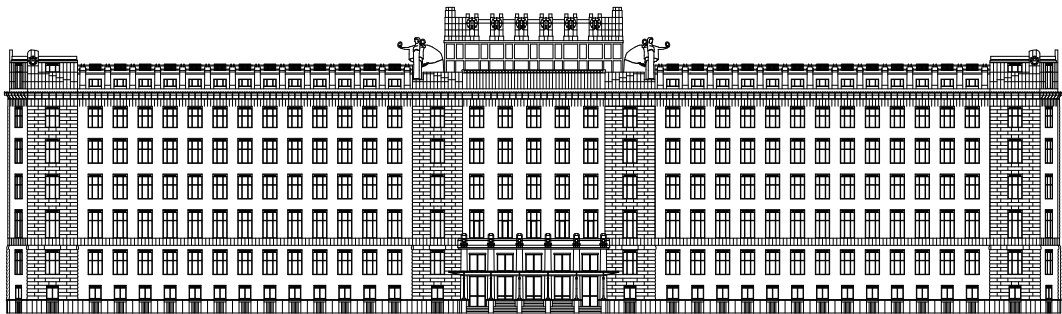
1904 Postsparkasse 2022 University Campus

The Postsparkasse was built in two phases, the first from 1904 to 1906, and the second from 1910 to 1912, according to the plans of Austrian architect Otto Wagner. It is considered an important architectural masterpiece of Viennese Modernism and a pioneer of modern architecture. With its consistently modern and functional style, it stands out as the winning project of a competition held by the Directorate of the Postal Savings Bank in 1903. Wagner experimented with new construction techniques and used innovative designs to create a building that was not only aesthetically pleasing but also functional and durable. As an entire city block in the heart of Vienna’s city center, it housed the central administration of a banking institution, with a public bank on the ground floor – in the famous hall.

In 2022, the building was extensively renovated by architectural firm Atelier Architekt Palme and transformed into a new university campus for research, science, and arts. The focus was on stabilizing the structure, modernizing the building services and renovating the interiors to meet the needs of the present while preserving the architectural charm and historical features. The structural intervention was limited to three new emergency staircases, respecting the historic fabric with delicate glass facades, while allowing natural light into adjacent spaces.

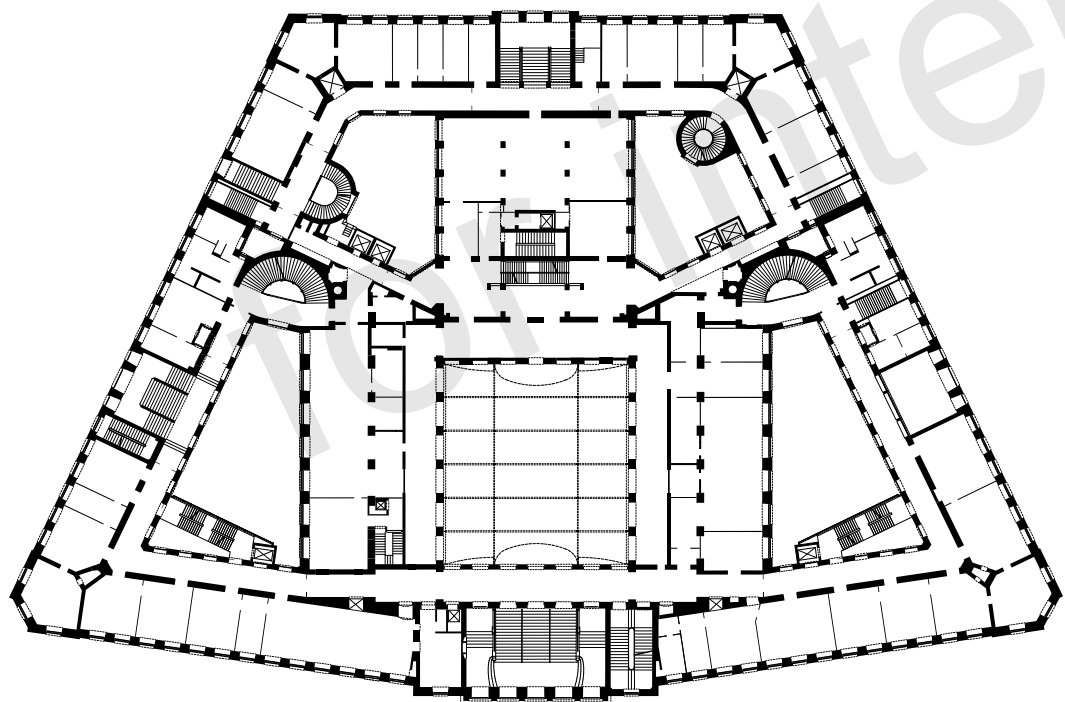
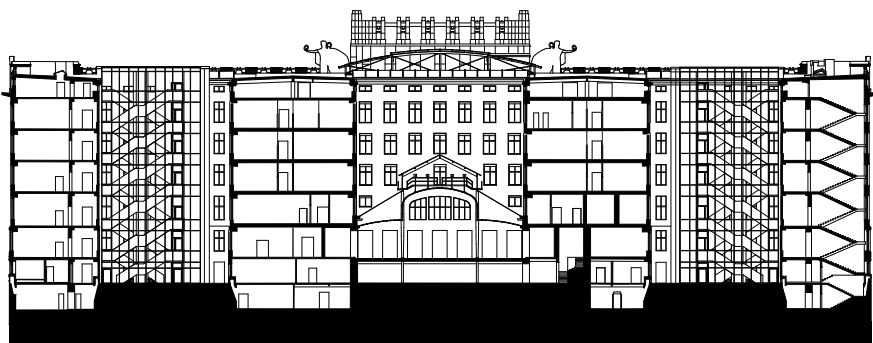
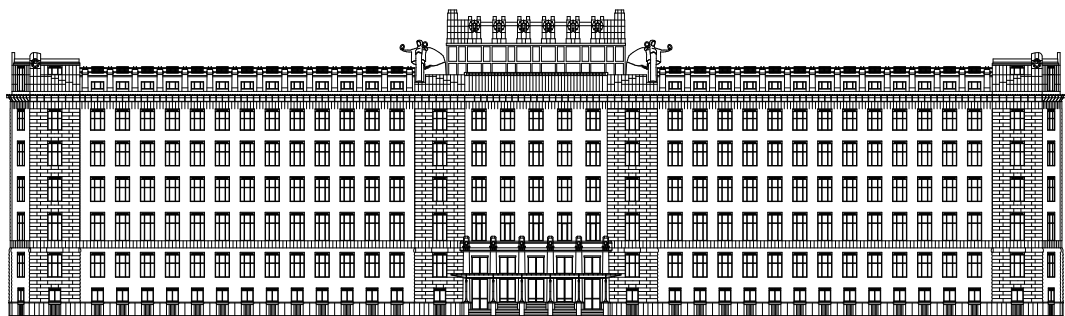
Drawings Chronology¹

1904-1912 / 2022: The building was adapted by Atelier Architekt Palme to improve safety for a change in its use²: Two new staircases with translucent glazing in the courtyards; two new lifts and a staircase at the rear of the building; two new exits were created as an extension of the staircases on the sides; construction of laboratory and workshop space in the upper basement; refurbishment of existing storage, archive and technical areas; converting parts of the office building for university use.



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Notes

1. The Postsparkasse in Vienna is a reinforced concrete structure clad with marble and granite slabs on the exterior, held in place by stainless-steel bolts. The entrance canopy, balconies, roof, and cornice decorations are also made of aluminum. The interior facades feature golden ornaments and distinctive tiles, while the main courtyard is covered by a steel and glass structure that forms the central hall. The building is protected as a historical monument, with particular emphasis on its exterior, internal structure, and selected representative spaces (in: O. Wagner, *Otto Wagner. Post Office Savings Bank, Vienna, Austria. 1904-06 Church of St. Leopold, Am Steinhof, Vienna, Austria. 1905-07*, Global Architecture, Tokyo 1978, p. 5-6). The elevation and section are based on 1964 reproductions of Otto Wagner's original 1906 drawings (in: O. Wagner, op. cit., pp. 46-47), while the plan is based on a 1990 reprint of the drawing "Hochparterre" (in: O. Wagner, *Otto Wagner, die Österr. Postsparkasse*, Agens-Werk Geyer + Reisser, Wien 1990, p. 2).

2. A competition for the safety-related renovation of the building was won by Atelier Architekt Palme, who completed the renovations by the end of 2022. In particular, two new staircase extensions were built as structurally active folded plate structures, as well as a new internal staircase. These modifications help to separate evacuation flows and play a crucial role in improving the safety of the building. In addition to the major overhaul of the safety systems, new laboratory and workshop space was created in the basement, existing storage, archive and technical areas were upgraded and parts of the office building were repurposed for university use. The drawings are based on plans provided by the Bundesimmobiliengesellschaft m.b.H. of the 2022 renovation (in conversation with Andreas Stampfer, Project Manager at Bundesimmobiliengesellschaft m.b.H., 05.08.2024).

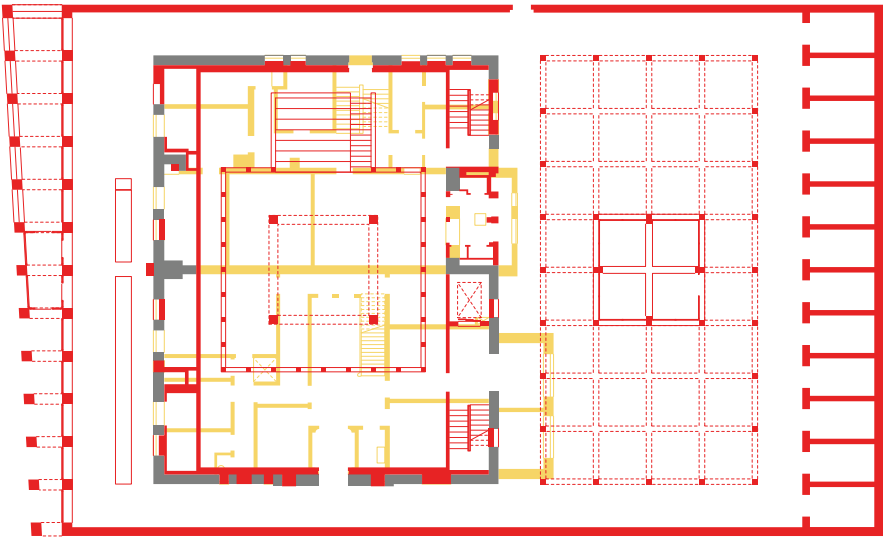
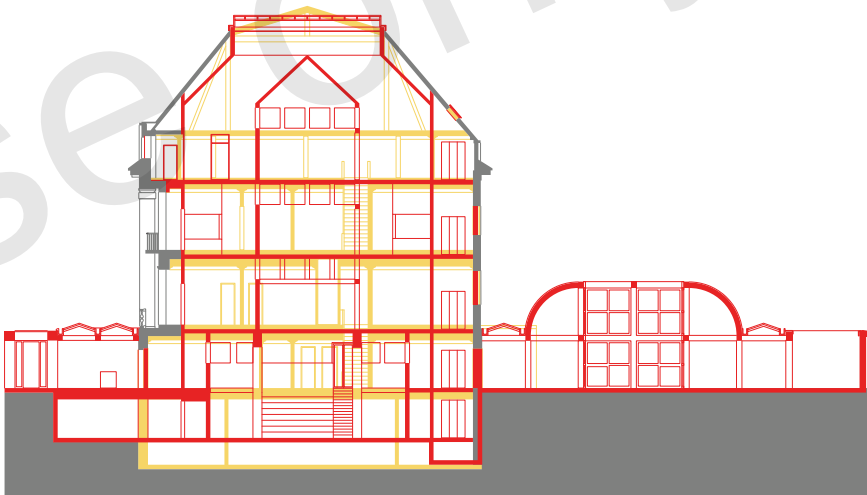
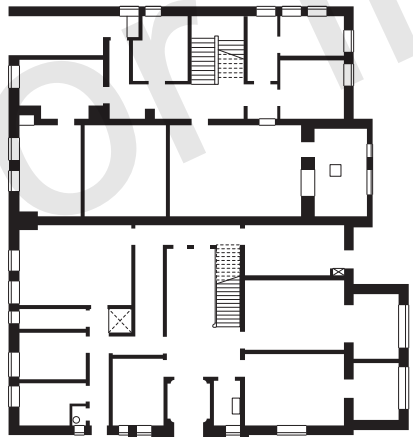
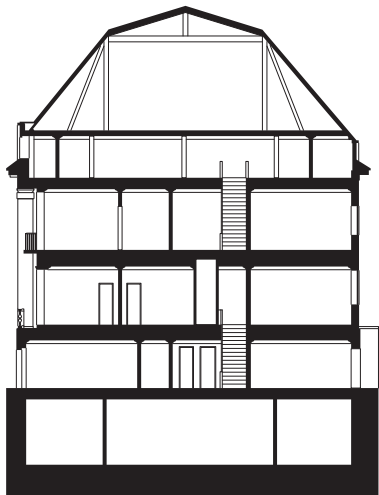
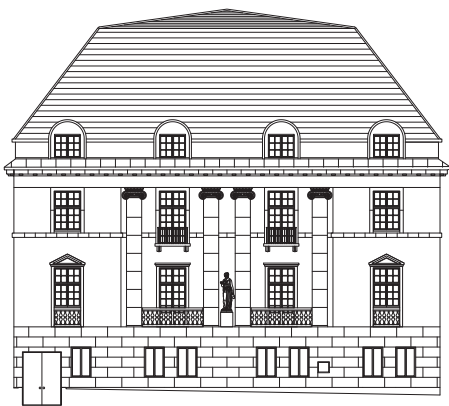
Deutsches Architekturmuseum
 Frankfurt am Main, Germany

1912: Geldmacher Villa –architect: Fritz Geldmacher
 1984: Deutsches Architekturmuseum –architect: Oswald Mathias Ungers

1912 Geldmacher Villa 1984 Deutsches Architekturmuseum

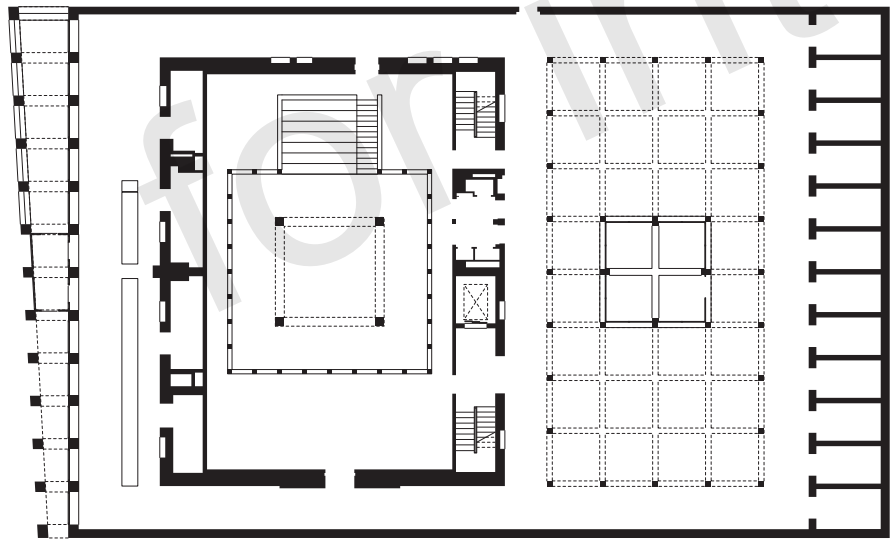
A Wilhelminian style villa in Frankfurt am Main, originally built by Fritz Geldmacher, served as the framework for the construction of the Deutsches Architekturmuseum by Oswald Mathias Ungers. The original villa featured a strict frontal symmetry; however, internal spaces were arranged asymmetrically. This configuration proved not to be suitable for the building’s new use as a museum, which required larger and more flexible spaces for exhibitions. Unger’s intervention was conceived as a ‘house within a house’, consisting of nested layers proceeding in an uninterrupted circulation toward a central core¹. Ungers’ design for the museum reduced the original villa to a shell through the removal of all internal partitions. Around the perimeter of the site a wall was erected that was conceived as an open loggia and at the same time internalized the external ground floor walls of the villa. Through this hierarchical re-contextualization, the original villa is experienced as a secondary layer within a larger scheme. Internally, Ungers conceptualized space in the form of strict Platonic geometries. An equal grid generates the spatial arrangement of the museum. Unger divided this grid so as to form the concentrated core, visible as four columns that culminate in the innermost ‘house’ on the fourth floor. A concrete scaffold formed on the internal face of the original villa transforms existing niches and bays into service risers, vertical circulation and storage facilities, whilst also rationalizing the internal walls from textured and varied surfaces into pure abstracted space. Circulation through the museum is conceptualized as an uninterrupted sequence of movements between the outermost and innermost layers. As one enters the museum through the new wall, one is routed along the sides of the site to the rear courtyard or through the shell of the old villa. Within the villa, the sequentially nested layers result in a condition in which each room serves as an outer room relative to an inner room, which in its turn the outer room of the next room, thus expressing a continuity that is both real and abstract thought².

Drawings Chronology
1912: Ground floor reconstructed based on a plan from the Ungers Archiv für Architekturwissenschaft³.
1912 / 1984: The internal walls and structure were demolished along with the protrusions on the South elevation, and only the façade has been retained. The ‘house within a house’ is built inside with a new wall and ground floor structure surrounding the villa⁵.



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Notes

1. G. Brown-Manrique, K. Frampton and O. M. Ungers, O. M. Ungers, *Works in Progress 1976-1980*, Rizolli, New York 1981, p. 34
2. *Ibid.*
3. The original building, referred to as the Geldmacher Villa, was built by Fritz Geldmacher in 1912 in Wilhelminian style. Located along the Main River in Frankfurt on Schaumainkai, the villa is co-located with other buildings of historic significance. The plans and elevations drawn by the Authors are based on archival drawings and photographs provided by Deutsches Architekturmuseum. The plans are attributed to the Ungers Archiv für Architekturwissenschaft (UAA), Köln, and photographs are by Foto Marburg Klaus Meier-Ude, 1979 and Photo-Göllner. There is no comprehensive documentation on the original condition of the Geldmacher Villa. Therefore, the Authors have reconstructed the section based on incomplete plans provided by Deutsches Architekturmuseum and attributed to Ungers Archiv für Architekturwissenschaft, and elevations and photographs. The section was drawn using a logical arrangement of walls and structure, in relation to the existing windows and wall openings, roof and other Villas built in a similar style and period.
5. The city of Frankfurt purchased the Wilhelminian style Villa on 24 August 1978 and engaged O. M. Ungers to complete the transformation from house to museum. The original villa had a strict frontal symmetry; however, the internal spaces were unsuitable for the new intended use of the building as a museum. As a result, the interiors were demolished, along with external wings on the

Southern elevation; the result was a shell strictly rectangular in plan. In Ungers' design, the structure is surrounded by a red sandstone block wall and filled with a new house-like structure. Visually, the wall serves as a plinth for the existing Villa, whilst the re-appropriated villa forms a container for the new museum. Physically and conceptually, Ungers' design creates a house within a house, using architecture to display and experience architecture in multiple ways. As demolition plans are not available, the Authors used photographs (Foto Marburg Klaus Meier-Ude, 1979 and Photo-Göllner) taken both before and after the re-modelling, and the analysis of the archival plans supplied by Deutsches Architekturmuseum and attributed to Ungers Archiv für Architekturwissenschaft. The new plans have been produced by the Authors referencing drawings provided by Deutsches Architekturmuseum and documented by architekten innenarchitekten BDA (2008).

6. The Authors created this hypothetical drawing based on the archival plan of the Geldmacher Villa and an analysis of other Villas of a similar style and era. The space depicted has been assumed to be a kitchen, as here the archival plan shows the presence of a hearth and bench. The surrounding landscape was drawn according to an external photograph (Foto Marburg Klaus Meier-Ude, 1979) provided by Architekturmuseum.

7. The Authors have created this drawing according to plans produced by BK Architekten and images of the Cafe im DAM found online.

Casa de Serralves Museum
 Porto, Portugal

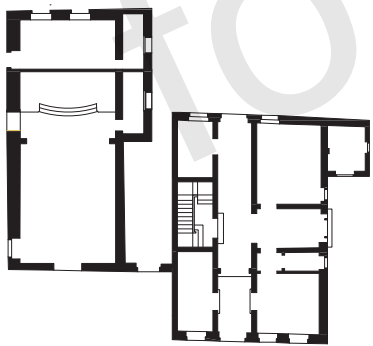
1925-1927: Chapel and Private House of Quinta de Serralves
 1930-1931: Casa de Serralves –architect: José Marques da Silva, Charles Siclis, Jacques Émile Ruhlmann
 1943: Casa de Serralves extension –architect: José Marques da Silva, Charles Siclis, Jacques Émile Ruhlmann
 1999: Casa de Serralves –architect: José Marques da Silva, Charles Siclis, Jacques Émile Ruhlmann.
 2001-2021: Casa de Serralves Museum –architect: Álvaro Siza

1925 Chapel and private house of Quinta de Serralves

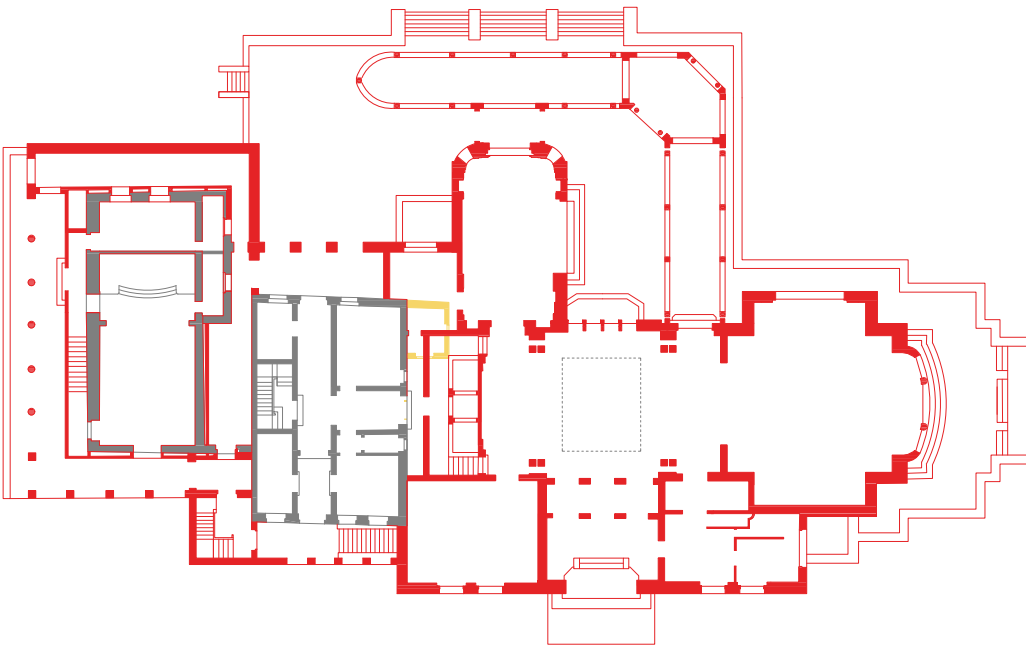
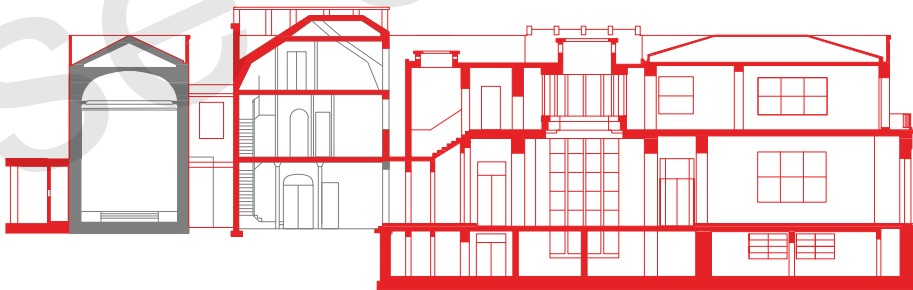
2021 Casa de Serralves Museum

Os fantasmas de Serralves is one of the few publications about the Casa de Serralves, Porto (PT). Written by André Tavares¹, the book narrates the construction history of this private house in the suburbs of the city. Unwritten stories populate one of the most important symbols of Art Déco in Portugal. The Serralves Villa, built on behest of forward-looking entrepreneur Carlos Alberto Cabral, features a complex spatial composition that is the result of its being redesigned multiple times by three different authors: José Marques da Silva, Charles Siclis, and Jacques Émile Ruhlmann. From 1927 to 1944, the villa was developed as an extension of a house that had been rebuilt between 1925 and 1927, with an annexed chapel dating back to the 19th century. The house reached its final and current form in 1943, after multiple design proposals, most of which are documented. The subsequent transfers of ownership did not change the house’s shape and function, in line with its first owner’s will, until when it became a museum under the Serralves Foundation (1999). In its history, the villa has always had to deal with pre-existent ideas and configurations which allowed for its affordances to change with minimal interventions. Hall, stairs, patio, and all the liminal spaces are the key to read the transformation of the villa throughout the years, especially with reference to its becoming a museum that exhibits itself as well as temporary exhibitions.

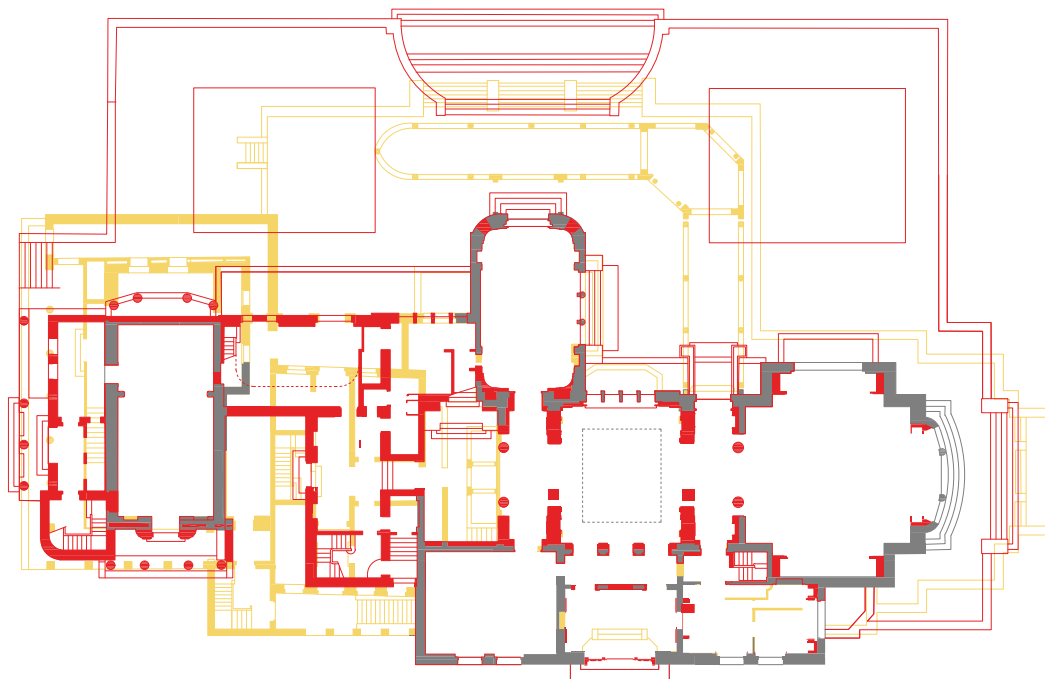
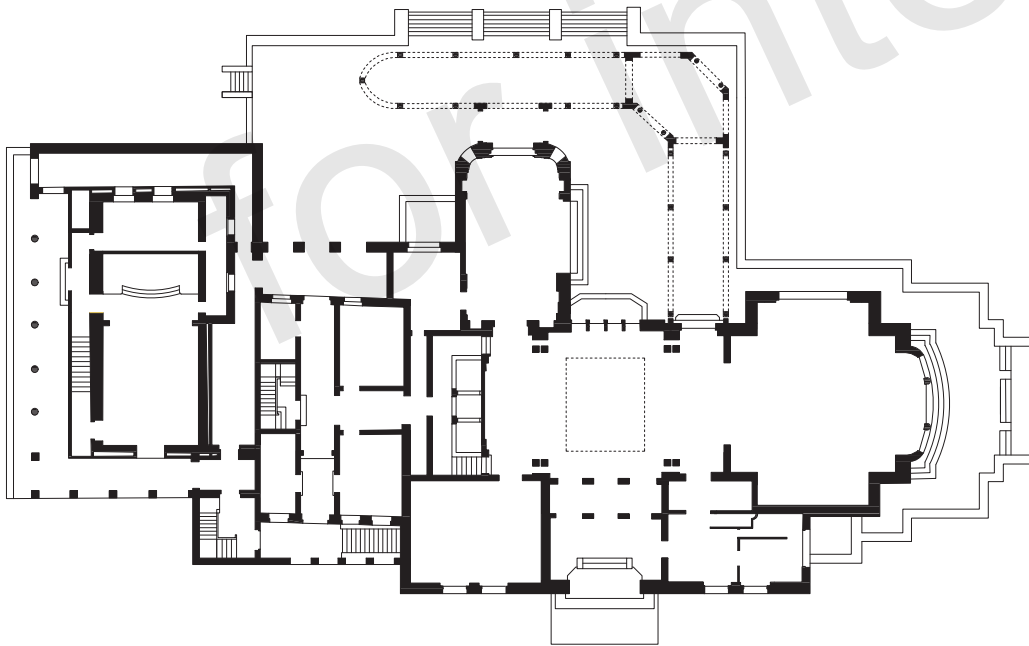
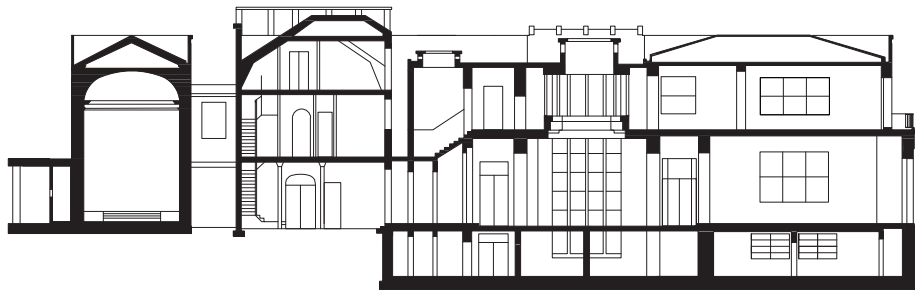
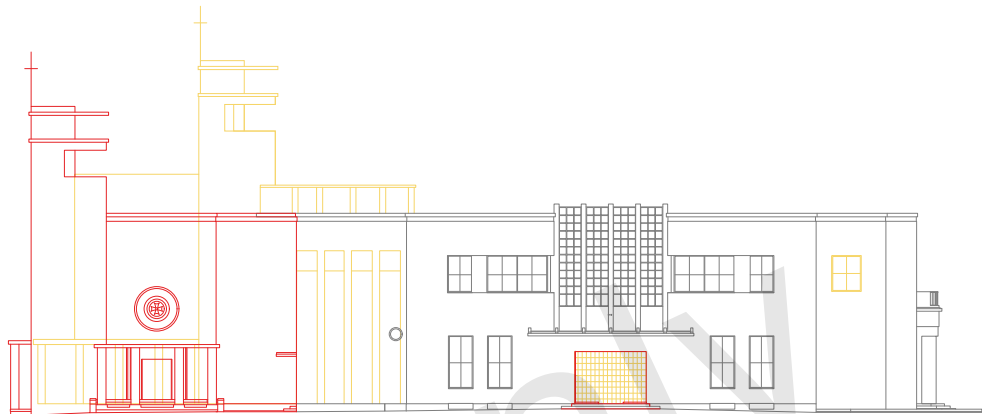
Drawings Chronology
1927 / 1930-1931: Incorporation of the chapel and extension of the private house to create a villa in Art-Deco style².
1931 / 1943: From 1930 to 1943, impactful changes in the project that brought the final configuration of the villa closest to the current one. The extension project included the demolition of the 19th-century house and connecting the chapel to the new building. The external pergola was also demolished to allow for a wider design of the garden surrounding the villa³.
1943 / 2001-2021: After the Serralves Foundation opened to the public in 1999, between 2001 and 2004 the Casa de Serralves was restored by architect Álvaro Siza⁴, with non-invasive alterations aimed to ensure accessibility to and use by the public with the introduction of restrooms, an event support kitchen (located in the basement) and the renovation of the technical installations and the equipment (acoustics, lighting, air conditioning, thermal control, etc.)⁵. Between 2019 and 2021, Siza continued the restoration with two non-invasive interventions: the lift in a pre-existing airshaft and the reconstruction of one restroom for visitors⁶.



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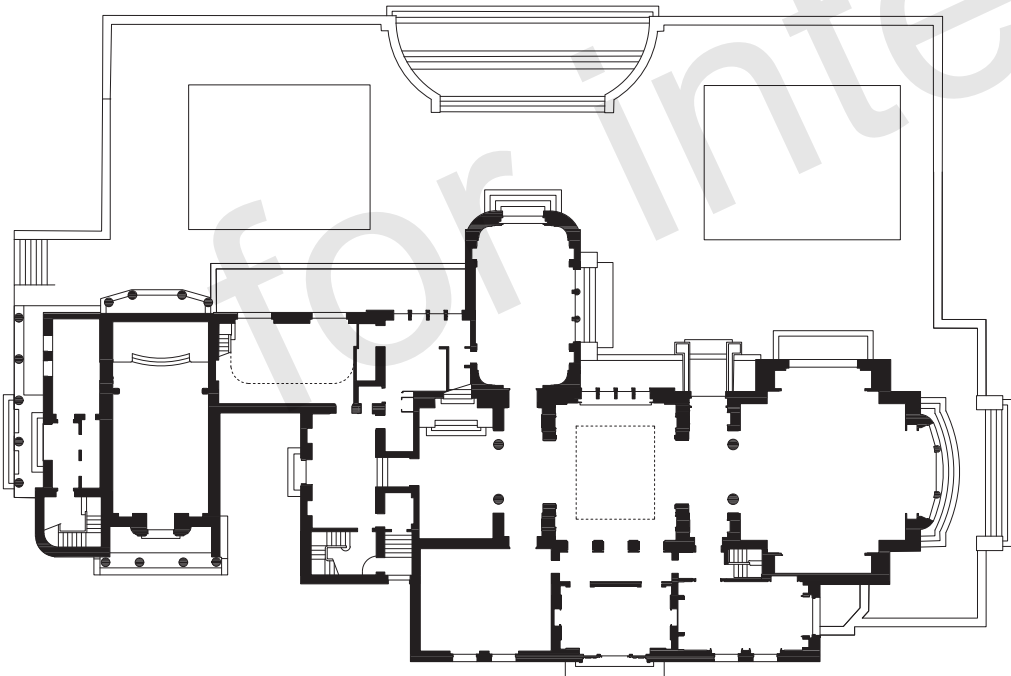


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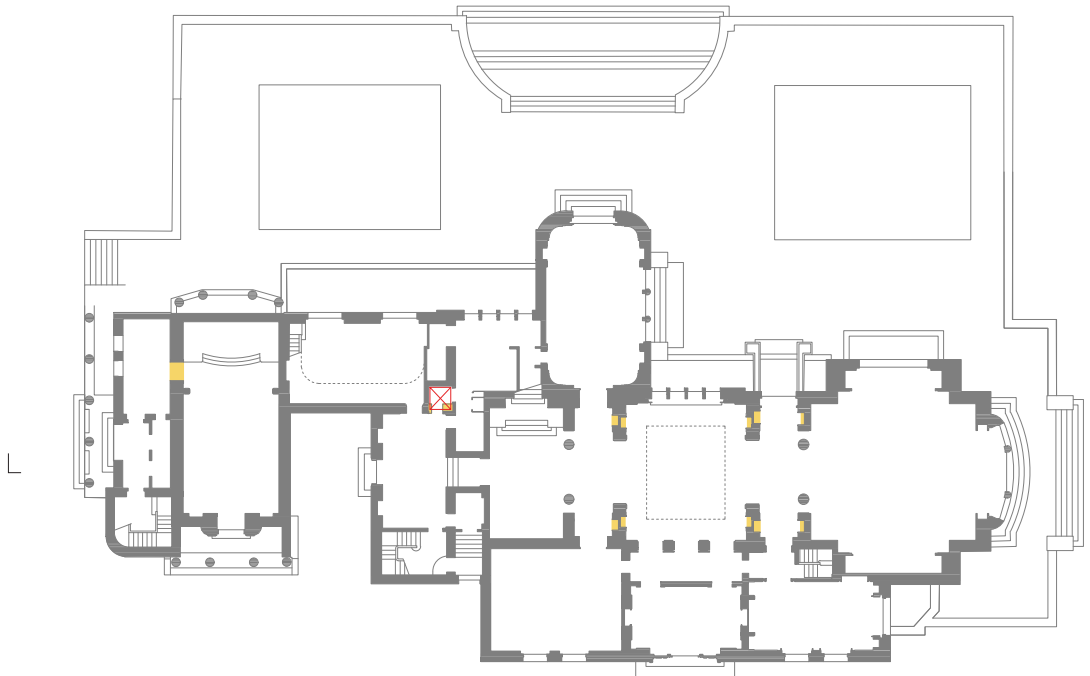


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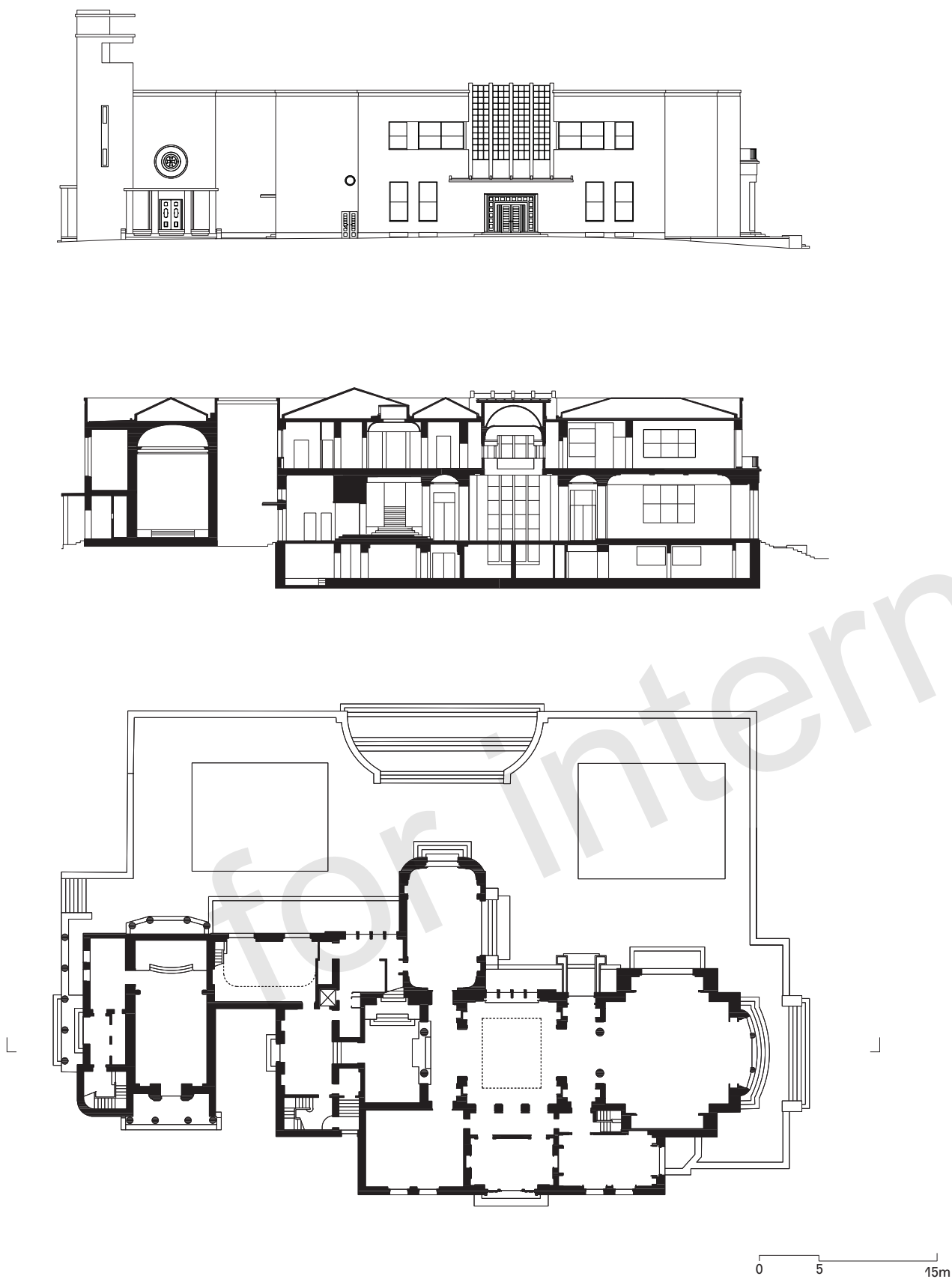
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Notes

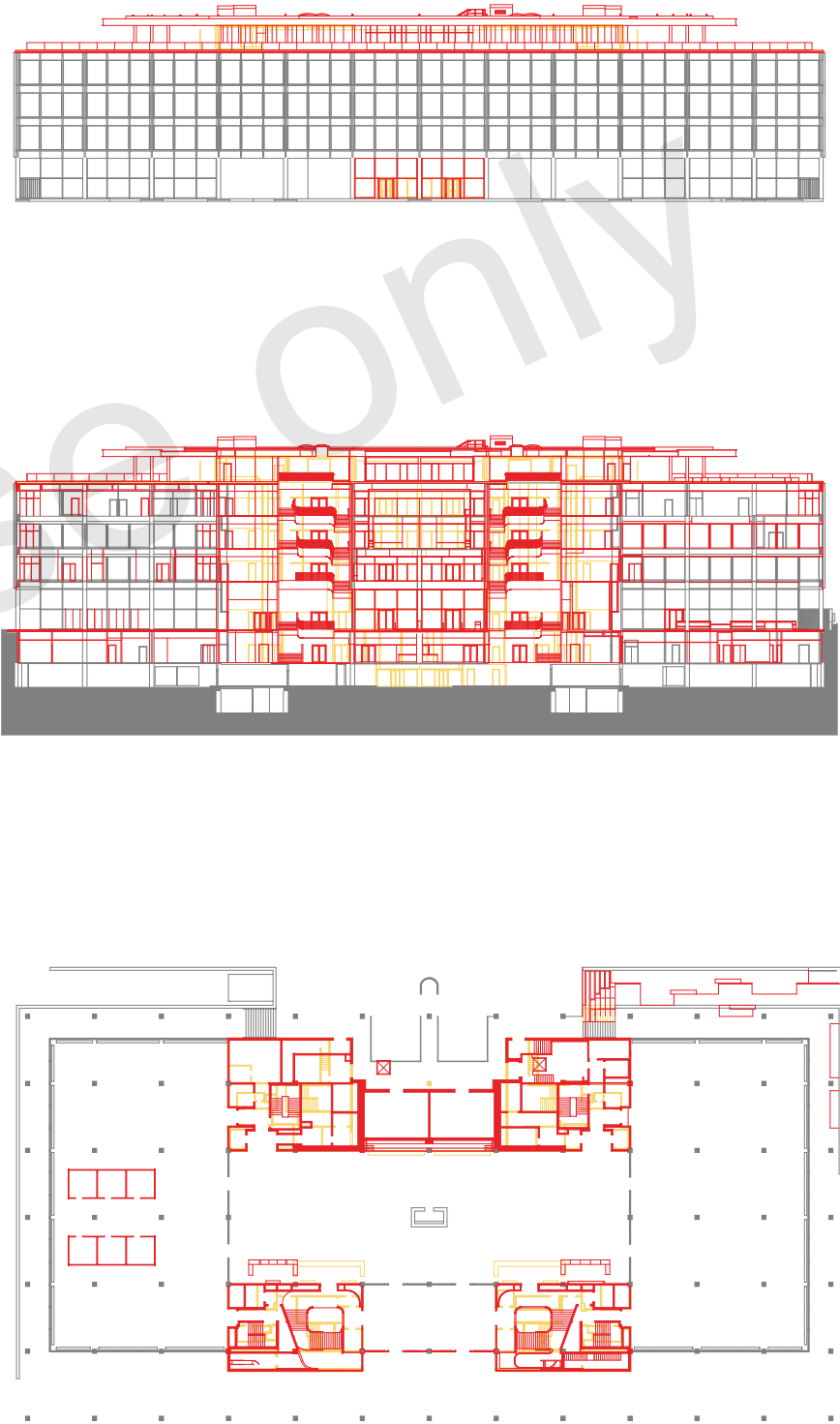
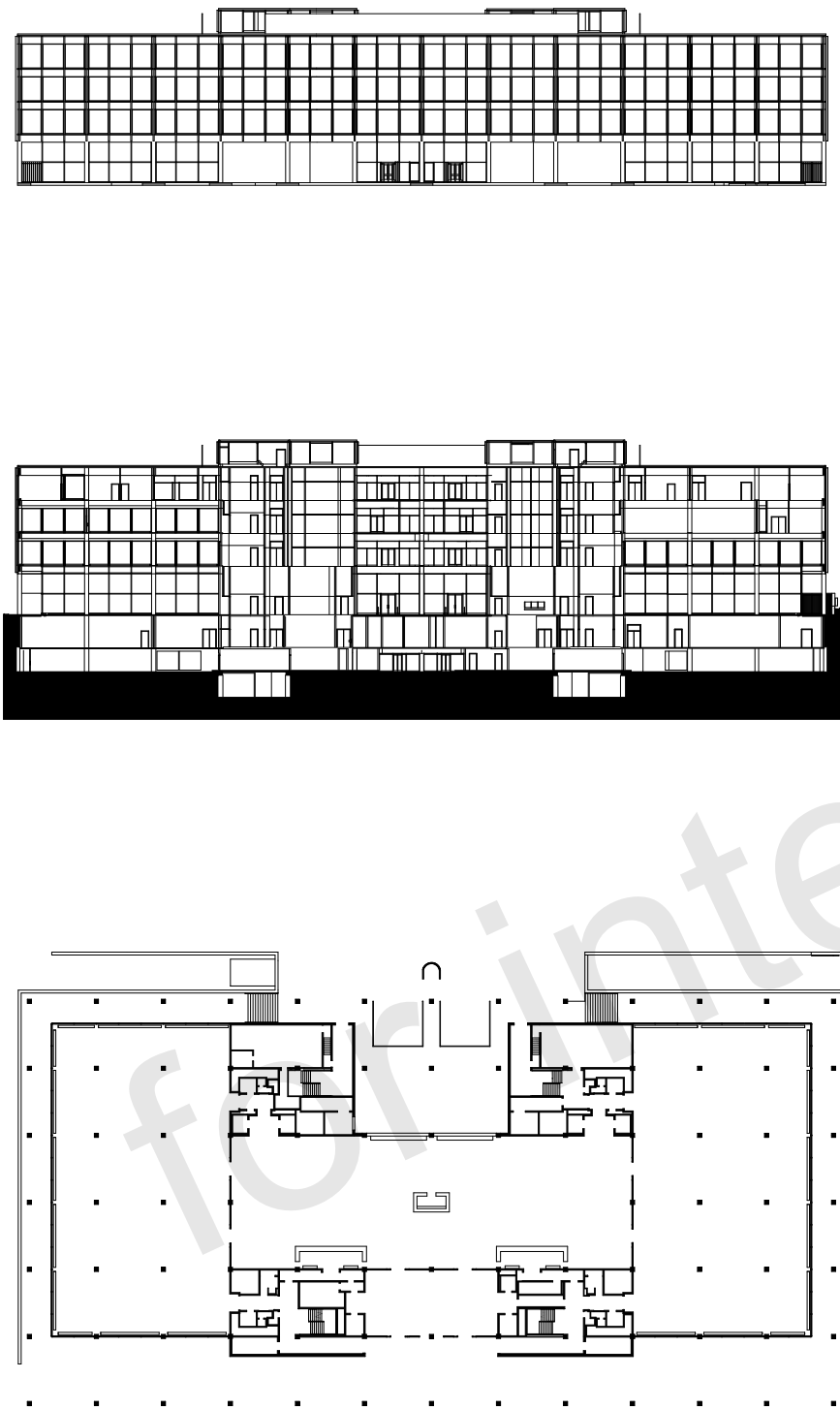
1. A. Tavares, *Os fantasmas de Serralves*, Dafne Editora, Porto 2007.
2. Only a few sketches exist from the period before the project of 1931 which produced the first important addition to the pre-existent buildings. A construction permit signed by architect José Marques da Silva allows us to document the extension of the property. The project of the new building, already embedded in the Art Decò style, was also influenced by the contribution of French architect Charles Siclis who in December 1929 had sent to Carlos Alberto Cabral two significant drawings. In the two external representations of the house, the formal qualities of the current villa are already evident, such as the well known external pink color. The interior design was commissioned to one of the great masters of French furniture design and interior architecture, Jacques Ruhlman. His work involved the vestibule, the hall, the dining room, the salon and the billiard room (A. Tavares, op. cit.).
3. The project achieved its final configuration in 1943, as shown by documents that supplement the project from 1931. Due to the peculiar historical period, during the Second World War, it is difficult to clearly identify the completion year (1939 or 1940).
4. Drawings by the author based on the archival documents of the restoration project of 2019 at the Álvaro Siza Archive, Serralves Foundation's Archives. The official documents do not cover a part of this period. Since few modifications have been done since 1930, the author used the most recent section produced by Alvaro Siza in 2019, with the same cut but facing the other side of the building. The author elaborated the visible lines from the section of 1930.
5. See: T. Cunha Ferreira and E. Fantini, "Conservazione delle superfici architettoniche del XX secolo. Interventi recenti di Álvaro Siza a Porto", in *Intervenire sulle superfici dell'architettura tra bilanci e prospettive*, Edizione Arcadia Ricerche, Venezia 2018, p. 417. The archival documentation of the restoration can be consulted in the Serralves Foundation Archive PT / FS / ASV / 37.
6. The visible lines of the section were elaborated by the author from the previous period, since in Álvaro Siza's drawings the same section faces the other side of the building.

1972 Martin Luther King Jr. Memorial Library

2020 Martin Luther King Jr. Memorial Library Extension

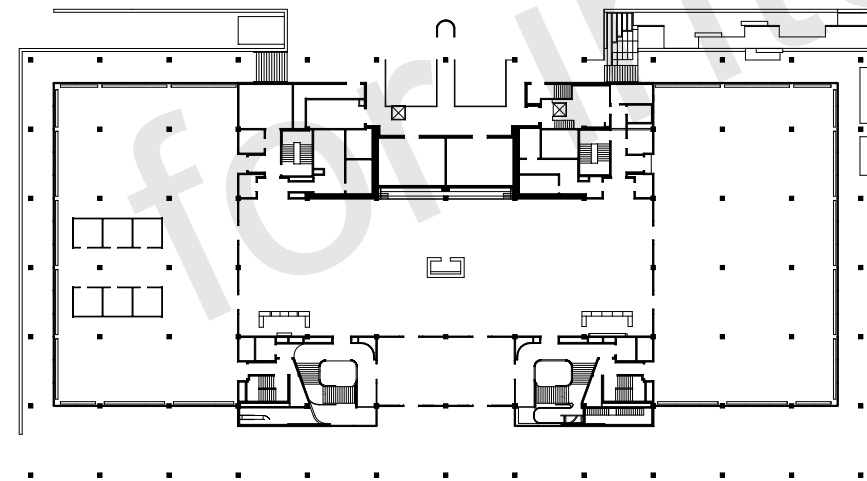
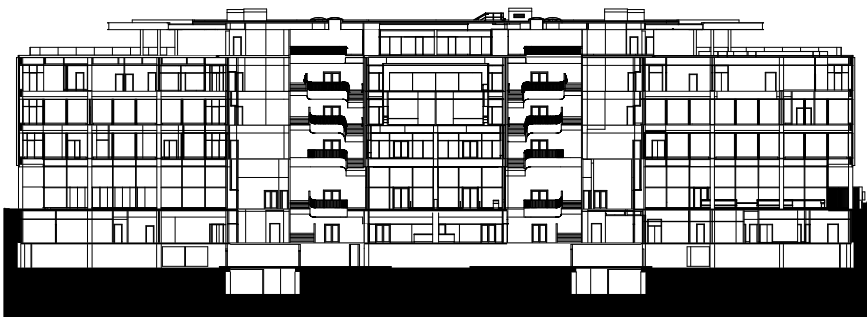
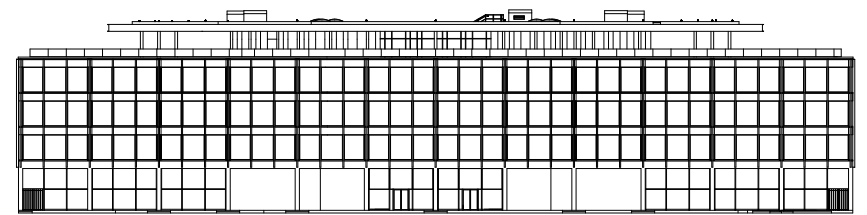
The Martin Luther King Library in Washington D.C. (1965-1972) is the last building designed and the first library built by Mies van der Rohe. The MLK Library was opened after the death of the Modern Master and embodies both the Modern identity as professed by Mies and the social freedom and equality represented by Martin Luther King¹. Right after its opening, the library became a relevant architectural and social landmark for an entire community as an expression of both social emancipation and Modern tectonics and spatiality². The library also embodies an expression of publicness, civicness and collectivity which mirrors the needs and changes of society through time. For this reason, Mies himself conceived the building as an architectural-social “Incomplete envelope” of Modernity (Von Eckardt, 1972), which could be expanded and transformed³. Dutch architecture firm Mecanoo, in collaboration with OTJ Architects, accepted this challenge, reorganizing the internal programs and adding new facilities such as a public roof garden, a theatre, signature staircases, and a suite of community studios and workshops⁴. The 39,600 m² rejuvenation project (realized in 2017-2020) was the result of a competition, and it was developed while respecting the simplicity of the original building, after long archival research and dialogues with actors involved in the design process of the original library, such as architect Jack Bowman⁵. The transformation project also opens new questions on the modern legacy, offering new insights into the modus operandi for transforming the Modern Master’s buildings.

Drawings Chronology
1972 / 2020: The cores were transformed with more open staircase; the roof changed with an additional floor and a main conference room at the last floors⁶.



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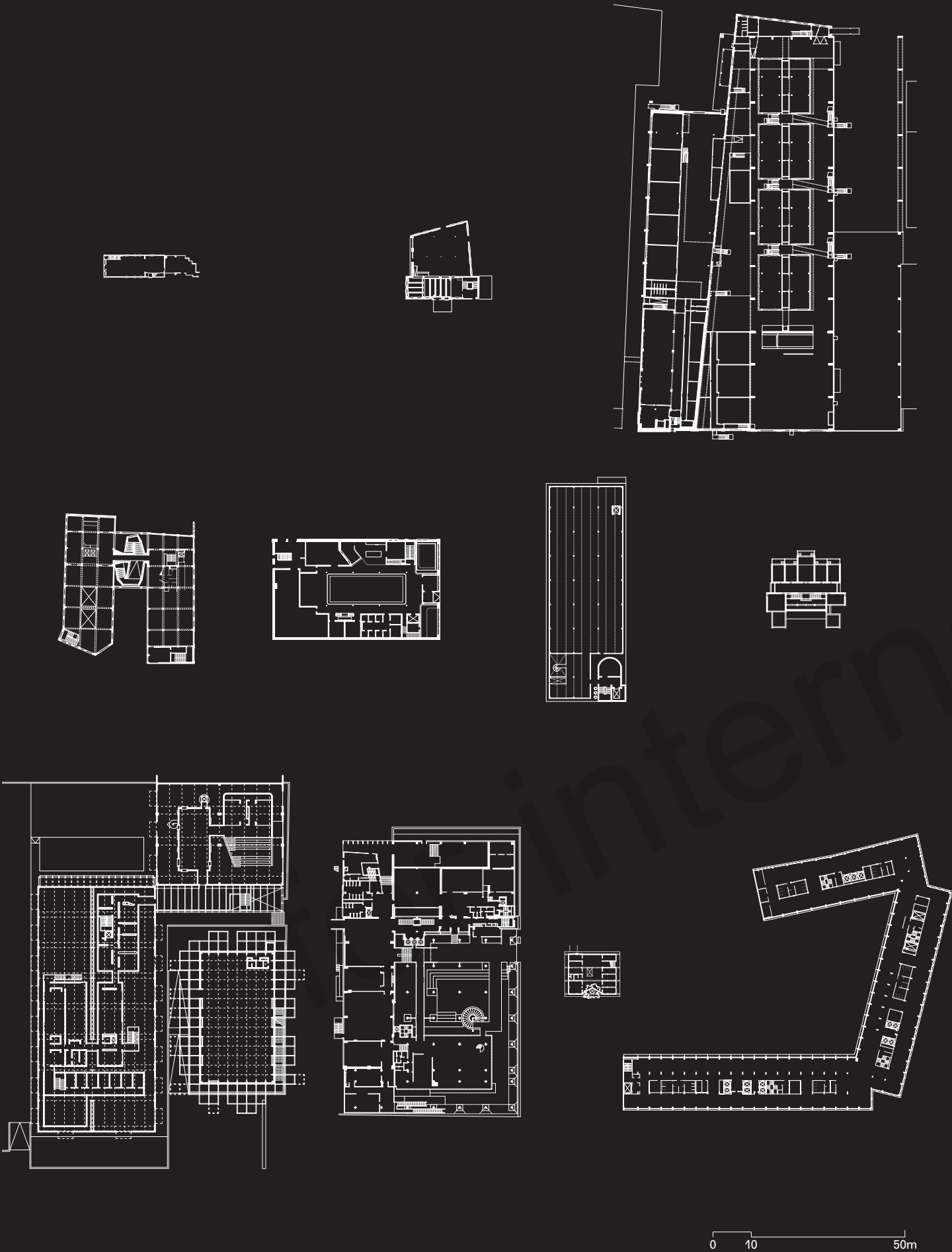
1. The Martin Luther King Library in Washington D.C. is one of the last buildings designed and the first library built by Mies van der Rohe. Even if Mies designed the library before its was named after Martin Luther King, the design choices were sympathetic to the library as a symbol of the power of democracy and social service and made it a civic landmark. The black bones of Mies library became an important social and civic structure for improving the quality of education and life, contrasting social segregation. Mies Architecture translated these social concerns typologically. For instance, publicness and openness are fostered by large windows with curtain walls which allow to view the urban surroundings from inside the building, from among the bookshelves, in particular at the ground floor, thus reinforcing the educational and civic role of the library within its society. Mies also occupied the entire site footprint, obtaining more available space for a public portico, which became an essential public shelter and a threshold between the exterior street and the free-structure internal lobby.
2. The project would fit into the low-rise type of Mies, even if Frank Schulze described the project as «neither vertical nor horizontal» due to its proportions and service cores, which are more typical of high-rise buildings (Franz Schulze, Edward Windhorst, *Mies van der Rohe. A Critical Biography*, New and Revised Edition, The University of Chicago Press 2012, pp. 374-375). The skin of the building mirrors Mies' objective architectural aloofness and impersonality. The rhythm of the facades in MLK is slow, with 3-meter-spaced mullions. Regarding the plans, MLK is composed of a rectangular shape with medium-sized bays (sides of 9 meters circa, composed of 3 modules, 3 meters long) with a balanced proportion and perfect symmetry in the shorter axis. Four closed central functional cores, more extensive in the northern part, distribute the circulation in the entire building, opening free space at all levels and letting natural light enter into reading rooms and other functions. Originally, the section division between three levels of MLK had no variations between floors or double heights: the underground basement, the higher ground floor-visually and physically open to the community at street level-and the upper floors.
3. Mies van der Rohe died in Chicago three years before the MLK Opening, on August 17 1969. He never saw his first library completed. Following the fate of its author, namely that of eternal incompleteness, the library would never be fully finalized, according an article written in «The Washington Post» on August 19, 1972. «It never will be. Mies would not want it to be»: the simple flexible volume, the impersonal and silent character of the enclosures of space were carefully proposed to envelop, «if you will, for life», the continual «change within them» (W. Von Eckardt, *A Modern Master's Monument*, in «The Washington Post», 1972, August 19).

4. Dutch architecture firm Mecanoo, working in collaboration with OTJ Architects, responded to the demand to transform the library, aiming to «highlight the library's social gathering purpose and its strong presence as a social landmark in the city», as Francine Houben explained. The new design proposal relied on archival research (also commissioned to Leonardo Zuccaro Marchi at TU Delft) and interviews, for instance, with Mies' assistant Jack Bowman. The design process became one of the few examples of consolidating research and design practice as a pivotal Architectural multidisciplinary activity facing the topic of Modern building renovation. Moreover, the research activities helped reveal Mies' intentions for future variations of its original design, such as a possible additional floor.
5. The transformation of MLK consisted of a new program for the future library, improving facilities such as a public roof garden, a theatre, signature staircases and a suite of community studios and workshops. The 39,600 m² (426,000 sq ft) rejuvenation project exhibits more openness toward the outside, allowing natural light deep into the building. In particular, the closed-blind functional cores have been transformed into new wood-lined staircases characterized by sculptural fluidity. The new stairs are wide, organically curving around a middle void, which allows natural light falling from skylights. While previous Mies' design considered the staircases as closed elements in contrast to the library's openness, Mecanoo integrated the circulation within the social-gathering and sharing activities of the library. New floors are open to the public, such as the lower ground floor, which hosts a wide range of new facilities previously missing, such as the Fabrication Lab. In the main entrance lobby, original features were restored while the internal wall was recessed and lined with vertical wooden slats with the original mural from 1986 by Don Miller celebrating Dr King's life. Another essential intervention was the opening of the Grand Reading Room on the third floor with a double height, visually connecting to the fourth-floor reading room above it.
6. The most relevant transformation is a central 291-capacity auditorium on the fourth floor, which opens the original linear section of the building with a new double-height event space with warm wood-lined walls. The auditorium lobby is surrounded by conference rooms and an Events Center, which opens into a new sky garden. The outcome is a trapezoid glazed pavilion as an additional floor, in compliance with the original Mies' thinking. Moreover, the pavilion is set back from the edges of the building, hidden from the street, and, therefore, it remains respectful of the original geometry and profile drawn by Mies. Finally, in line with the spirit of advancement and inclusivity which Mecanoo urged to highlight and propel, a new roof garden implements tranquility and proximity to nature, fostering a brand new idea of the library of the future.

Third Category

Ambiguous

Buildings where the original spatial quality is often generic or tailored towards a specific use. A specific typologically driven design approach adapts these projects to feature extensive transformations aimed at producing a new or confrontational spatial character.



577 Niagara Street
p. 222

577 Niagara Street commercial building / Cat Cafe and office space
1900 / 2020
Buffalo, USA

Gratkorn Corner
p. 230

Gratkorn Butcher / Commercial and office space
1910 / 2023
Gratkorn, Austria

ZHAW School of Architecture
p. 238

Kesselschmiede Halle 180 / School of Architecture Halle 180 + Halle 189 + Halle 191
1924 / 2018
Winterthur, Switzerland

Espacio expositivo Serrería Belga
p. 252

Serrería Belga de los Pinares del Paular / Espacio expositivo Serrería Belga
1928 / 2013
Madrid, Spain

63rd House
p. 260

US Post Office / 63rd House community space and manufacturing studio
1941 / 2024
Chicago, USA

The New Farm
p. 268

Philips Telecommunications Factory / The New Farm
1956 / 2018
Den Haag, The Netherlands

Casa Asilo
p. 278

Kindergarten / Casa Asilo
1960 / 2018
Mazzarrone (Catania), Italy

Opificio Golinelli
p. 284

Fonderie SABIEM / Opificio Golinelli - Centro Arti e Scienze Golinelli
1960 / 2017
Bologna, Italy

Atrio Politecnico di Milano
p. 292

University Building / School of Architecture Politecnico di Milano
1961 / 1985
Milan, Italy

Peveril Gardens
p. 298

Peveril House Parking Loads / Peveril Gardens
1967 / 2017
London, United Kingdom

ED.G.E. Office building
p. 304

Aerhotel Executive / E.D.GE Office building
1973 / 2022
Milan, Italy

1900 577 Niagara Street commercial building

2020 Cat Cafe and office space

577 Niagara Street was built circa 1900 as a two-story brick building in Italianate style in the industrial city of Buffalo, New York. The façade is structured horizontally in three parts. The lower level has slender cast iron columns and infill glazing. The upper level has a stereotomic expression with three slender, arched windows set into a brick façade. The top of the façade is finished with a decorative wooden parapet. Behind this representative façade, the building had two stacked floor plans for any commercial use plus a basement. In 1940, an extension to the back with a crawlspace foundation added about 50% more floor space to each floor level. From 1950 onward, following the industrial decline of Buffalo, the building gradually changed due to a lack of proper maintenance and belated, haphazard repair efforts. The generous ground floor openings were gradually reduced with brick infill and off-the-shelf aluminum storefront framing. By 2019, part of the parapet blew off and the roof began to leak, feeding a tree growing out of the damaged rear brick façade. In the meantime, the building hosted as a grocery store, a strip club, a law firm, and a hair salon. At that time a cat café entrepreneur sourced the building as a startup location and approached Davidson Rafailidis firm who envisioned the project as the first phase of a continual construction scheme on the overarching lot. The so-far realized form is a part of a future whole.

Drawings Chronology

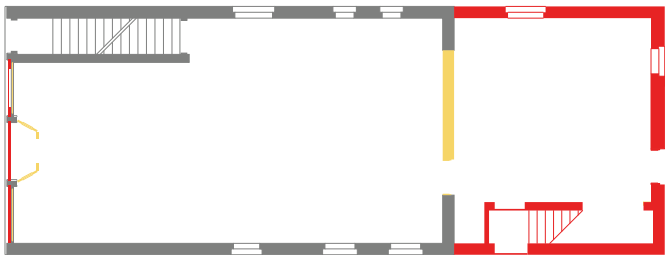
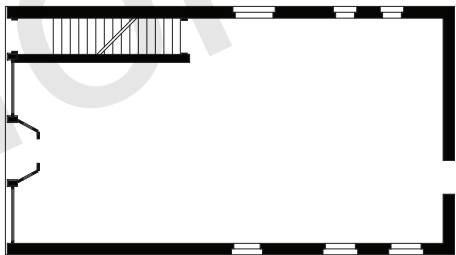
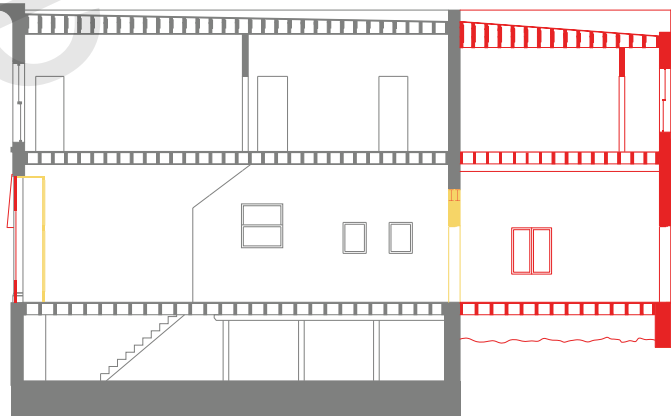
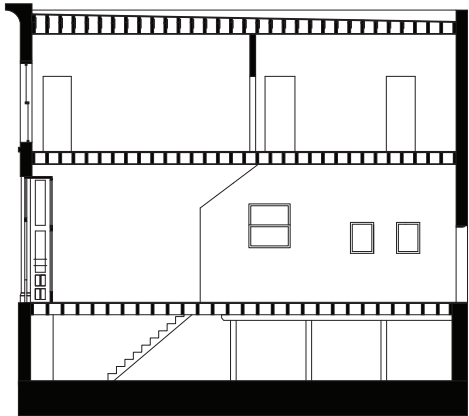
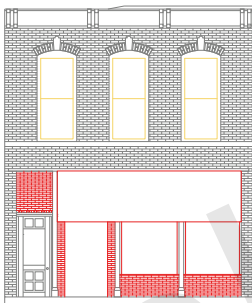
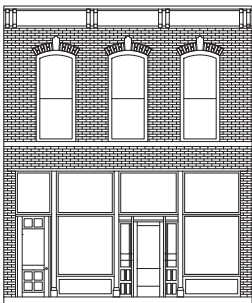
1900: The original “core” of the building is evident in the structure today because the basement footprint and the vertical joints in the exterior brick¹.

1900 / 1940-2019: The addition to the rear of the building was added circa 1940 whereas changes to the front facade were made later, likely in the 1990s².

2019 / 2020: In 2020, a Buffalo entrepreneur approached Davidson Rafailidis to convert the then-vacant ground floor of 577 Niagara Street into a cat cafe³. Though the interior of the existing building required extensive repair, and a new separation between areas for food preparation and cats, only the changes to the building envelope and the addition are shown here. The main exterior changes consisted of: a new white oak street-facing storefront arcade; a rebuilt rear wall, integrating a large new opening; a patio space constructed with structural clay block.

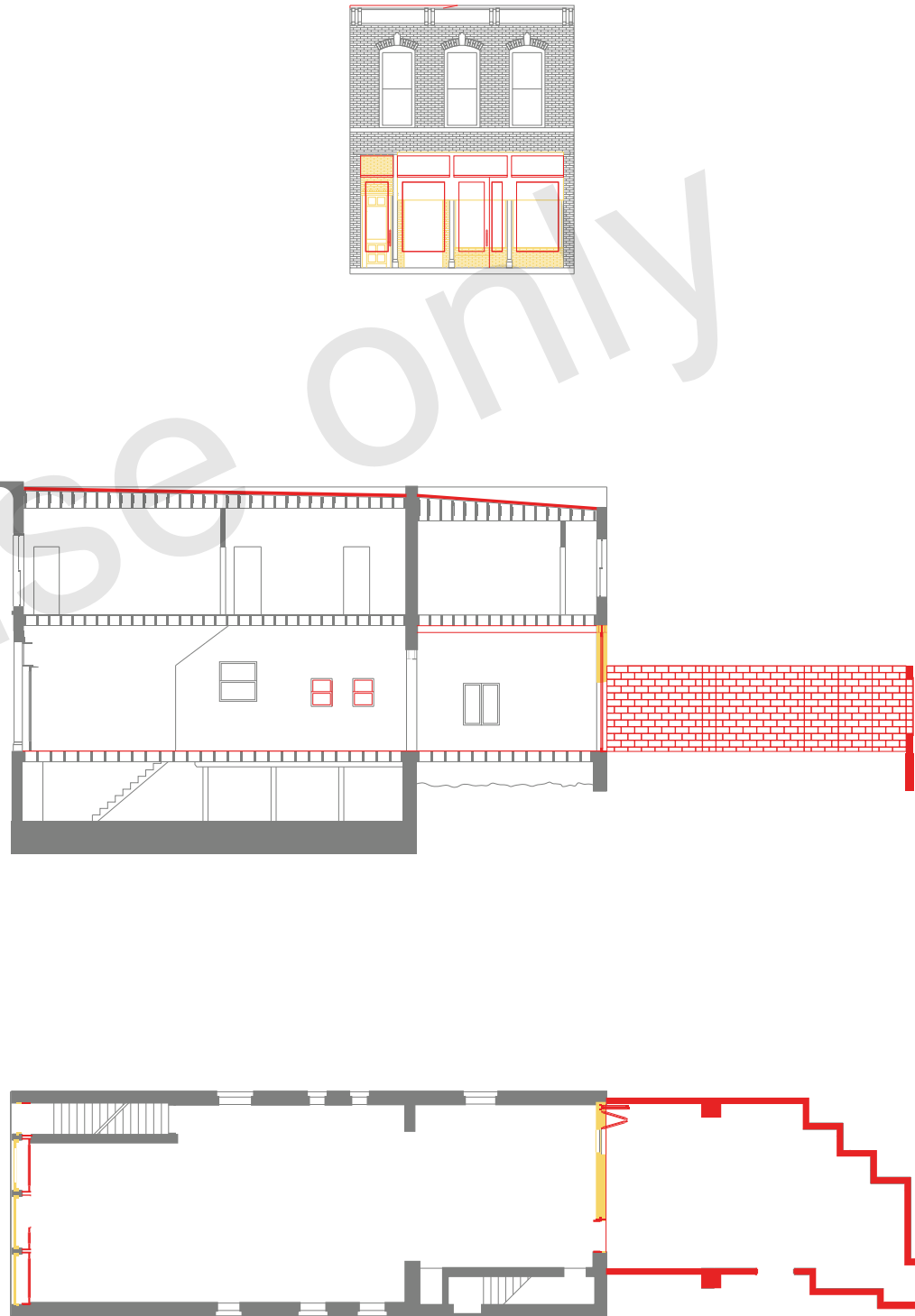
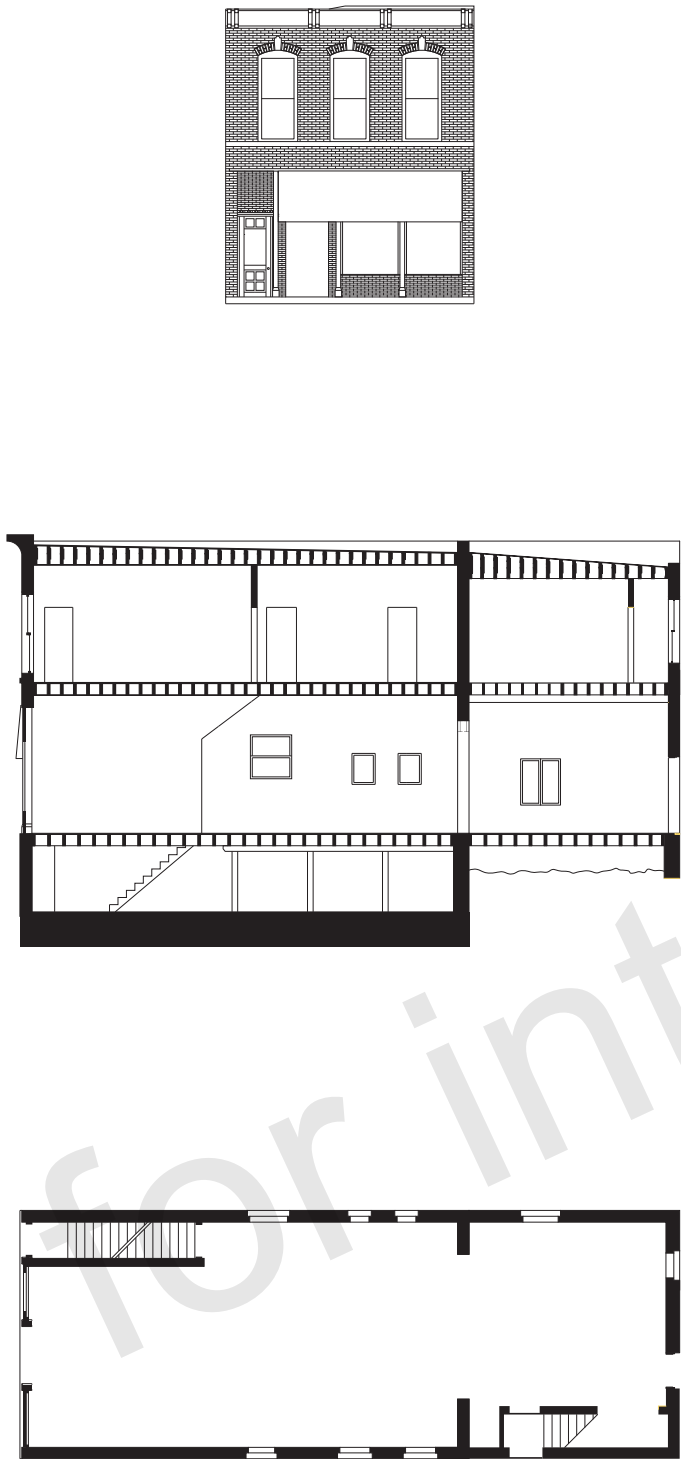
577 Niagara Street
 Buffalo, USA

1900: 577 Niagara Street
 1940-2019: commercial use
 2020: Cat cafe and office space –architect: Davidson Rafailidis



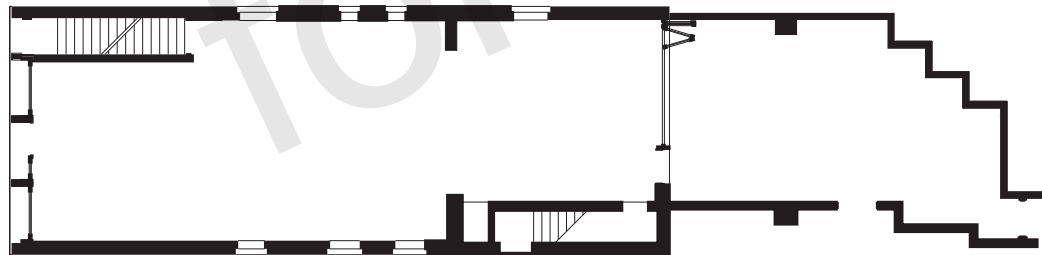
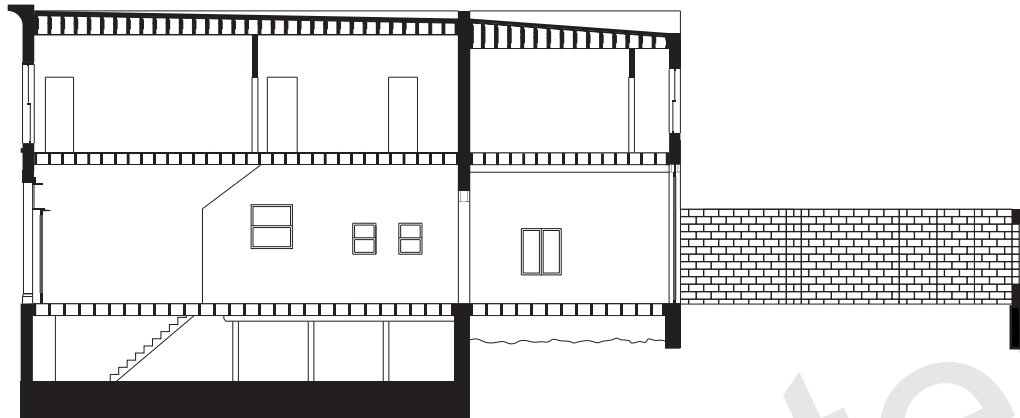
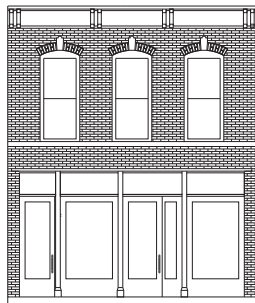
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Notes

1. The building at 577 Niagara Street in Buffalo, New York, USA, is estimated to have been built around 1900. The building shell is structural, uninsulated, triple wythe brick. The street-facing facade has characteristics of Italianate style; the front elevation is narrow and tall with three tall and slender, evenly spaced, arched windows on the second floor and a storefront facade on the ground floor, coupled with a primary entrance to the second floor. The narrowness of the building reflects the proportions of building lots in Buffalo, which are narrow and deep. The character and construction of 577 Niagara Street patterns-in with other buildings in the Lower West Side neighborhood. Niagara Street is a significant vehicular and pedestrian artery running North-South on the West edge of the city, just 1.3 miles (2 km) from the Canada-US border. At the time that the building was constructed, the neighborhood was home to a sizeable community of Italian immigrants.
2. The depth of the lot allowed the building volume to increase, toward the rear. A two-story addition which extended the footprint of the building by approximately one-third was constructed around 1940. A second means of

egress was integrated into this addition, for both the ground and second floors. While different commercial or quasi-commercial uses cycled through the ground floor through the decades between 1940-early 2000s, the front elevation was altered. Around the 1990's, a significant amount of infill brick was installed between the original, slender, cast iron columns, decreasing the size of the glazing in the front facade and making the building darker and more introverted. These alterations coincided with a period of general economic decline in the City of Buffalo. By 2019, the ground floor of the building was squatted; a generator was used by the inhabitants as a power supply. The shell of the building was poorly maintained and was disintegrating rapidly, mainly due to poor management of rainwater and snowmelt draining from the flat roof at the rear.

3. The interior bifurcation of the ground floor plan is not shown. The cat cafe functions based on an air-tight separation of animals and food preparation. The exterior, rear addition to the building was meant to give the cats a space to enjoy outdoors.

1910 Gratkorn Butcher

2023 Commercial and office space

Originally constructed around 1910, this building began its life as a modest two-story brick building in the northern industrial suburb of Graz, Austria. Over the years, the exterior underwent numerous modifications, with extensions and outbuildings added haphazardly, mostly without regard for the original structure’s integrity or aesthetic harmony. The ground floor features two rooms with distinctive hollow vaulted ceilings, known as Prussian caps, while the upper level lacks notable architectural elements or a representative façade.

For much of its existence, the building served a dual purpose: the ground floor housed commercial activities, including a basement that extends beneath two-thirds of the structure, while the first floor provided residential space. However, decades of neglect left the building in disrepair, culminating in its last incarnation as a humble pizza and kebab shop. In 2020, a new owner embarked on an ambitious project to breathe new life into the neglected property. The once-dilapidated structure was radically reimagined. Two expansive halls, supported by minimal columns, were added to the street-facing side, providing a bold new presence for commercial use at the corner. The attic was transformed into a modern living space, complete with a spacious terrace offering views over the surrounding area.

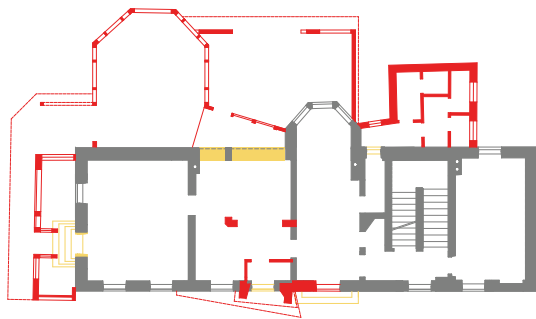
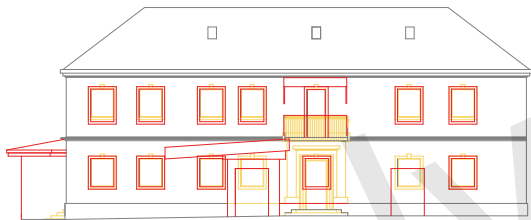
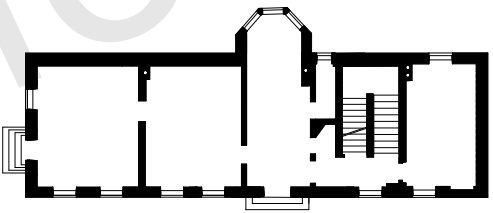
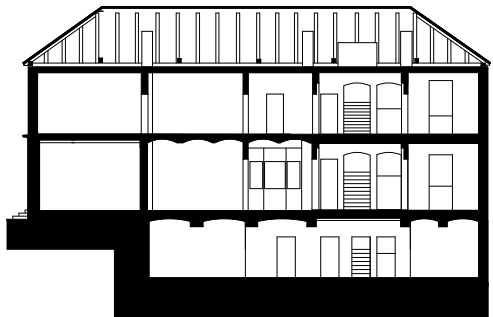
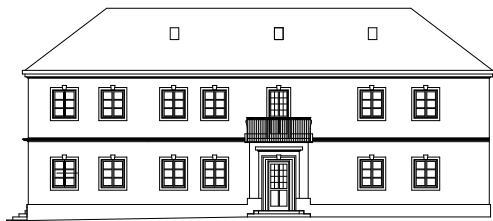
These additions, while adhering to zoning and setback regulations, resulted in an unconventional silhouette—characterized by a skewed outline and a stepped form that leans into the neighboring two-story, pitched-roof house, which now features a risalit and a gable facing the parking lot. Gratkorn Corner now blends history and modernity, revitalizing this commercial corner in the heart of the industrial community.

Drawings Chronology¹

2019 / 2023: In 2019, the new owner enlisted Studio Andreas Lechner to explore possibilities for renovating and expanding the existing structure. All previous extensions and outbuildings were demolished, making way for a large hall added to both the ground and upper floors. The window openings in the original building were standardized and transformed into equally sized French windows. A new risalit and gable provide a prominent entrance for the ground-floor restaurant, while a staircase to the right leads to offices on the upper levels.

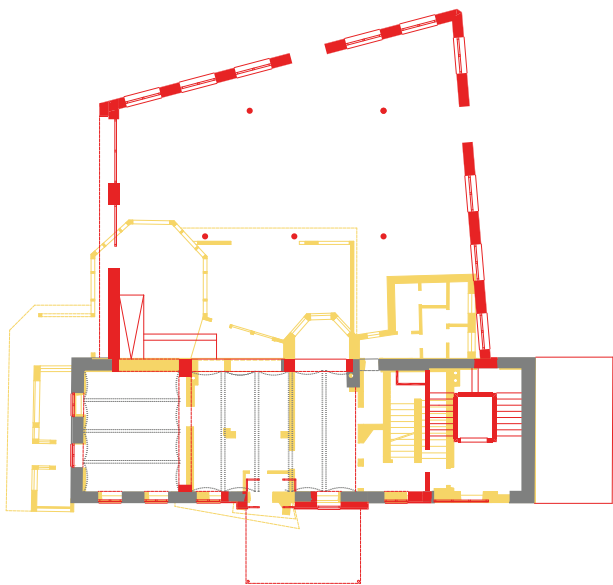
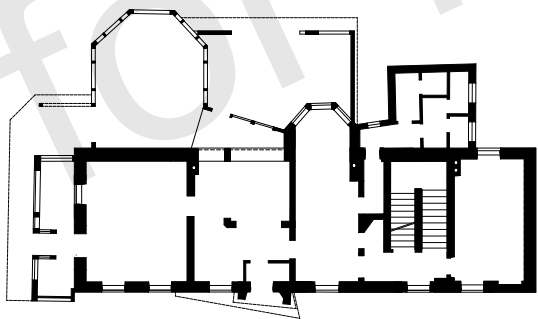
Gratkorn Corner
 Gratkorn, Austria

1910: Gratkorn Butcher
 1960-2019: Commercial and residential use
 2023: Commercial and office space –architect: Studio Andreas Lechner



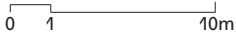
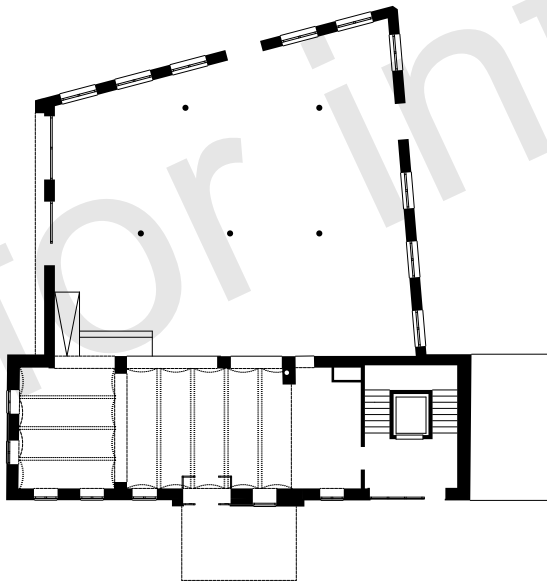
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Notes

1. The original “core” of the building remains evident, while extensions and outbuildings have mostly been added since the 1970s. The plans shown here are based on our comprehensive building survey conducted in 2019.

ZHAW School of Architecture
 Winterthur, Switzerland

1924: metal and welding workshop “Kesselschmiede –Halle 180”
 1991: school of architecture “Halle 180” –architect: Mäder+Mächler Architekten und Eppler Maraini Schoop
 1997: multifunctional hall extension “Halle 180” –architect: Mäder+Mächler Architekten und Eppler Maraini Schoop
 2003: extension “Halle 189 / 191” –architect: Mäder+Mächler Architekten
 2007: space densification “Halle 180” –architect: Mäder+Mächler Architekten
 2018: renovation project “Halle 189 / 191” –architect: gadolaringli architekto

1924 Kesselschmiede Halle 180
 2018 School of Architecture Halle 180
 + Halle 189 + Halle 191

Kesselschmiede-Halle 180 was built in 1924 as a metal and welding workshop of the Sulzer AG in Winterthur, Switzerland. After 50 years of continuous expansion the site was closed in 1988 due to technological developments and economic conditions in the post-war period.

In 1990 the lack of space at the Department of Architecture at Winterthur Technical School of Engineering (TWI, today ZHAW) led to a study on the revitalization of vacant buildings, including Halle 180. Planned as a provisional interim solution to accommodate various functions of the department, a free-standing steel furniture was developed that also offered flexibility for later conversions.

The transformation of the single-function industrial building into a multipurpose university facility reveals the ambiguity of the hall’s spatial resources and a functional indeterminacy inherent in the existing structure.

A hybrid unity of existing and new in dialog creates a composed collage by interlocking the elements that organize the generosity and openness of the existing hall and yet allow intimacy and privacy through vertical staggering, niches and a compact density of rooms. As a spatial gesture with an appellative value, the new steel structure invites to perceive the hall vertically, contrary to its existing longitudinal layout and promotes the performative act of diagonal ascent.

Visual connections and a floor plan with no walls, invented a new, innovative type of school known as the “curtain-school” (Vorhangschule), in contrast to the conventional typology of a “corridor school”. Permanently ephemeral, the conversion exists as a resilient interim to this day. By preserving a processual character and enabling further adaptations through appropriation of the users and expansions in the following years (enlargement of the space, densification to the inside and addition of adjacent halls) Halle 180 became a showcase project and acted as a generator for further urban developments on site.

Drawings Chronology¹

1924 / 1991: During the conversion of the factory building into a school of architecture² a new steel structure was implemented in the long and narrow existing hall³. The analysis of structural conditions, building-physical requirements and reasons of historic preservation led to a freestanding steel-furniture consisting of four platforms, set off from the outer walls, creating a surrounding open access zone⁴. Planned as an interim and easy to dismantle structure, this cost-effective solution minimizes constructive points of contact with the existing shell⁵. Regarding spatial arrangement, the design follows a strategy of interconnecting the existing and the new by galleries and open platforms with flexible curtains instead of enclosing walls. The open structure hosts ateliers for 320 students, seminar rooms, lecture halls, the library and offices⁶.

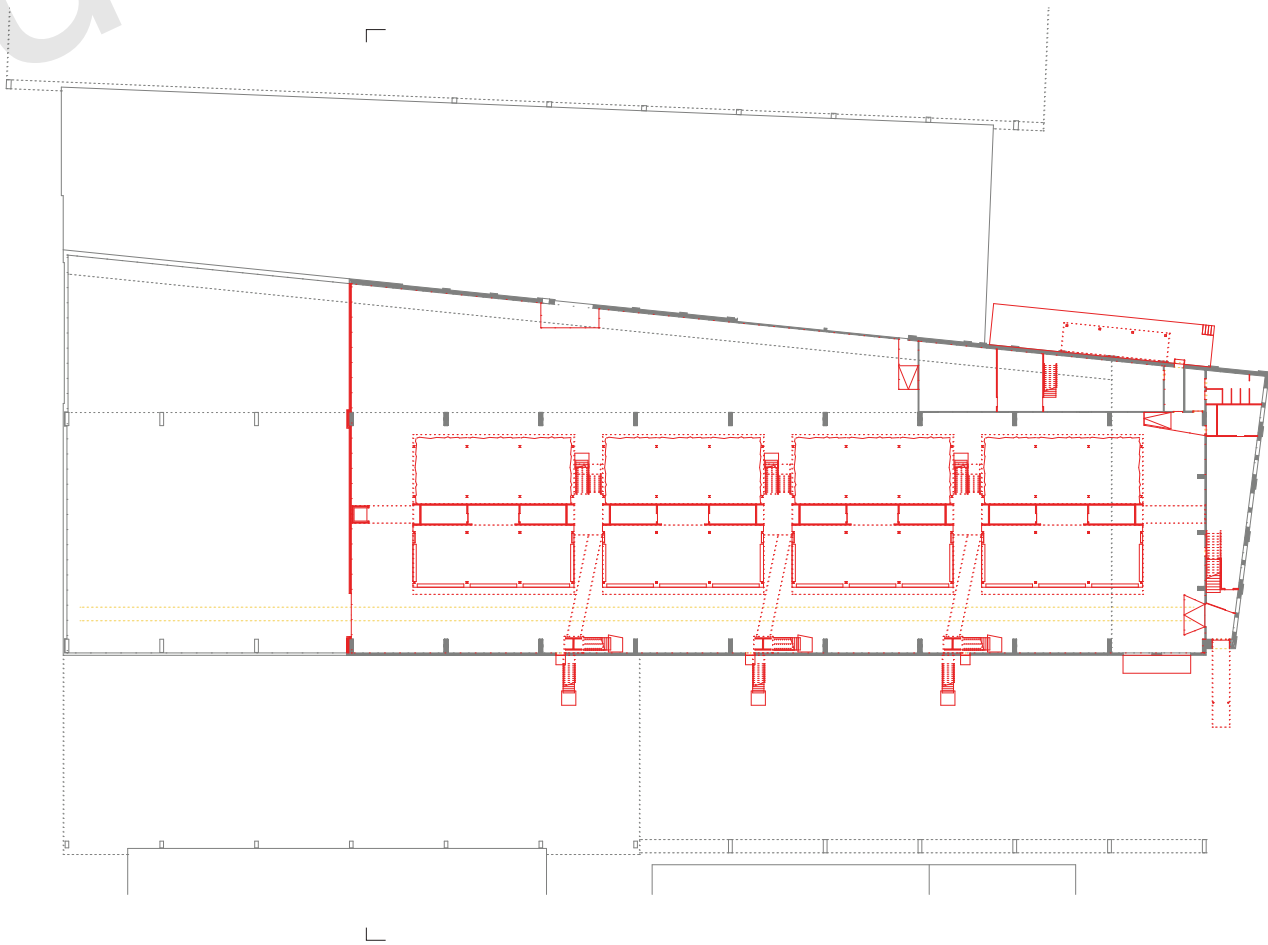
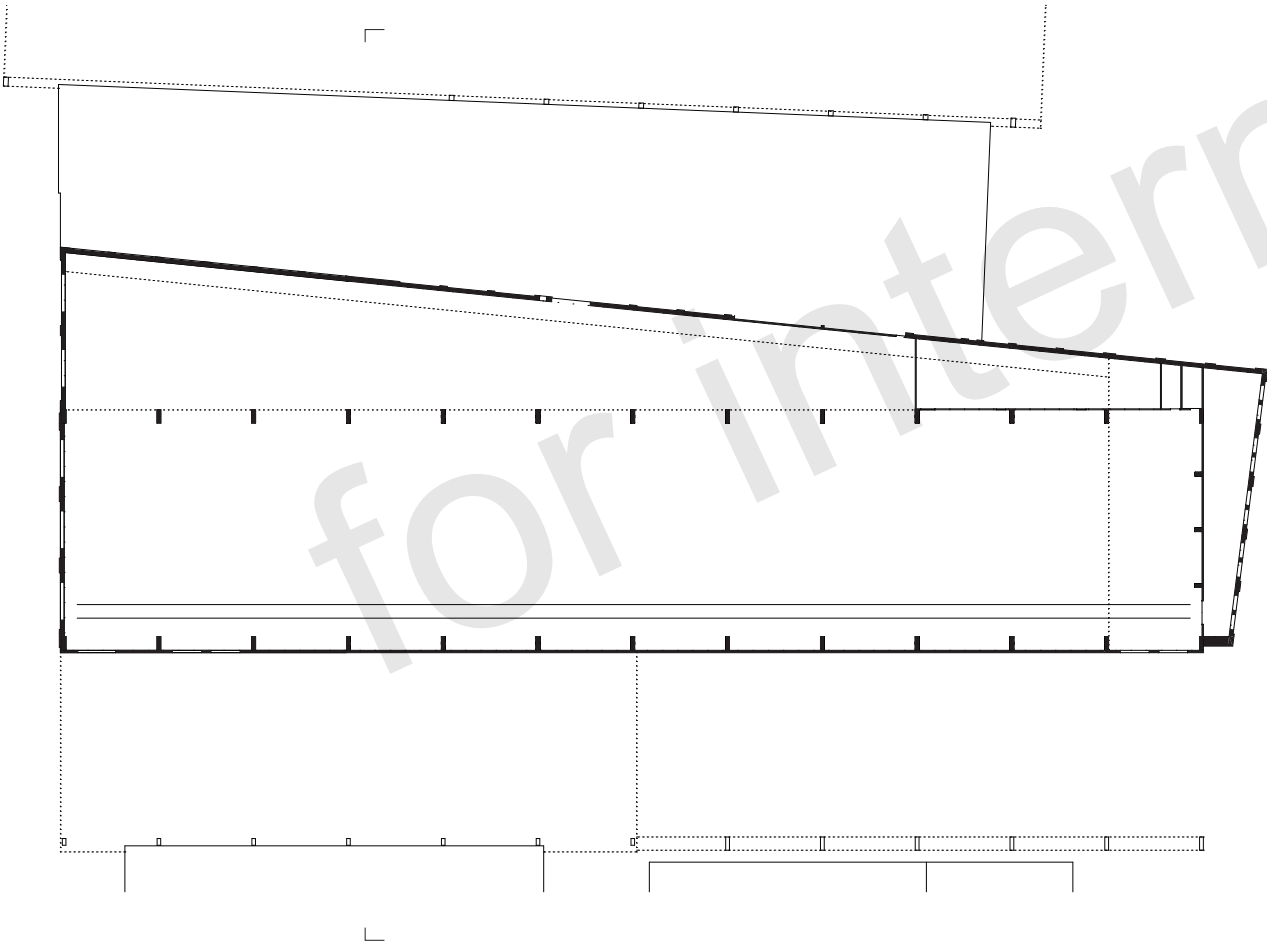
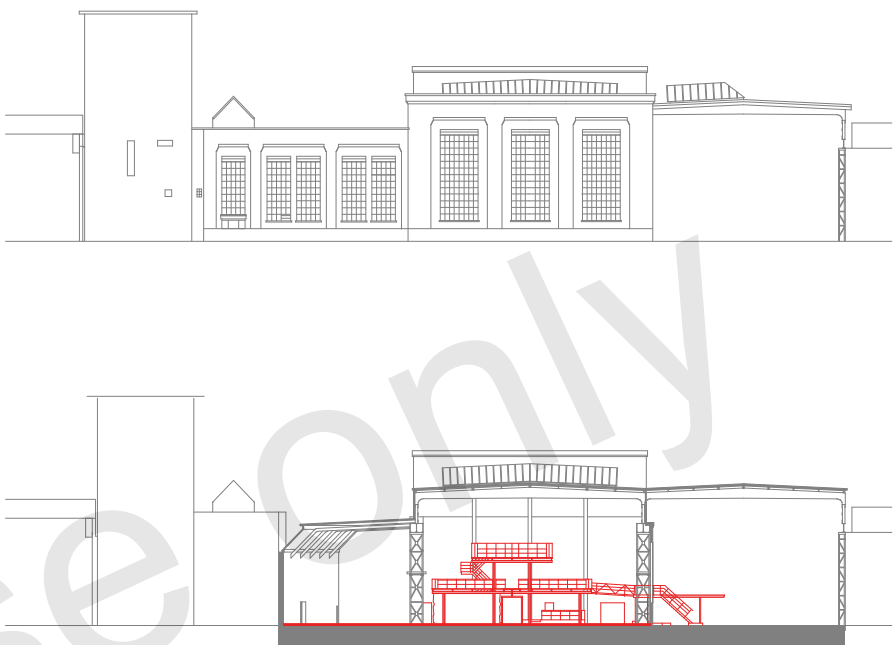
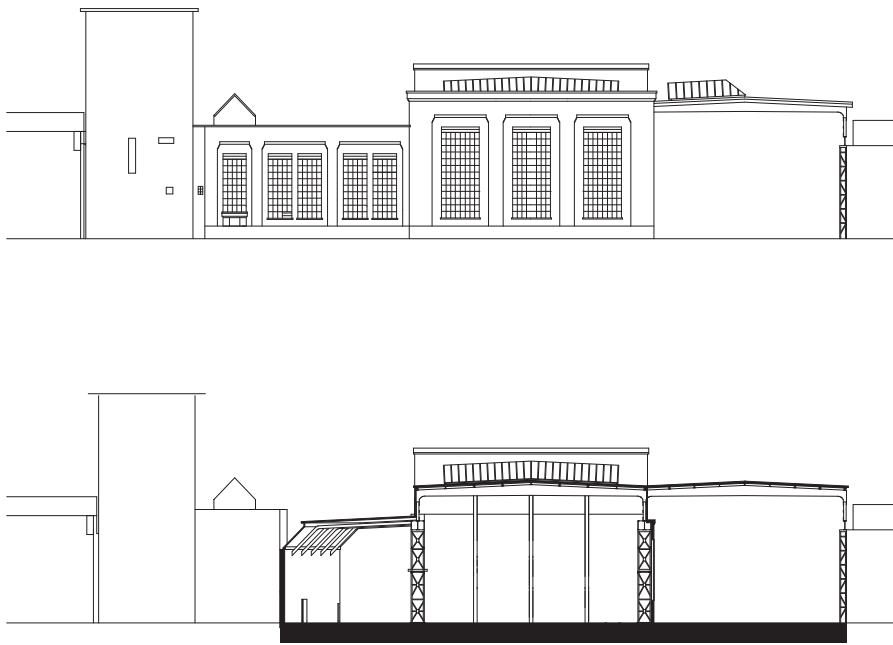
1991 / 1997: In 1997 three additional axes of Halle 180 were acquired. A high room without additional fixtures offers space for various functions. The clear separation by the fire-wall provides zoning in the long room. While on north of the fire wall the hall features dense built-in structures, the space in the south uses the full room height and allows to experience the original spatial character of the factory building. In the conically widening area, additional enclosed rooms were placed that were similar to the original rooms. On top of these new seminar rooms, a gallery with atelier space overlooks the multifunctional hall. The adjacent open hall with crane runway was partly enclosed by a new façade with signage. The existing windows facing south were equipped with suspended metal elements for passive solar shading⁷.

1997 / 2003: In 2003 rooms on the ground floor of neighboring Halle 189+191 were used to house new functions for the school of architecture. Only small interventions were made to provide a multifunctional room, a cafeteria and an auditorium.

A new entrance was created, minimal wall paneling was added to improve the acoustics in the room, and bright refreshing colors were added. A new door enables direct connection to the main space in Halle 180⁸.

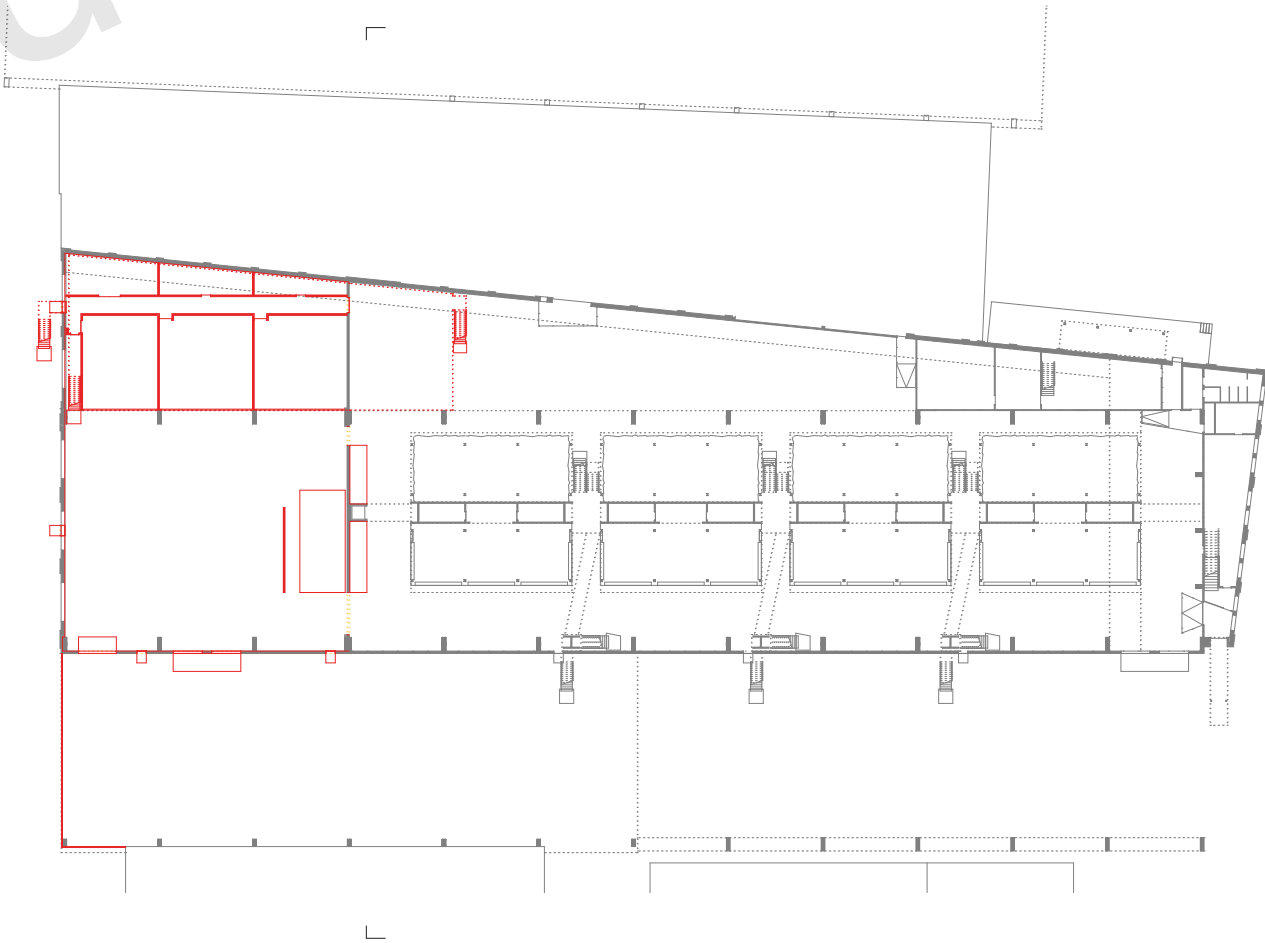
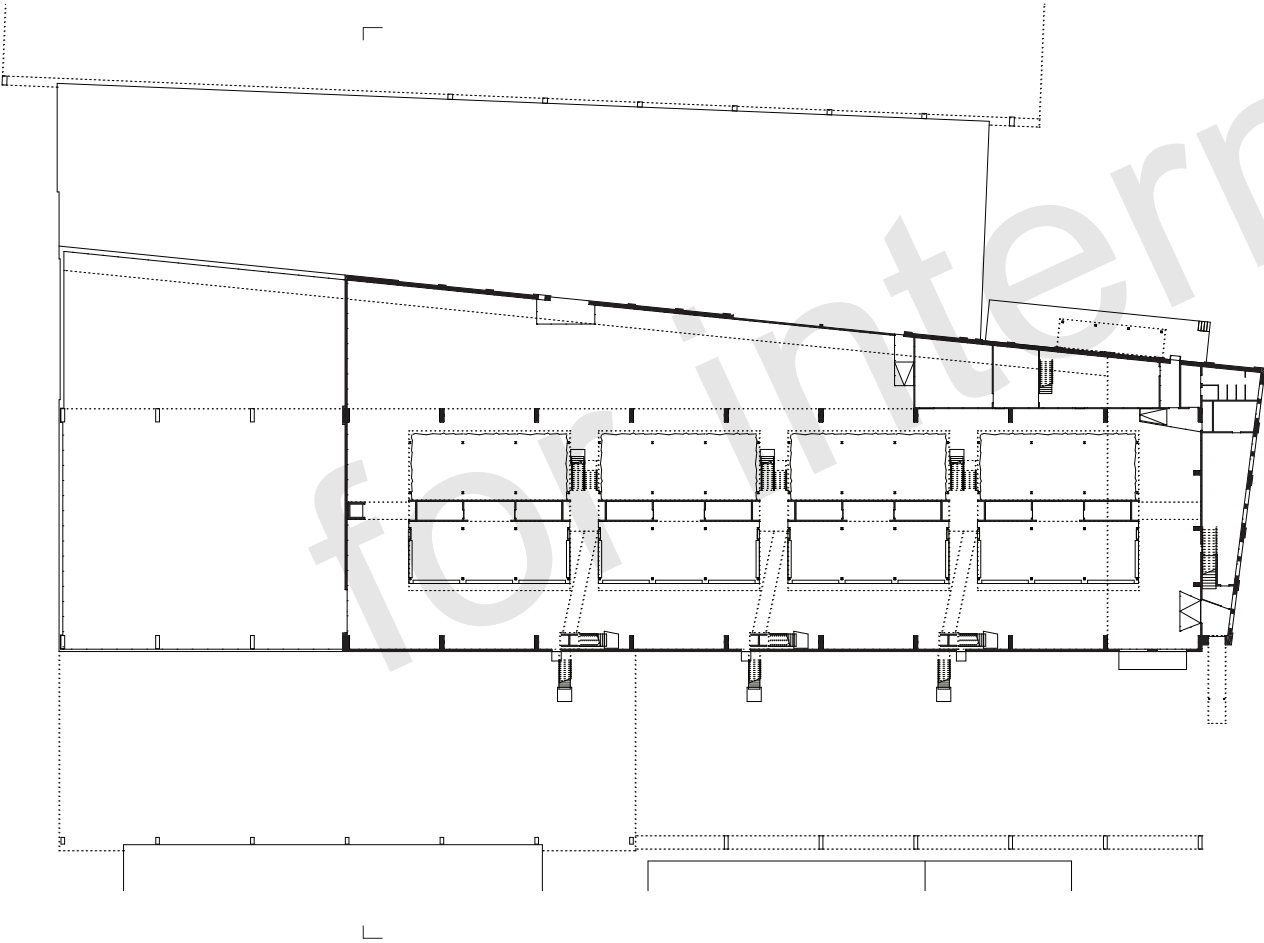
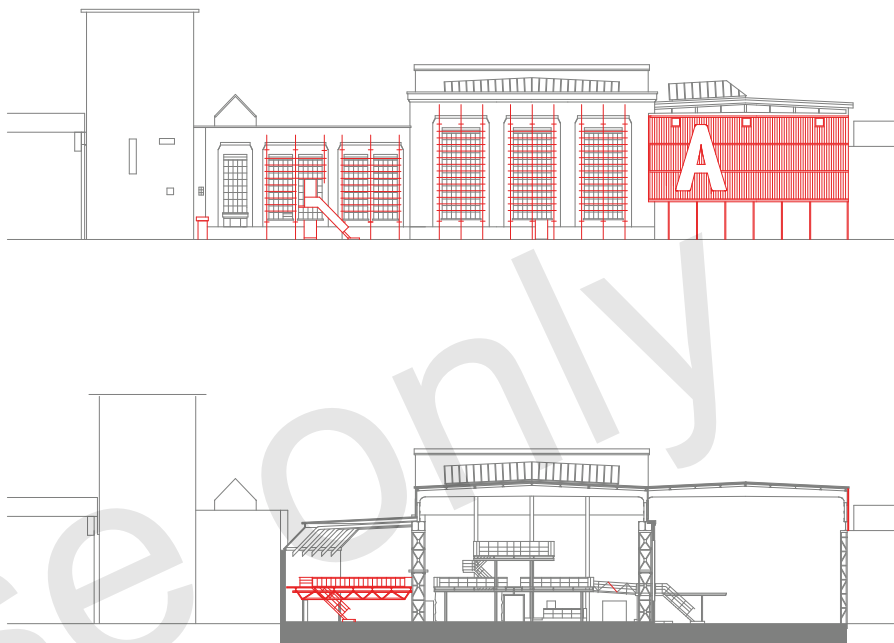
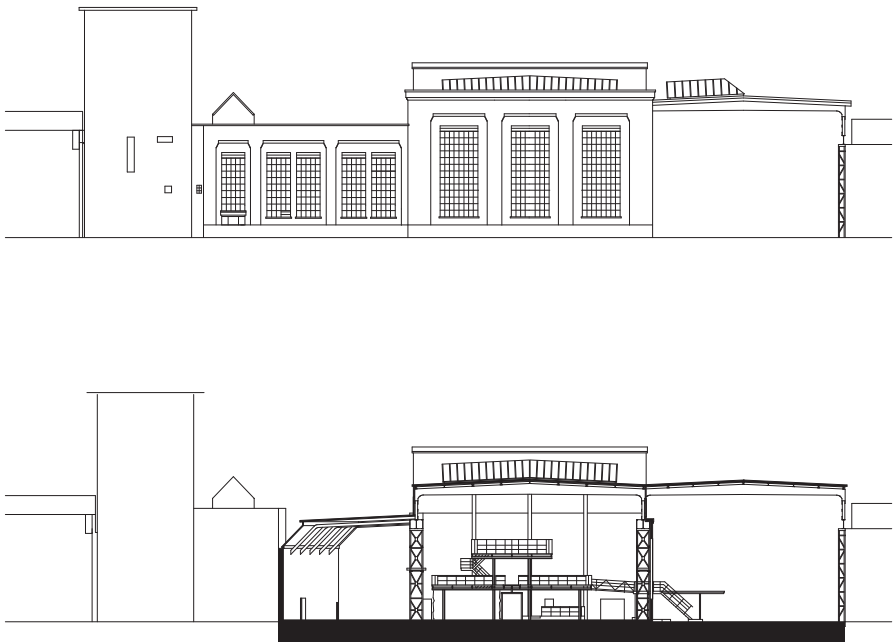
2003 / 2007: Densification of the inside: In the conically widening area a pavilion-like room was implemented. The ground floor space of the so-called Aquarium offers room for meetings, acoustically separated from the large hall. On top, an open gallery offers workspace for students. In contrast to the existing single-storey chambers, the layout of the new box, as a necessary reaction to structural requirements, does not touch the outer façade of the hall. Beams span between the existing lattice frame columns and the exterior wall. In the other part of the hall a depot is placed. The construction from 1997 was reinforced to add a new floor. Besides more storage space the room houses a material library and sample exhibition as well as more atelier space for students⁹.

2007 / 2018: Continuous adaptation and improvement became an integral part of the temporary interim solution– it was “learning by doing”. The renovation of Halle 189+191 started in 2013 by gadolaringli architekto. A lecture room, additional classrooms, offices and workshops were created. The cafeteria was located below the silos. With only few interventions in the construction– two staircases, a new floor, and an attached balcony – new spatial connections were created. Only minimal and careful interventions were made; based on technical and comfort standards from comparable educational facilities Together with Halle 180, the whole complex forms an open network. An ensemble «as a small city» provides the opportunity to participate, to adapt and transform, which in return leads to maintenance and care for the buildings by its users¹⁰.



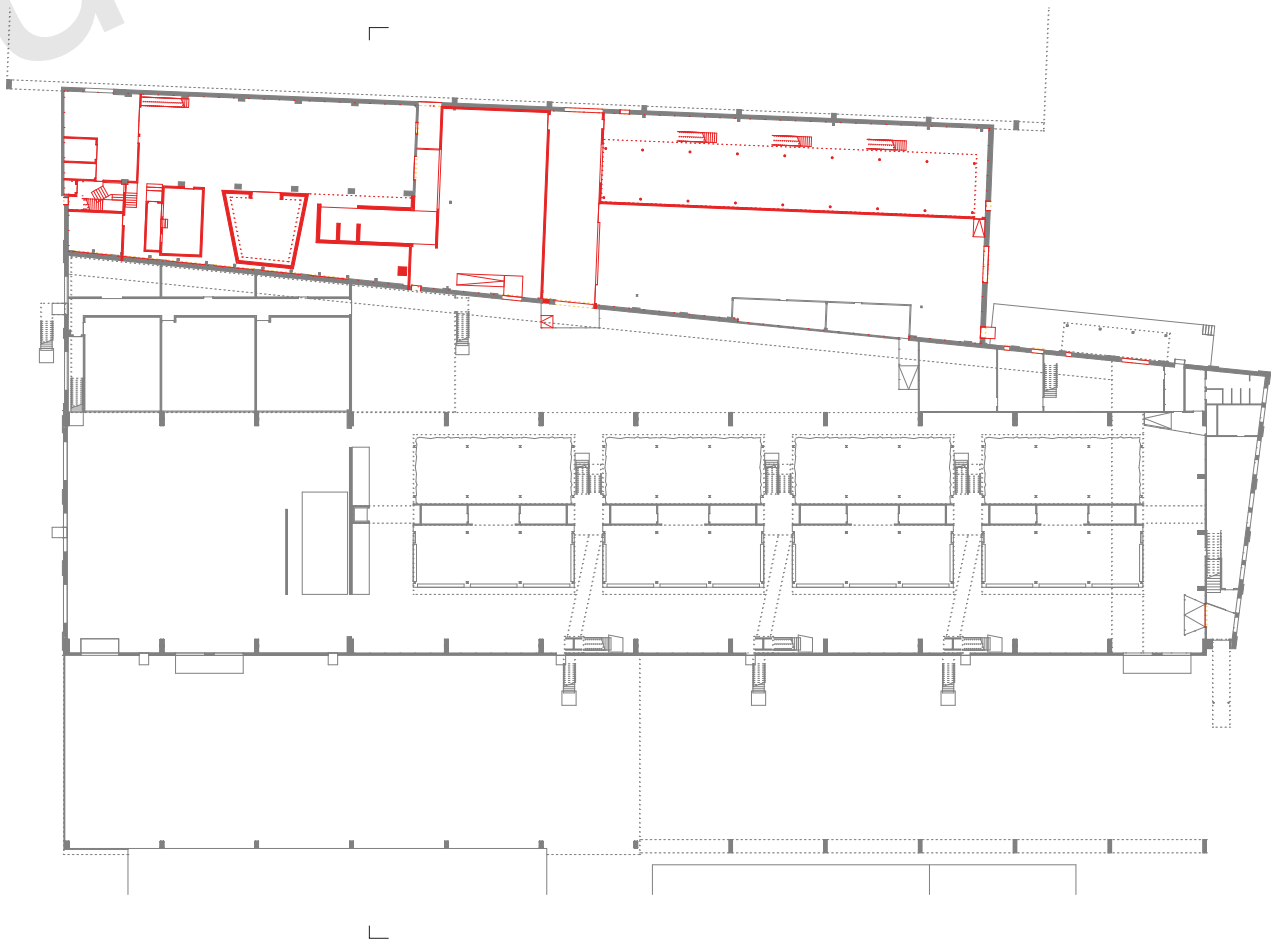
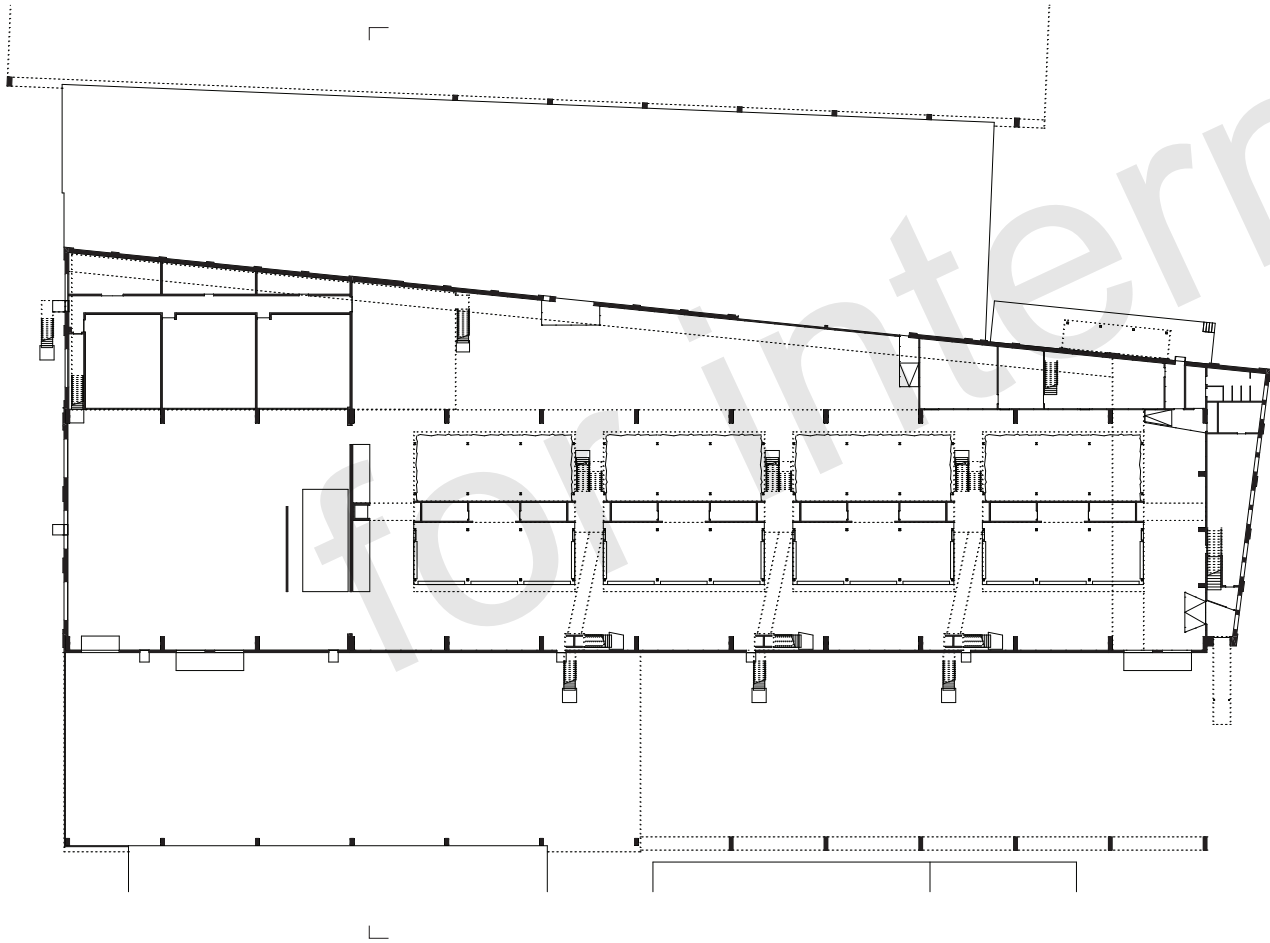
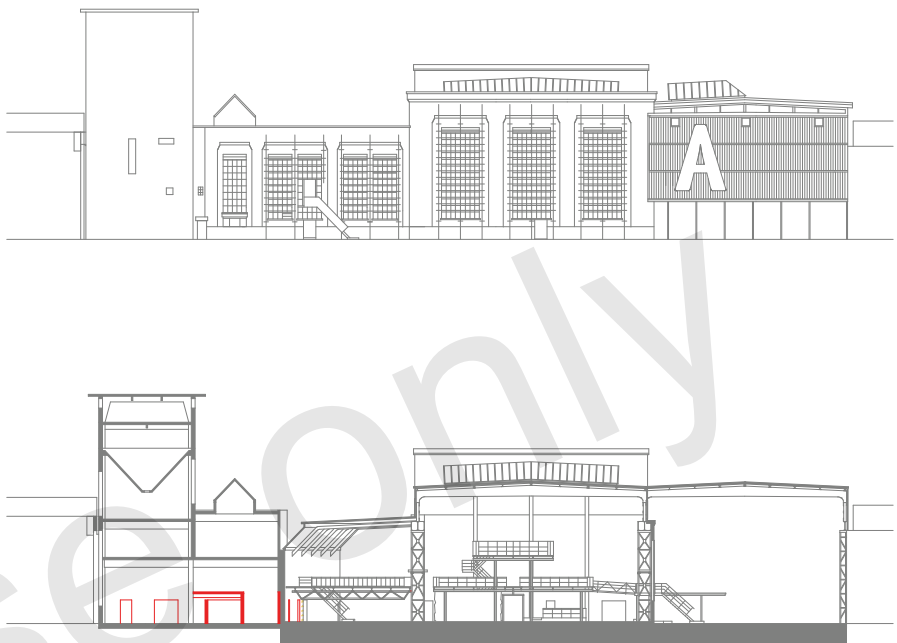
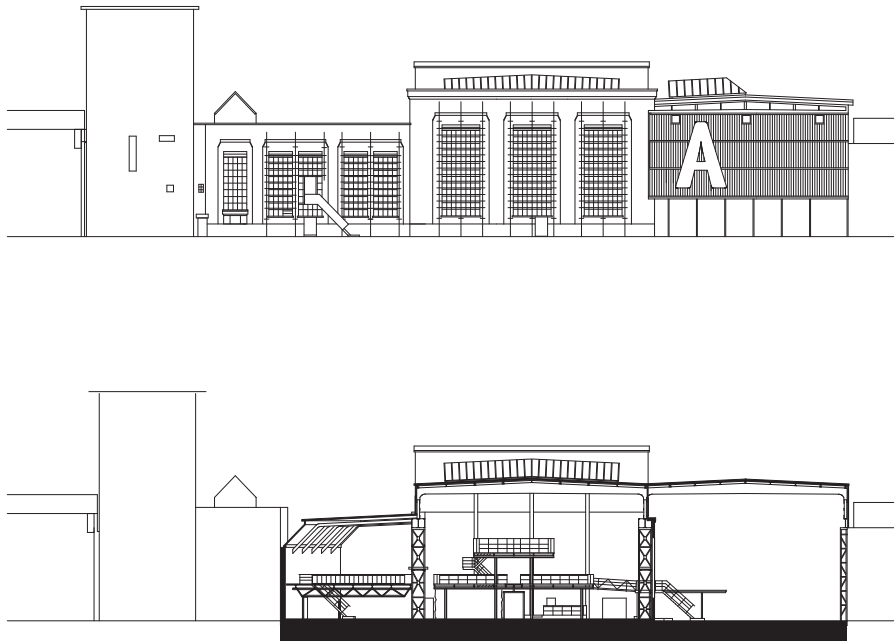
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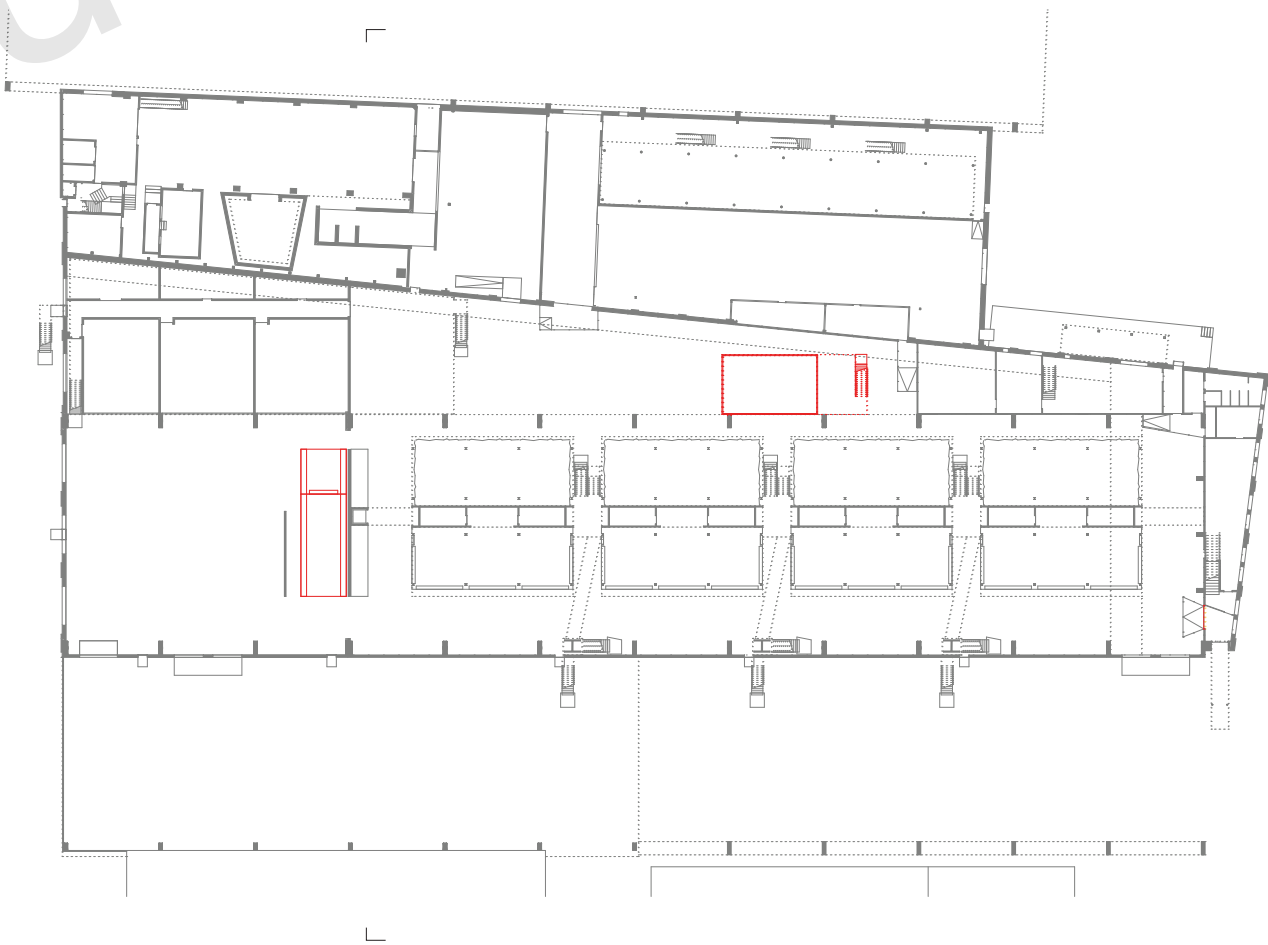
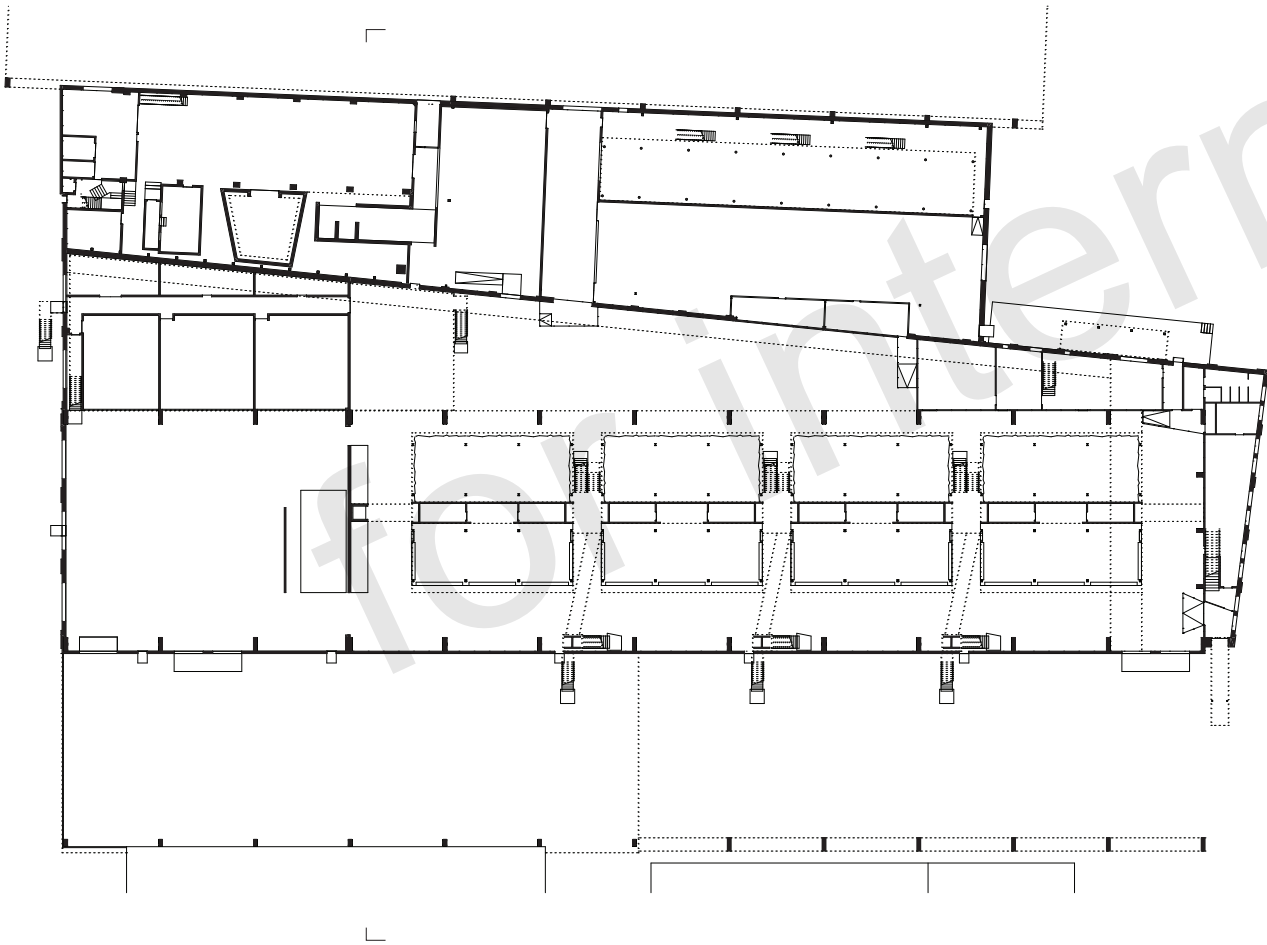
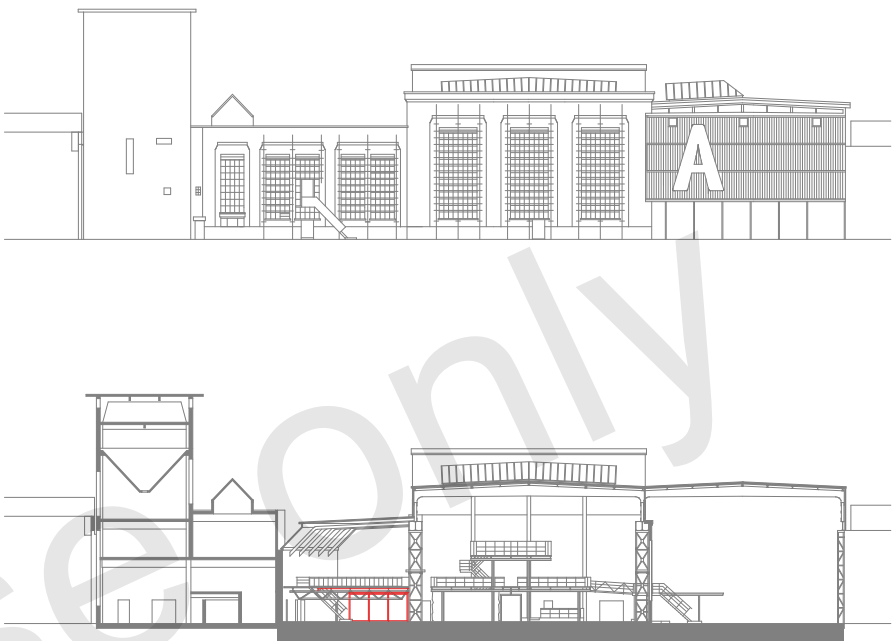
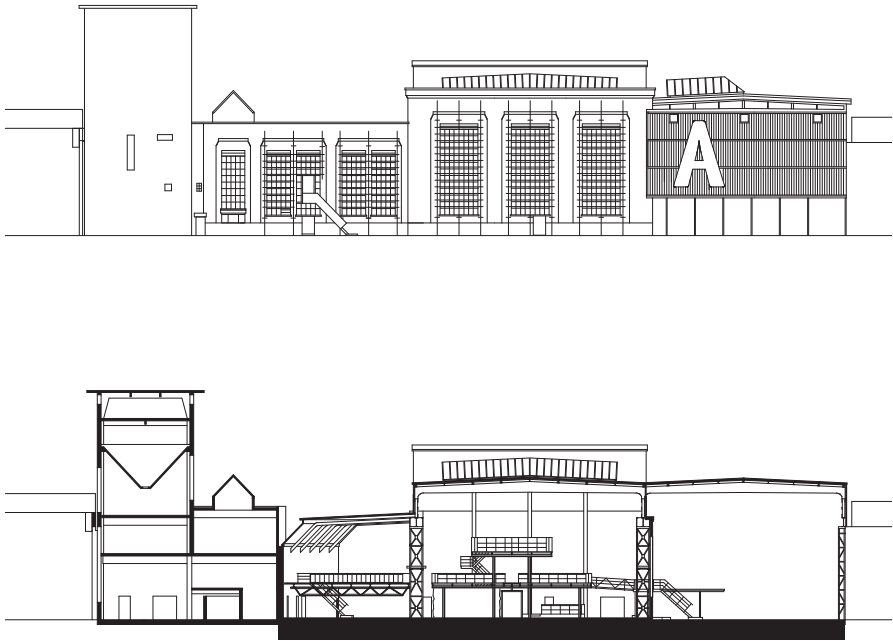
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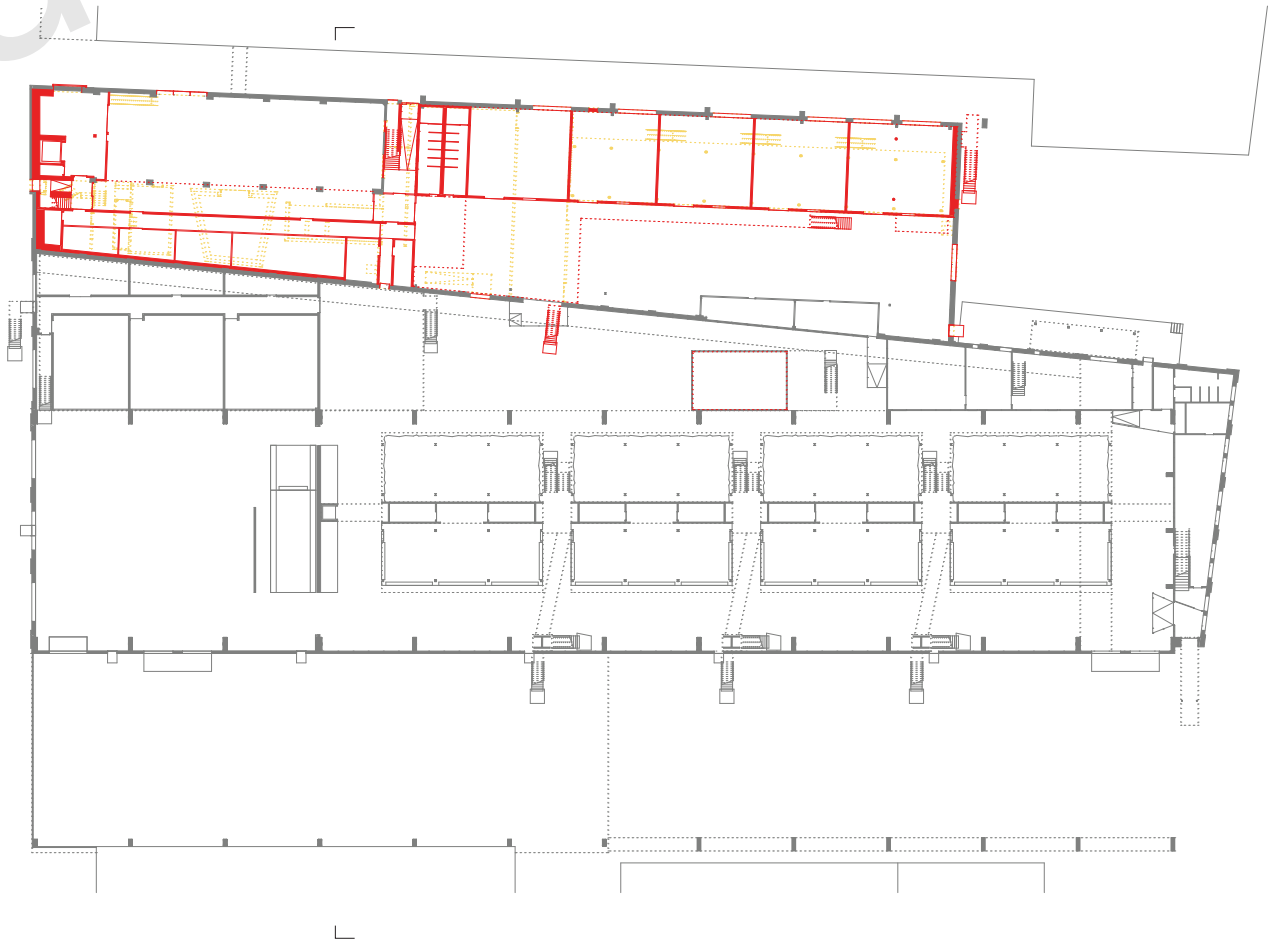
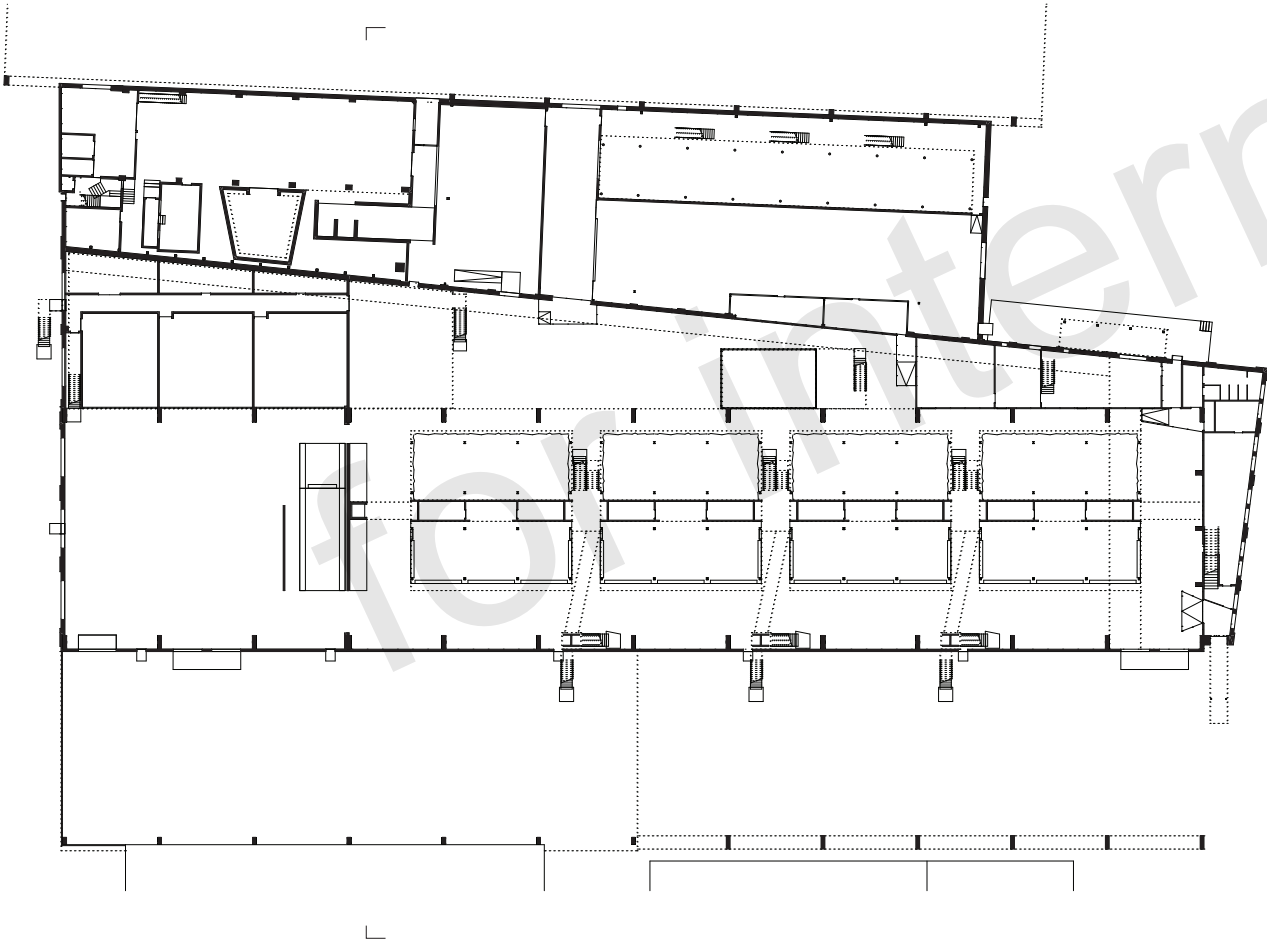
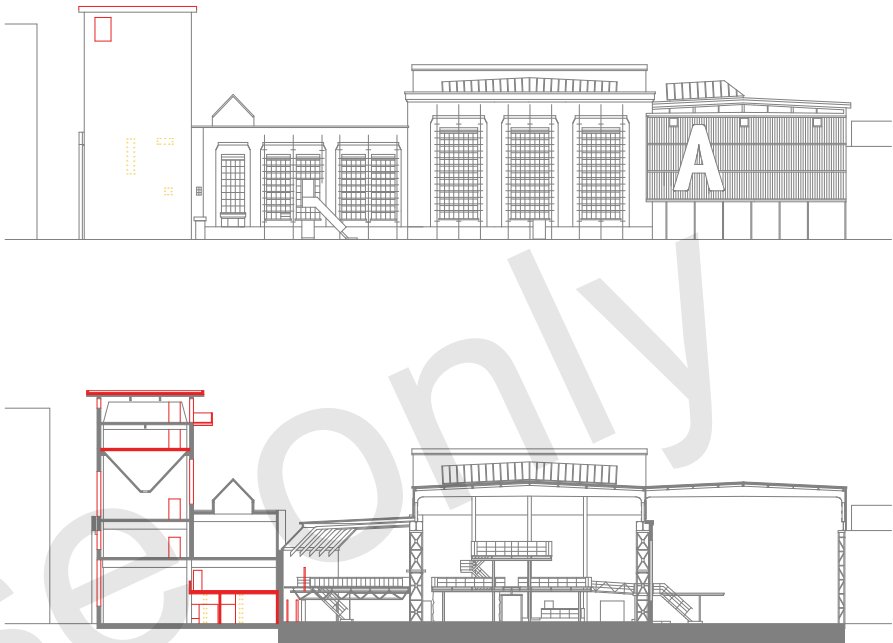
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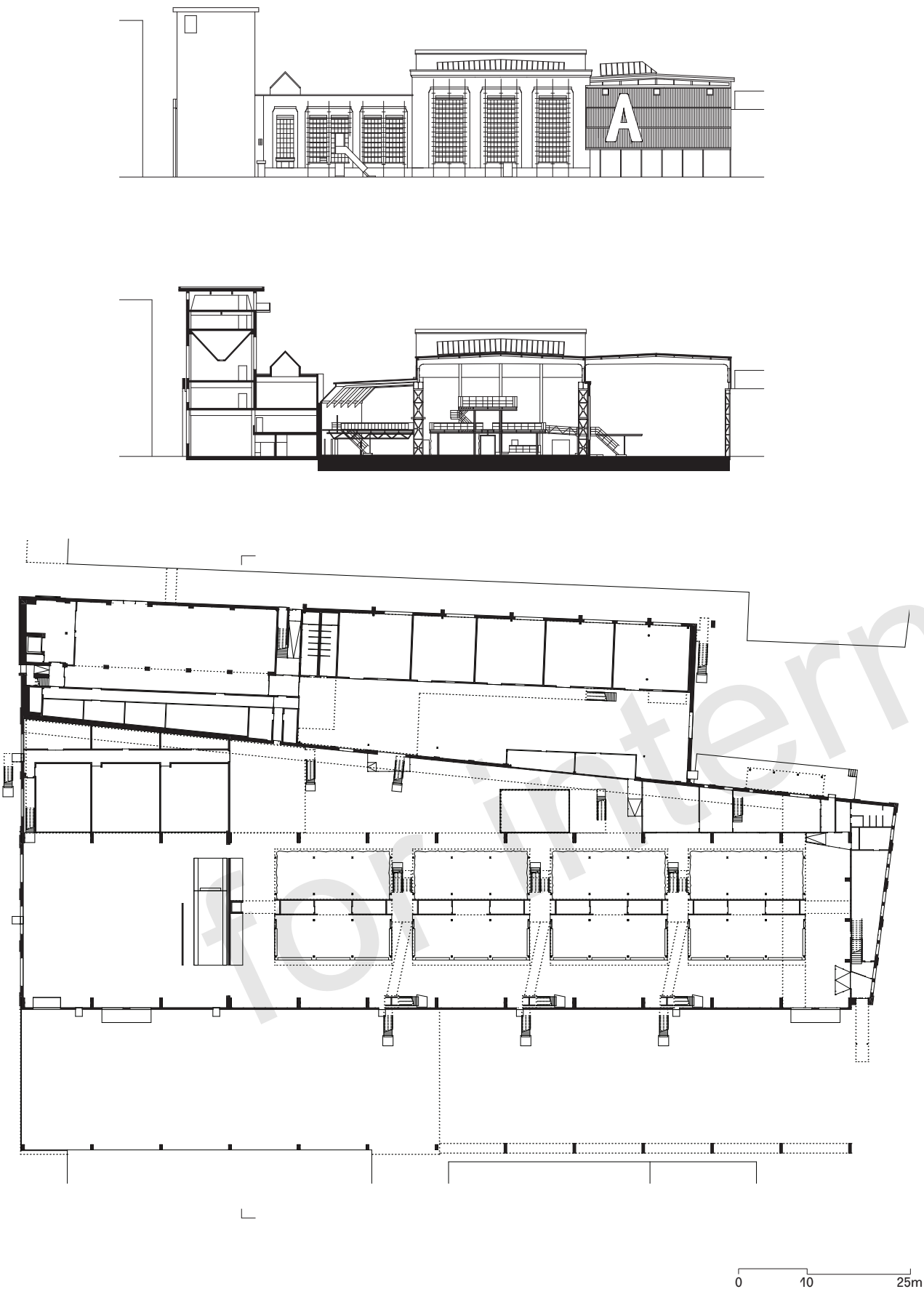
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Notes

1. The building Halle 180, used as a metal workshop, dates back to 1924. The adjacent buildings toward the south were added later: Halle 189 in 1941 as a coal stockyard and gas power station, and Halle 191 as an additional workshop. With no original drawings at hand, the ground floor, the elevation and section have been edited retrospectively, starting from the status of the reuse of Halle 180 in 1991. To redraw its floor plan, elevation, and section the author used the drawing of the conversion published in *Werk, Bauen + Wohnen* by Hermann Eppler and Stephan Mäder (H. Eppler, S. Mäder, *Provisorium Architekturabteilung Technikum Winterthur*, 1991, <https://doi.org/10.5169/SEALS-60095>) along photos showing the transformation and historic images published by Stephan Mäder in 2008 (S. Mäder, *Halle 180: Architekturschule in einer Industriehalle*, in «Carte blanche» 8, ZHAW, Departement Architektur, Gestaltung und Bauingenieurwesen, Winterthur 2008.)
2. After the factory site was abandoned in the 1980s in connection with the oil crisis, the site was the subject of several feasibility studies and competitions, all of which failed. It was then decided to rethink and transform the area step by step and find new suitable uses for it, in the former industrial zone.
3. The hall is 120 m long, 25 m wide and 14 m high; it was originally sized as required for the production of long pipes and pressure tanks, and consists of wide solid-wall beams, supported by riveted metal-framework columns. It is mainly provided with light through the gablerooft-shaped skylights, a device often used by Séquin & Knobel. Lateral light falls through the recessed window strips and the large glazing in the longitudinal wall to the north. Toward the street, in the west the hall ends with a massive brickwork building. Additional masonry is only used for the infill in the side walls.
4. «With this hybrid construction, the Kesselschmiede shows, in contrast to earlier, less compromising Sulzer buildings, the transition from traditional building to modernity» (Hans-Peter Bärtschi in *TECH-info*, 1992, from S. Mäder, op. cit.).
4. «The only thing that is certain is uncertainty. The interim in an industrial hall

- represents an experiment», Stephan Mäder, former director of the school, explained. From 1990 to 1991 he worked intensively with the students on the concept of the adaptive reuse project.
5. The rhythm of the existing structure, with a distance of 10 m. between the columns and the skylights, is in dialogue with the pattern of the platforms. Staircases placed every 20 m divide the platforms (17x17 m). 6 m distance to the old facade is maintained to improve the indoor climate and comfort. In addition, metal sheets are installed in the uninsulated hall to reduce cold-air-circulation. The pragmatic solution of stepping back from the exterior walls requires reactions in the volume of the structure. This requires an innovative approach regarding the depths of the rooms. In cross-section, the new platforms are slightly offset to the centerline of the existing beams and to the ridge line of the gable roof. This shift creates a wide access zone toward the north. The area to the south opens conically. Escape routes to the outside are created via walkways and stairs that penetrate the shell only at certain points. A pragmatic yet innovative spatial solution.
 6. Redrawing was made after the documentation in «Werk, Bauen + Wohnen», as mentioned above.
 7. Redrawing was made after the documentation in «Archi: rivista svizzera di architettura, ingegneria e urbanistica», s. n., 2006. *Trasformazione Della Sulzer Halle 180 a Winterthur*, <https://doi.org/10.5169/SEALS-133449>.
 8. Redrawing was made after the documentation in «Carte blanche», n° 8, 2008 as mentioned above.
 9. Redrawing was made after the documentation in S. Mäder, *Aquarium: Einbau in der Halle 180*, in «Carte blanche», n° 3, ZHAW, Departement Architektur, Gestaltung und Bauingenieurwesen, Winterthur 2007.
 10. Redrawing was made after the documentation published in H. Adam, *Anregende Gegensätze in der Bau- und Lernkultur*, in «Espazium», 2018, <https://www.espazium.ch/de/aktuelles/anregende-gegensaetze-der-bau-und-lernkultur>.

Espacio expositivo Serrería Belga
 Madrid, Spain

1928: Serrería Belga de los Pinares del Paular –architect: Manuel Álvarez Naya
 2006: Medialab-Prado-Espacio expositivo Serrería Belga –architect: Langarita-Navarro

1928 Serrería Belga

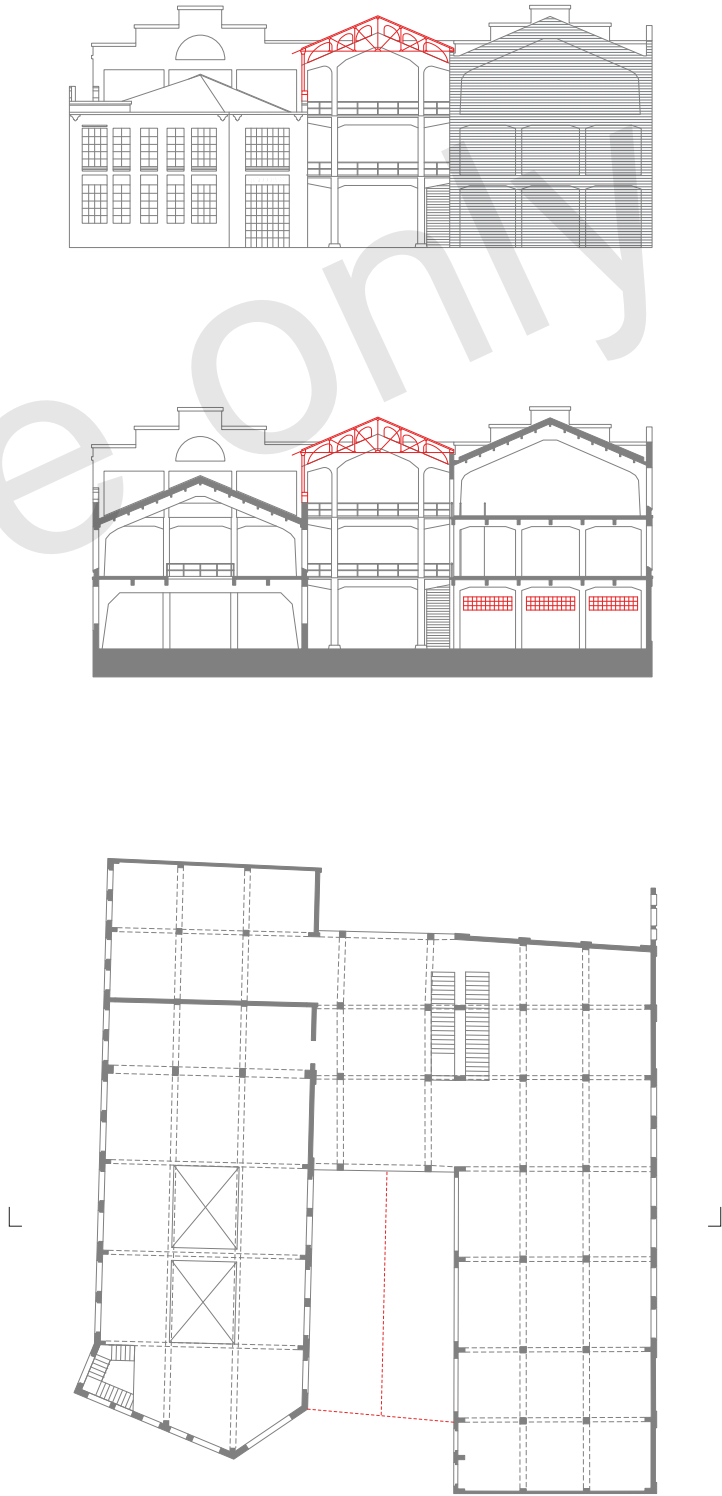
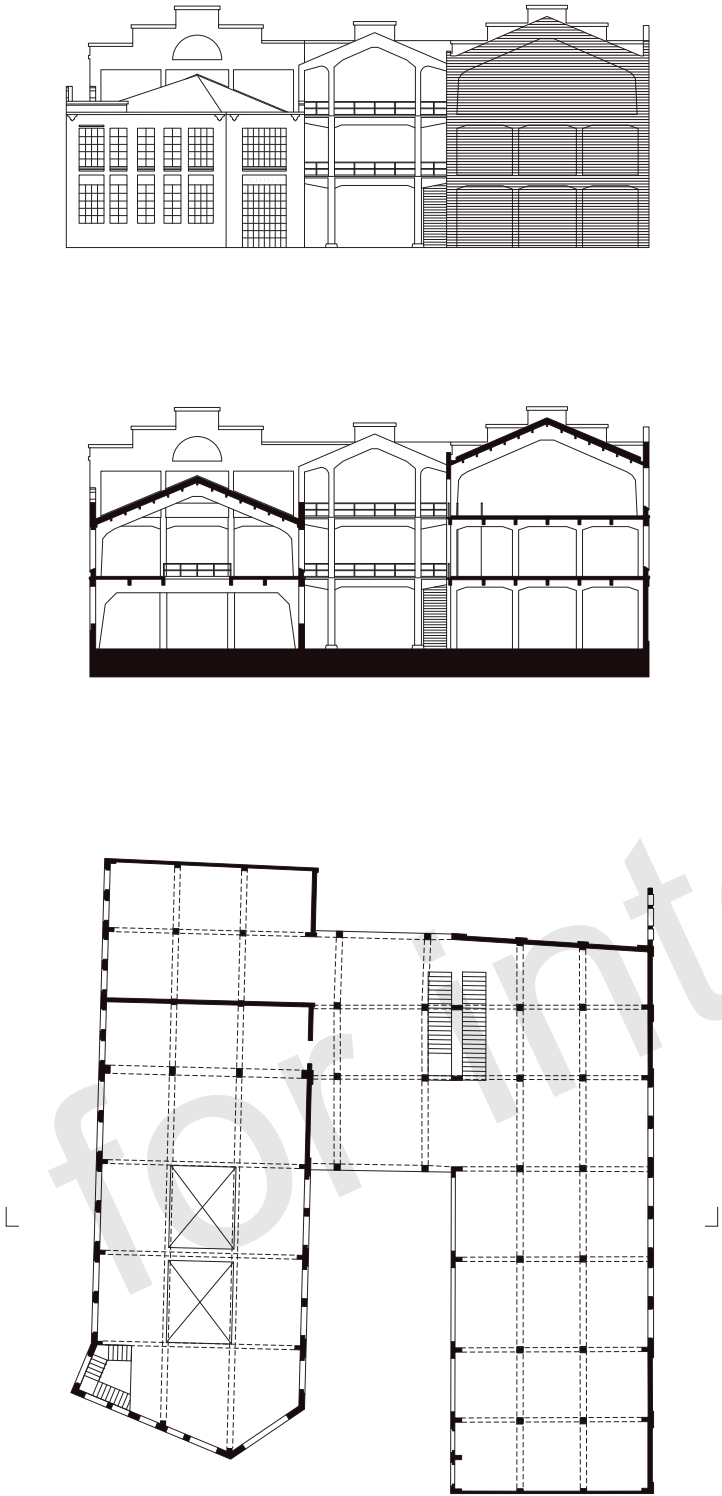
2013 Espacio expositivo Serrería Belga

Serrería Belga is a building located in the center of Madrid, near to the Atocha train station and the industrial area next to it, and close to the neighborhoods of Pacífico, Salamanca, and Delicias, which were growing areas at the beginning of the twentieth century, when the building was built to serve as sawmill and timber selling point for Sociedad Belga de los Pinares del Paular, whose pinewoods were up in the region’s mountains. The project by Manuel Álvarez Naya is an example of industrial architecture in Madrid characterized by the simplicity of the concrete structure, left exposed in the interior spaces, combined with a characteristic façade. The building is U-shaped and encloses an interior court. Lightning and ventilation were mainly provided by the big openings in the façades that faced the court, which had no windows in the central and the east aisles.

The relocation of industrial activity outside of the city led to the closure of the sawmill in the Nineties, which left the building in a state of abandonment until in 2006, when it underwent an intervention to transform it into the cultural center Medialab Prado. It became a hub open to the cultural community with a variety of participative activities. The program received the Princess Magriet Award by the European Cultural Foundation in 2016 while the intervention was nominated to the EUMies Award 2015.

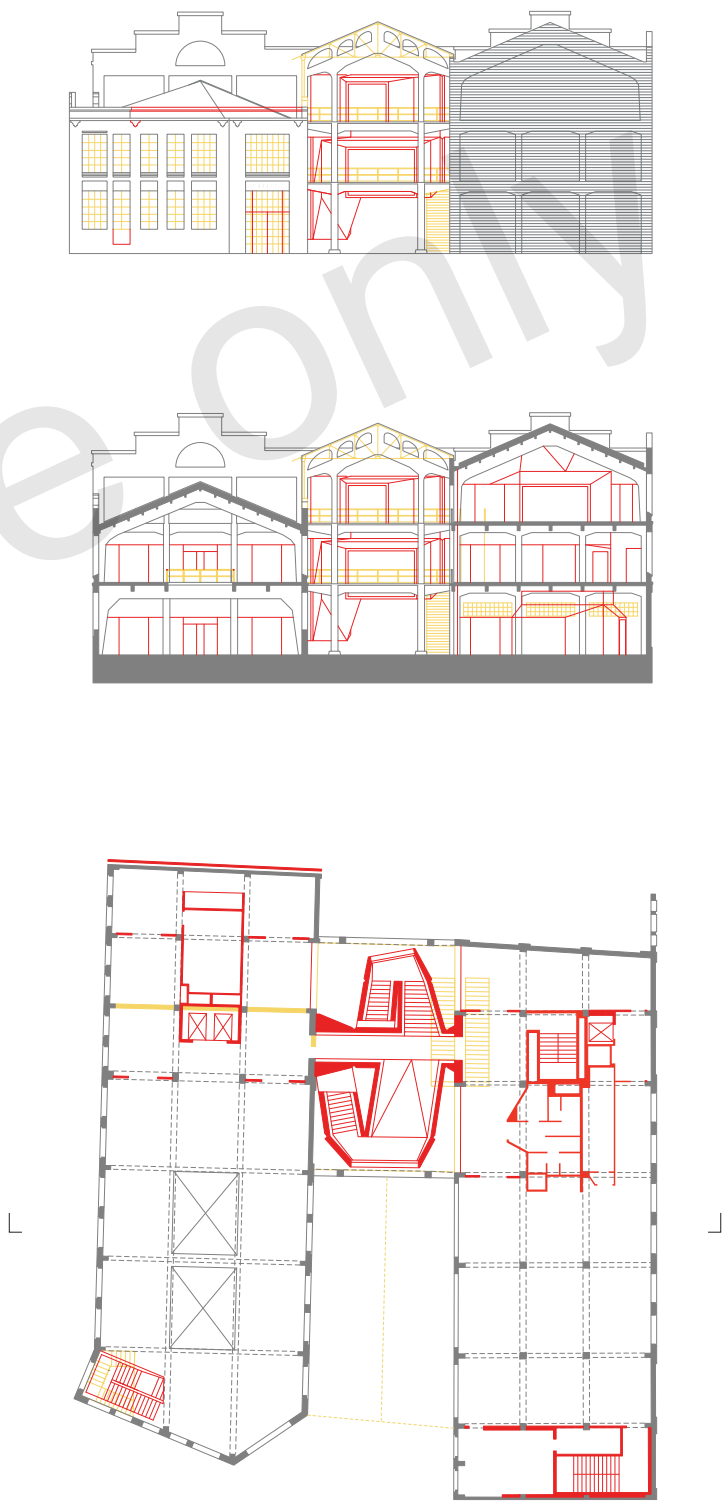
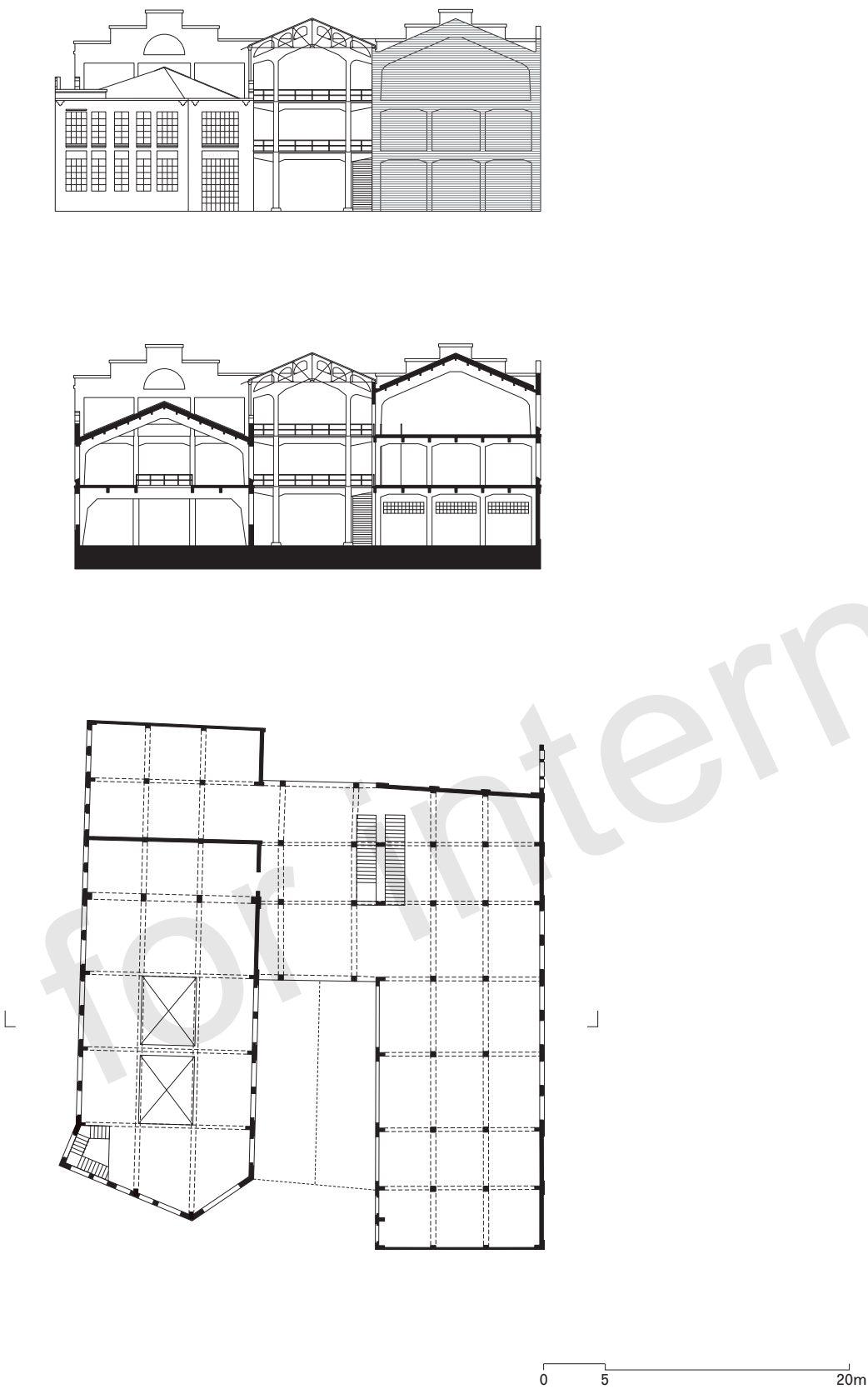
In 2021 the Medialab Prado was moved into another location so that the Serrería would become an exhibition space. The building has acquired its current function while maintaining its original architecture but also redefining its main access and circulations, and therefore, the main staircase has lost its use and readability as the spine of the complex.

Drawings Chronology¹
1928 / 2006: The building underwent small modifications to adapt to the changing needs of the sawmill. The business closed in the nineties and the building remained in disuse. In 1997 the building was protected through urban planning and in 2002 it was acquired by the municipality, which organized an architectural competition to reconvert the building into a cultural center².
2006 / 2013: In 2006 the competition was won by Spanish architecture studio Langarita-Navarro. The intervention introduced a main staircase that acted like a spine connecting all the spaces at the different levels. From there, the addition would expand into the existing warehouses to add the necessary services and facilities, while keeping it diaphanous the southern part of the spaces. This configuration allowed for the spaces to be multifunctional. The project also included a public square that serves as access from the north and connects with the Caixaforum museum, taking advantage of the demolition of an adjacent building³. The intervention kept exposed the concrete structure in the interior spaces, using wood and textiles to differentiate the new from the old. In 2021 the building changed function into an exhibition space, blinds had to be added for the windows but no changes were made to the architecture⁴.

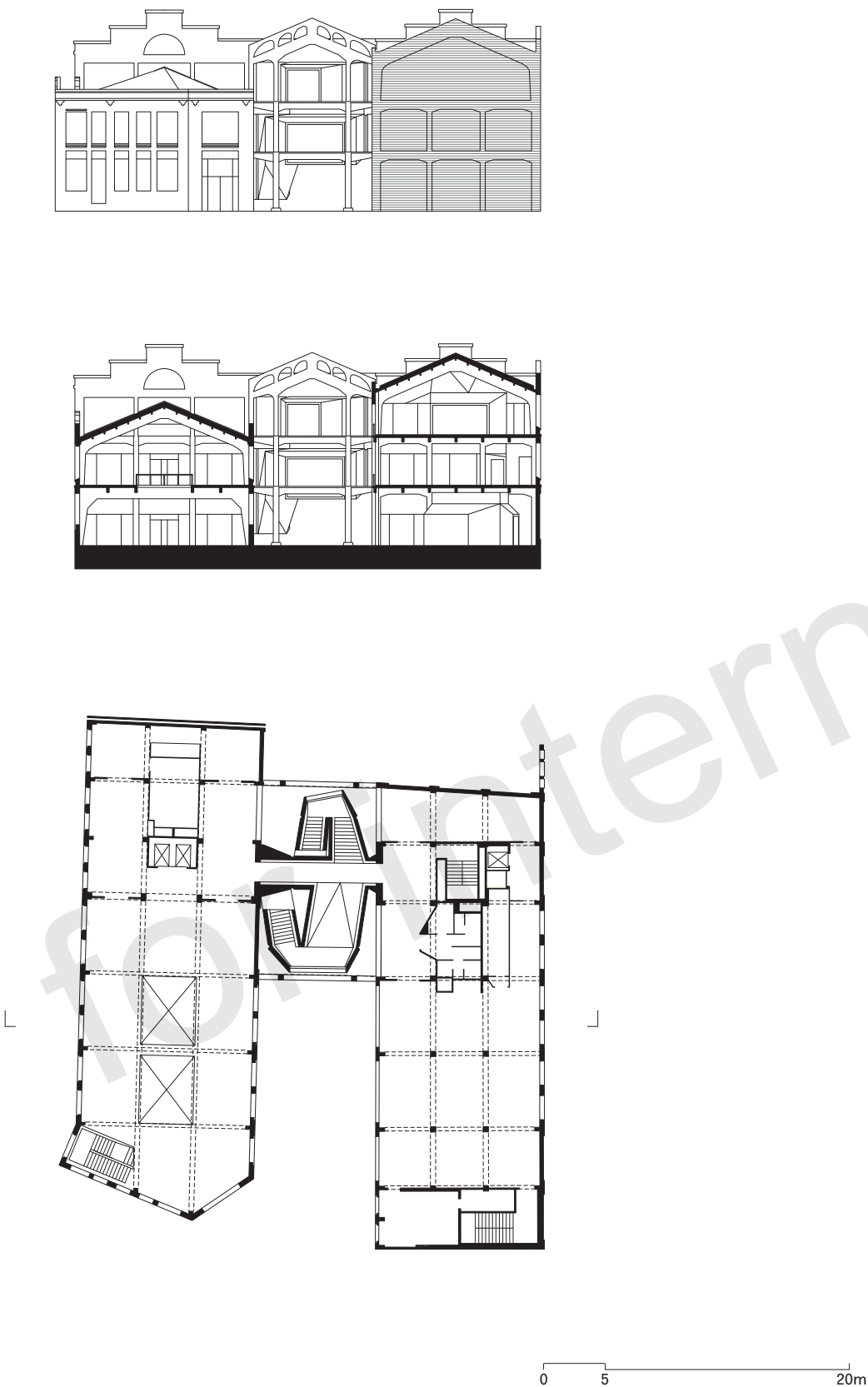


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Notes

1. Serrería Belga was built in different phases from 1924 to 1928. There is not a set of plans of the whole complex as we only have different uncomplete plans that include unbuilt elements; therefore, the author believes that probably, the spatial configuration of the first floor in 2006 was the same as the original one, as documented in images in: Fundación COAM. *Memoria histórica para el proyecto de rehabilitación de las Serrerías Belgas de los Pinares del Paular*, 2006, <https://patrimoniopaisaje.madrid.es/FWPProjects/monumenta/contenidos/Monografias/ficheros/Serrerias-Belgas.Memoria-Historica.pdf>. *Pinar de los Belgas. Historia*, <https://www.pinarbelgas.com/historia/>.
2. C. Burgos Vargas, "Preserving Preservation. Emerging Heritage values in Medialab Prado (Madrid)", in C. Bellanca, S. Mora Alonso-Muñoyerro, and C. Antonini Lanari (eds.), *Roma, capitale d'Italia 150 anni dopo*, vol. 2, Artemide, 2021, pp. 92-10.

3. A. Alonso and V. Acebo. *La Cosa contra La Serrería: Medialab Prado*, in «Revista Arquitectura», n° 366, pp. 26-53; *Intermediae Prado*, in «a+t: Civilities II», pp. 142-151.
4. COAM, *Informe sobre el edificio y la rehabilitación de la Serrería Belga para Medialab-Prado*, 2021, <https://www.coam.org/media/Default%20Files/actualidad/noticias/docs/2021/03%20marzo/NFORME%20MEDIAL-AB-PRADO%2011%20DE%20MARZO%202021.pdf>. S. Pérez Mendoza. *El Ayuntamiento de Madrid desmonta Medialab Prado a toda prisa*, in «elDiario.es», 16 / 03 / 2021, https://www.eldiario.es/madrid/ayuntamiento-madrid-desmonta-medialab-prisa-trabajadores-piden-paralizar-traslado_1_7303782.html.

63rd House
 Chicago, USA

1941: US Post Office
 2003: Salvation Army Family Store
 2024: 63rd House –architect: Studio Gang, Libr Ink, Beehyyve.

1941 US Post Office 2024 63rd House

The US Post Office building, located along the 63rd St commercial corridor in Chicago, was originally built in 1941. It served the neighborhood of Chicago Lawn until 2003, when it was bought by the Salvation Army to operate as a thrift store, and was ultimately left vacant in 2019. In 2021, the abandoned former post office was sold to become 63rd House, a multi-functional community hub and apparel manufacturing headquarters for Blue Tin Production (BTP), a worker’s co-operative run by immigrants, refugees, and working-class women of color. The building was designed by Libr Ink, Beehyyve, and Studio Gang¹ in close collaboration with community partners and neighborhood residents. The design draws on BTP’s values of radical transparency in fashion and considers how this concept translates to architecture through materiality, circulation and flow, light, views, sound, and enclosure.

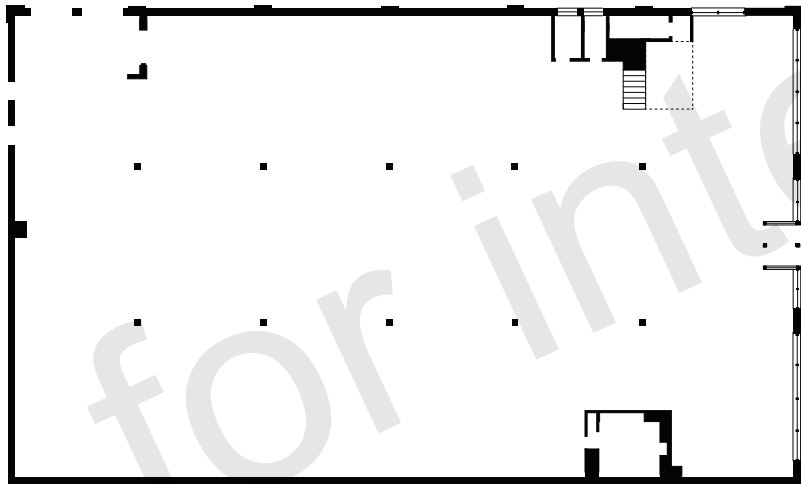
The sweatshop as an architectural typology has historically operated as a “black box” where violence against workers can be hidden and labor practices are controlled and optimized. Architecturally, this involves an open floor plate of production organized along a regulated grid with limited lighting and views. Although the building was not originally designed as a factory, its previous use as a century post office in the 20th century required it to be designed in such a way so as to “permit economical operation and maintenance”², which resulted in a similarly gridded layout.

The design of 63rd House challenges the “black box” typology by using curtains and other flexible partitions to disrupt the regulated grid of steel columns, have light filtering into the building, and create varying degrees of openness or enclosure around a restored atrium. By doing so, the design allows workers, innovators, and artists to use the space for activating the open floor plate with unconventional program adjacencies: garment manufacturing, community co-working, lounging, cooking, meditation, therapy, and art.

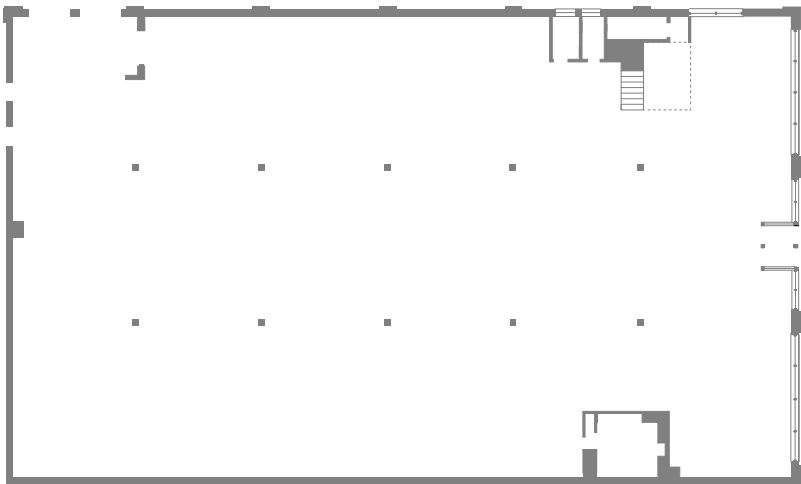
Drawings Chronology³

1941 / 2003: When the building was acquired by the Salvation Army in 2003, the majority of the glazing was replaced with solid masonry and / or metal panels at the central atrium pop-up, the storefront transoms, and all facade windows⁴.

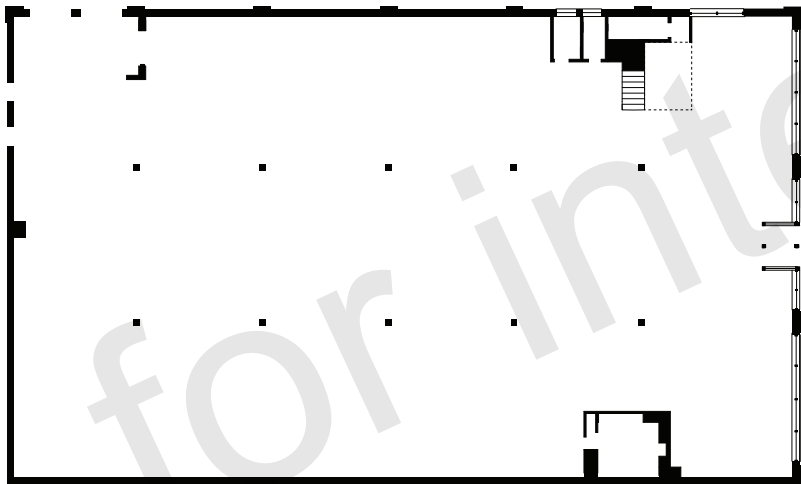
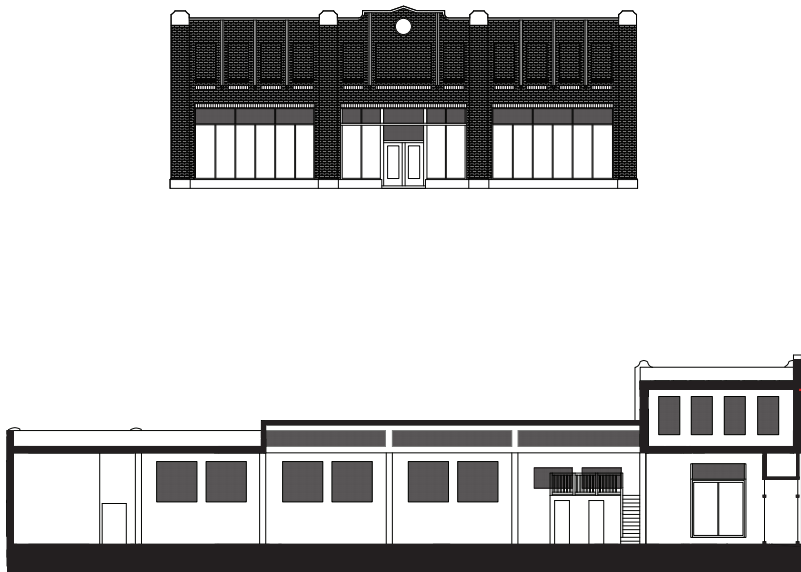
2003 / 2019 / 2024: In 2019, the building was left vacant and began to fall into disrepair. In 2021, the building was acquired by Blue Tin Productions (BTP), who worked with Studio Gang, Beehyyve, and Libr Ink to transform it into a multi-functional community hub and apparel manufacturing headquarters for the co-op. The building underwent several alterations⁵: Full demolition of all interior elements besides the primary structure. Full roof removal and replacement including a new terrace and greenroof. Full build-out of the interior, including millwork, flexible partitions, feature stair to a mezzanine, two egress stairs and an elevator to the second floor, accessible ramps, and spaces for reading, lounging, cooking, praying, meeting, co-working, therapy, and apparel manufacturing. Restoration of all existing glazing openings. Upgrade of all plumbing, mechanical, and electrical systems to energy efficient systems, including new geothermal wells and solar panels.



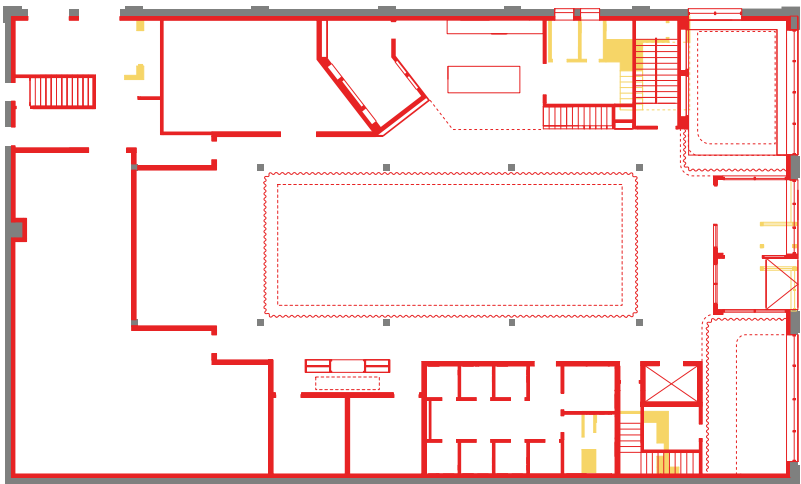
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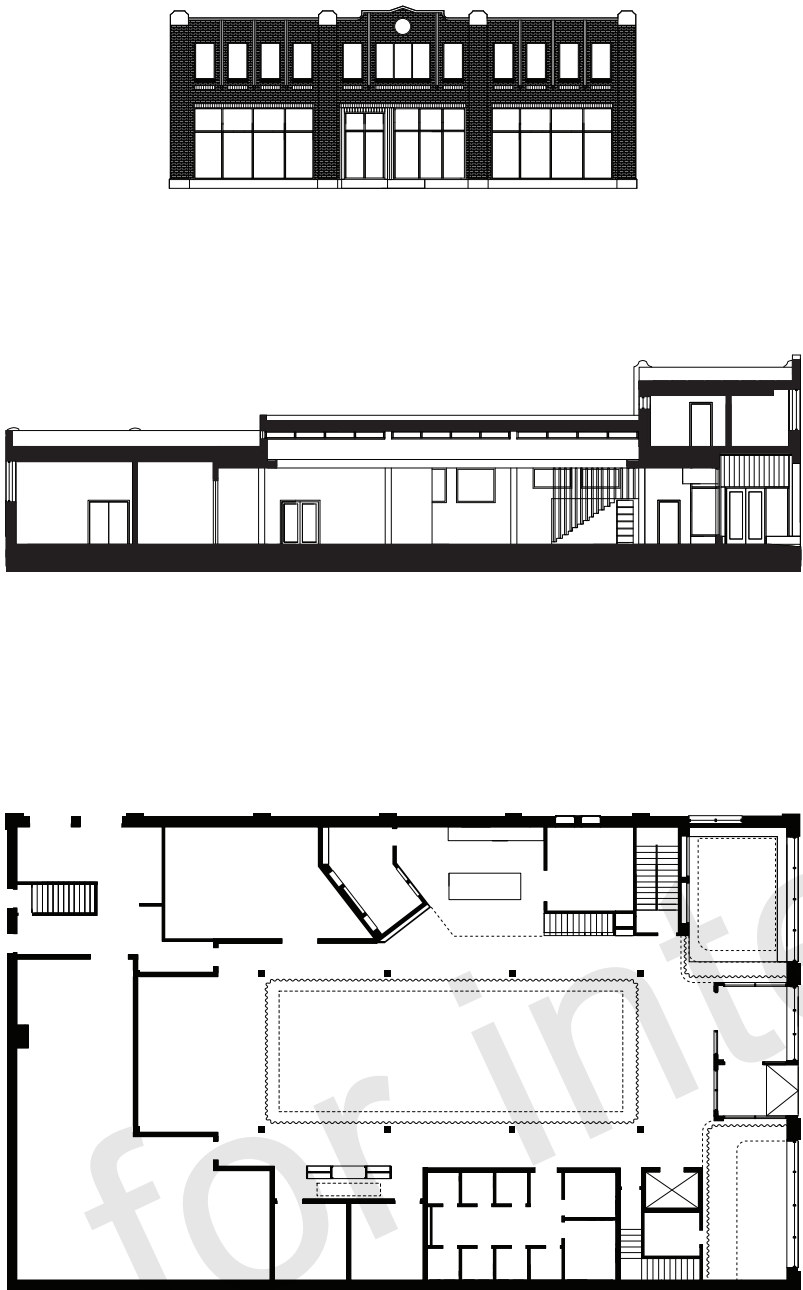
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Notes

1. The concept design was initiated and led by Noora Aljabi during her time at Studio Gang. The final design and construction was developed by Beehyyve and Libr Ink (Noora Aljabi).
2. United States Postal Service, *History of Post Office Construction 1900-1940*, 1982, p. 8.
3. Construction of the US Post Office Building on 63rd Street was completed its around 1941, likely as part of the expansion of the governmental Public Buildings Program in the 1930s (United States Postal Service, op. cit., p. 14). The architect originally tasked with the building's design is unknown, and without any original drawings on hand, the ground floor, section, and ele-

- vation have been edited retrospectively, using the current existing building survey drawings as a base and assuming that the only significant change to the building since its construction was the infilling of all exterior glazing.
4. According to the City of Chicago's Building Records, no major work was done on the building in the period when it operated as a Salvation Army thrift store, besides the infilling of the exterior glazing and a renovation of the interior stairs in 2011.
5. The drawings shown here are based on the final construction drawing set produced by Libr Ink and Beehyyve. Construction of the 63rd House space is estimated to begin in 2024.

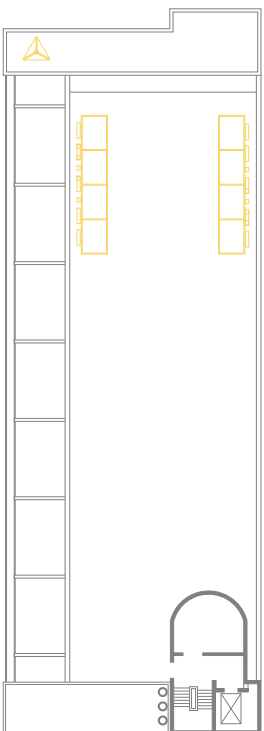
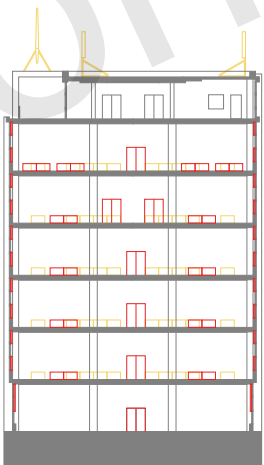
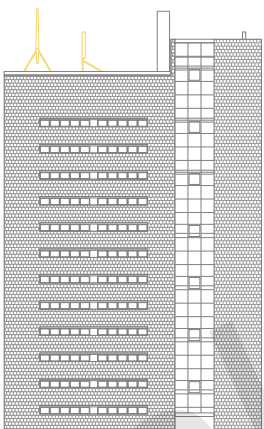
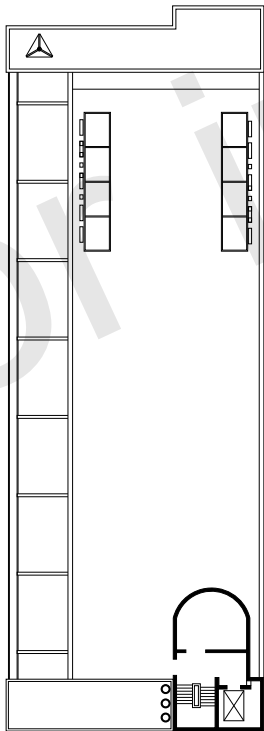
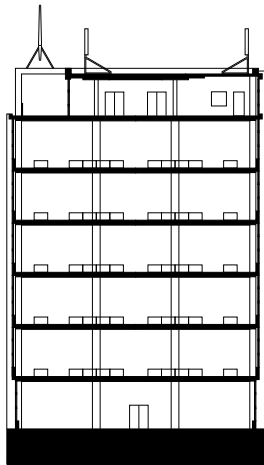
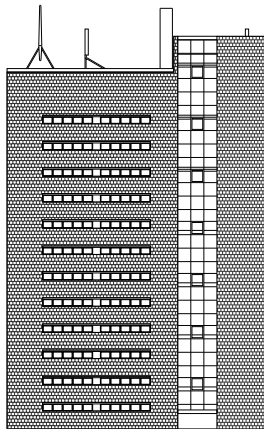
The New Farm
 Den Haag, The Netherlands

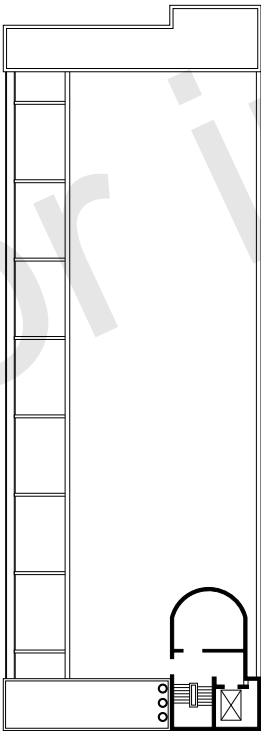
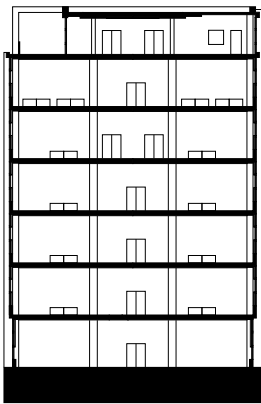
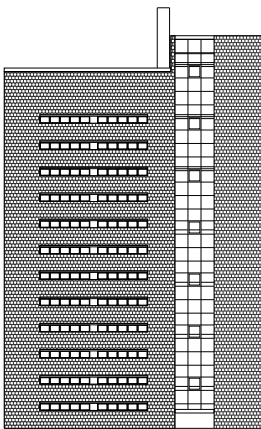
1956: Philips Telecommunications Factory –architect: Dirk Roosenburg
 1998: office complex De Schilde
 2016: Urban Farmers –architect: Space&Matter
 2018: The New Farm –architect: Corine Keus

1956 Philips Telecommunications Factory 2018 The New Farm

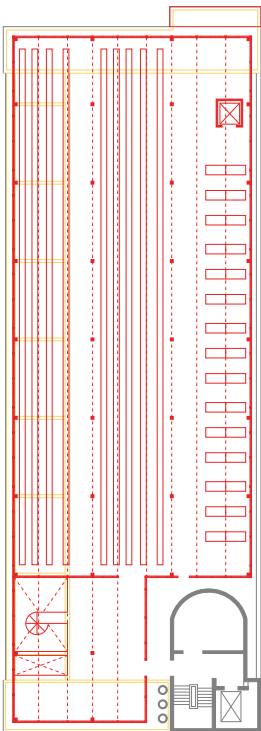
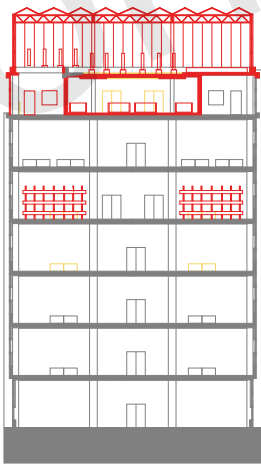
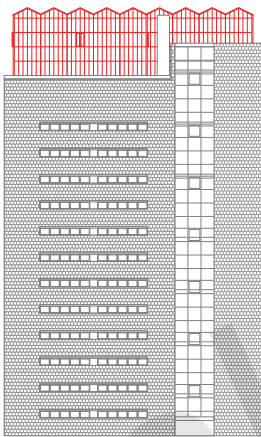
Designed in 1956 by architect Dirk Roosenburg, the building on Televisiestraat 2¹ in The Hague was originally built by Philips Telecommunications as a factory to produce components for telephone systems. Roosenburg designed a 35 meters high factory building consisting of six floors. Five floors were for production departments and warehouses. On the top floor, on the river side, there was a large canteen with a communal terrace alongside, and offices in the rear. In 1994, production ceased and after that, in 1998 the industrial building was completely redeveloped into offices under the name De Schilde. During the 1990s this building underwent a restoration project that altered some of its most original qualitative components, such as the transparency of the façade, and in 2000s remained unused for several years. In 2013, the company Urban Farmers (out of business since 2018) won the entrepreneurial challenge for Urban Agriculture. The building was developed with a focus on innovative, high-tech forms of vertical urban agriculture. The project was carried out by Space&Matter, an Amsterdam-based design studio, and consisted of a 1,200 square meter greenhouse on the rooftop with hydroponics system and 900 square meters for fish cultivation on the floor below. After this realization in 2016, the unoccupied building below started to attract several innovative food start-ups, thus transforming the vacant spaces, but despite global fascination with the concept, the plan did not result in sustainable occupancy and in 2018 Urban Farmers went bankrupt. Despite this event, the redevelopment of the building in its whole continued, under the name The New Farm. At present, the building operates as an incubator for circular, innovative, and social entrepreneurs from The Hague and surrounding areas. Architect Corine Keus is overseeing a new renovation project that encompasses the entire building and aims to restore the original floor height and glass walls.

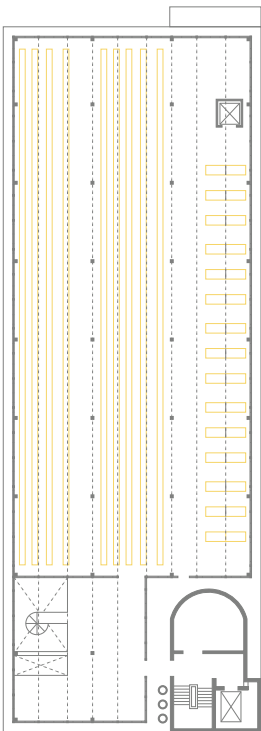
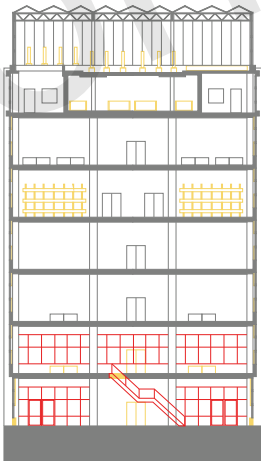
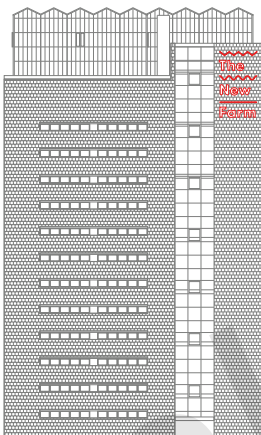
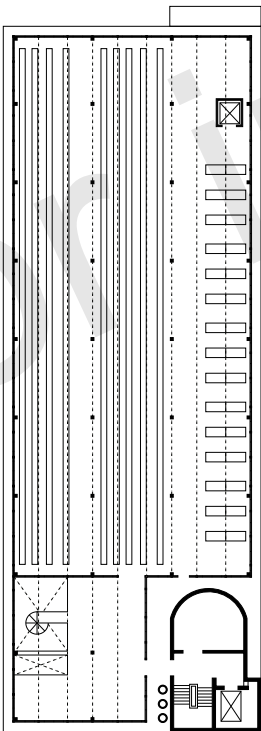
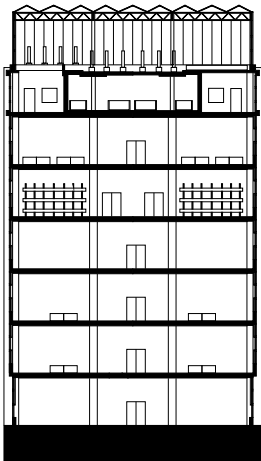
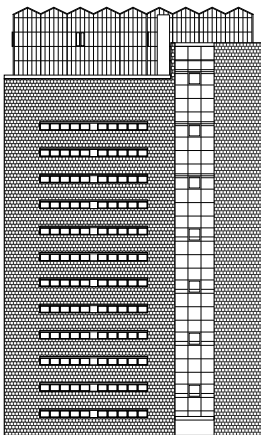
Drawings Chronology¹
1958 / 1998: After Philips closed in 1994, the building was converted into an office complex².
1998 / 2016: From 2013, the roof floor and sixth floor were transformed into one of Europe’s largest urban farms³.
2016 / 2018: Since 2018, the rooftop greenhouse spaces are vacant, but the rest of the building is undergoing a renovation process⁴.

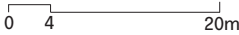
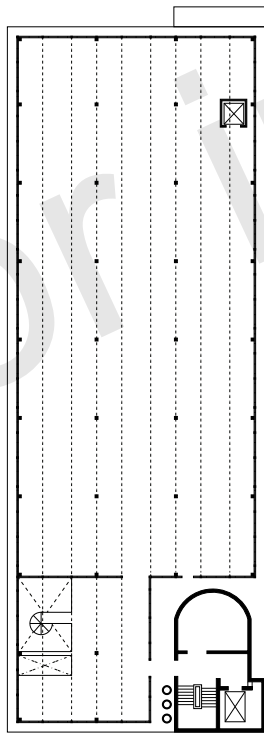
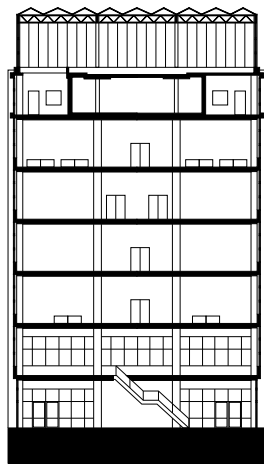
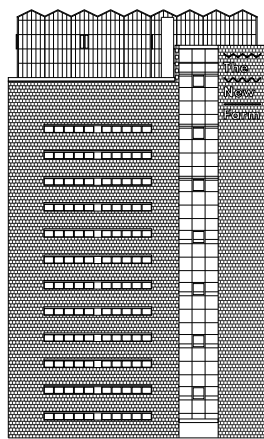




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Notes

1. In the 1954, the area around Fruitweg in The Hague is zoned as an industrial park. Already in the Thirties some companies settled here, on the railroad side. The streets of the industrial area were given names derived from technology. The Philips Telecommunications Factory on Televisiestraat was one of the last large companies to settle in the industrial area in 1958. Due to the great increase in the number of telephone connections in the Netherlands, Philips Telecommunications' business increased greatly. The old factory no longer met the modern demands for production and had become too small. Architect Dirk Roosenburg (1887-1962) served as a dedicated architect for Philips from 1919 onward. In his documented "works list", Roosenburg detailed 40 projects undertaken for Philips. This complex effectively consolidated Philips' dispersed workshops and warehouses. The facility encompassed five floors dedicated to production departments and warehouses, while the top floor featured a spacious canteen with a terrace on the Fruitweg side and an office. A shipping platform with a protruding awning was situated on the first floor at the rear corner. The long side facades are glass curtain walls composed of square windows, which are blue sealed on the upper levels. On the upper floor terrace, the steel structure of the building continues. Both ends of the building are rather closed, only the two stairwells have a glass facade, the rest is a wide brick wall with narrow window sections (in: D. van Hoogstraten, *Dirk Roosenburg*, Rotterdam 2005). Without any original drawings at hand, the elevation, the section and the plan have been edited, starting from the actual configuration of The New Farm, and comparing it with period photos (aerial photos and photos of interior spaces) visible on the website of SHIE (Stichting Haags Industrieel Erfgoed-The Hague Industrial Heritage Foundation), a foundation established in 1993 and active for more than 25 years in the field of inventorying, preserving and restoring industrial heritage in the Hague region (in: www.shie.nl).

2. In 1994 the Philips production in the Televisiestraat ended; at that time there were still 750 employees. In 1998 the factory was given the function of a company building, under the name De Schilde. Signs and telecommunications antennas are removed. The functional layout of each floor changes from productive to work space with desks and cubicles. The transparency of the facades is altered through a system of plastic shades that are applied internally to the curtain wall glass. Without any original drawings and looking retrospectively at the actual configuration, the author in the making of these drawings also used the historical Street View option introduced in Google Maps. comparing the current panoramic photos with those from 2008 and 2010.

3. In 2013, UrbanFarmers won the entrepreneurial challenge for Urban Agriculture. They built a circular rooftop "hydroponics" system with a greenhouse and fish farm directly below. The project was developed with a focus on innovative, high-tech forms of vertical urban agriculture. Food production started in 2016: a 1.200 m² roof greenhouse for specialized vegetables, a 370 m² covered fish farm and a 250 m² area for integrated processing and packaging. In addition, 250 m² within the farm were exclusively reserved for events and guided tours. The urban farm was initiated by the municipality of the Hague and realized by Urbanfarmers, a Swiss technology company focused on building food production facilities in cities. In 2018, the company declared bankruptcy and terminated production in the rooftop farm as it produced no revenues (in: M.

Negrello, *Architecture for urban agriculture. Spaces and architectures for commercial indoor "zero-acreage farms"*, Ph.D. thesis, Supervisors Matteo Robiglio, Roberta Ingaramo, Politecnico di Torino, 2019). The project was developed by Space&Matter, an Amsterdam-based design studio. When aligning the dimensions of the new greenhouse with the existing building's architecture, a conscious decision was made to preserve the characteristic shape of the greenhouse roofline. This choice was driven by its dual compatibility with the UrbanFarmers identity and its role in announcing the transformation of De Schilde into an urban farming hotspot. The deliberate introduction of a distinct gap between the preexisting building and the new addition allows for the independent consideration of the two entities or their collective perception as a unified whole. This approach is undertaken in order to pay homage to the architectural excellence and historical identity of the former telephone and television factory (in: www.spaceandmatter.nl). In order to realize the drawings for this intervention, the author contacted directly the Space&Matter architects who worked on the project, who kindly shared some of their original drawings. However, the built project is in many parts different from the one represented in the architects' drawings, so where there are discordant findings, the author relied primarily on the project photographs, which portray the actual state of the art more unequivocally.

4. After the realization of UrbanFarmers in 2016, the unoccupied building below started to attract innovative food start-ups, thus transforming the vacant space into a food innovation hub. Thus was born The New Farm: a stacked ecosystem of manufacturing companies focused on the circular economy, social innovation, and food production. Throughout 2017 and 2018, a substantial transformation unfolded across the curtain walls, ground floor, 1st and 4th floors of the former factory. The ground floor now accommodates catering facilities, while the 1st and 4th floors have been reconfigured to include a coffee roastery, among other facilities. This redesign involved the installation of wooden and steel interior facades, housing various features such as incubators, an oyster mushroom farm, and several food labs. In tandem with the internal refurbishments, efforts were directed toward the renewal of the facade glazing. The incorporation of new glass embedded with solar cells stands as a noteworthy addition, fostering a significant degree of self-sufficiency in energy for The New Farm. (in: www.breumelhofbouw.nl). Involved in this renewal process is Corine Keus, an architect based in The Hague, who has centered her efforts in restoring the transparency of the building as one of its most original qualitative components, which had completely disappeared due to the renovation in the 1990s. Corine Keus' design has reintroduced transparency to the structure while enhancing the openness and accessibility of the base. The innovative infill incorporated into the existing facade not only reinstates the original quality but also infuses a new and sustainable vitality into the building through the utilization of transparent solar panels for energy generation. The floor layout adopts a flexible building system inspired by greenhouse construction and aluminum sandwich wall elements. The establishment of a new entrance serves as the central reception area, featuring a void that opens up views throughout the building, imparting a markedly more expansive and accessible character. This transformative approach has visibly increased the building's accessibility (in: www.corinekeus.nl).

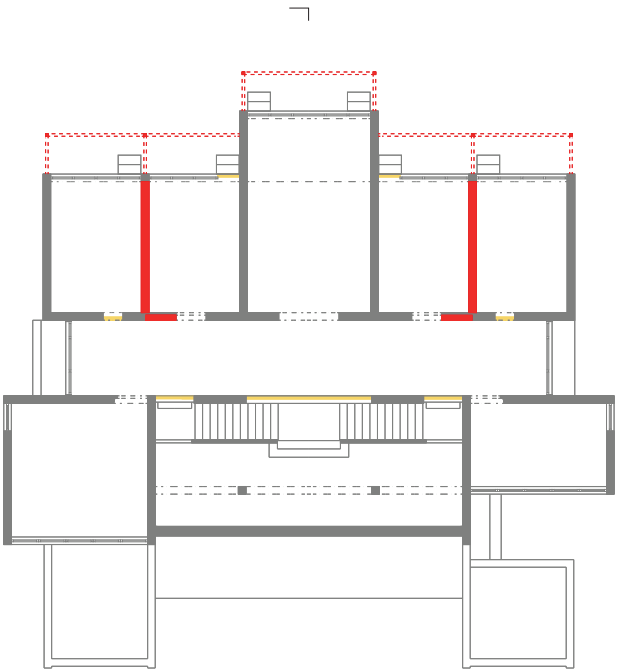
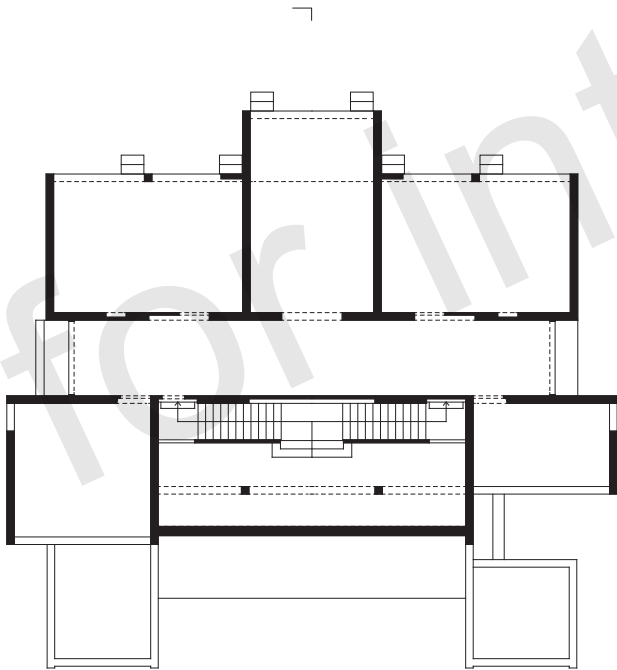
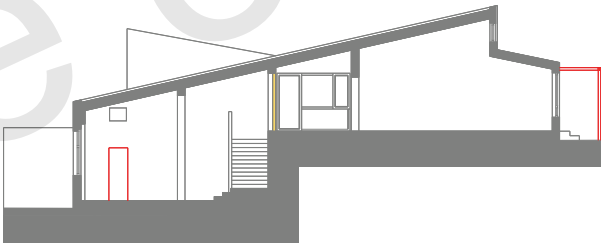
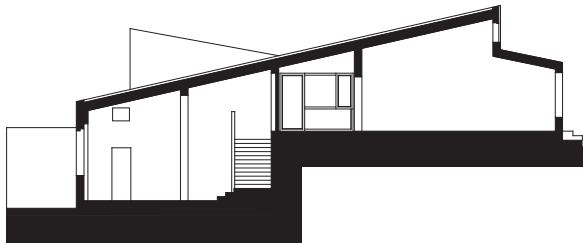
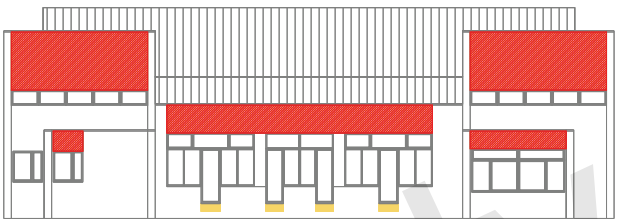
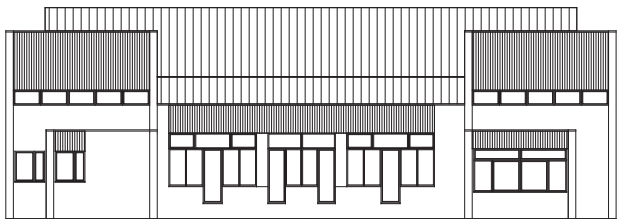
Casa Asilo
 Mazzarrone (Catania), Italy

1960: Kindergarten
 2018: Casa Asilo –architect: Maria Giuseppina Grasso Cannizzo

1960 Kindergarten 2018 Casa Asilo

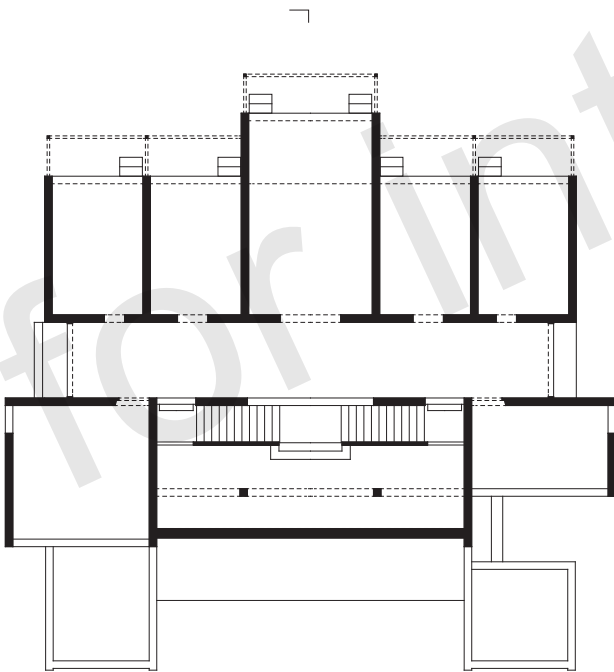
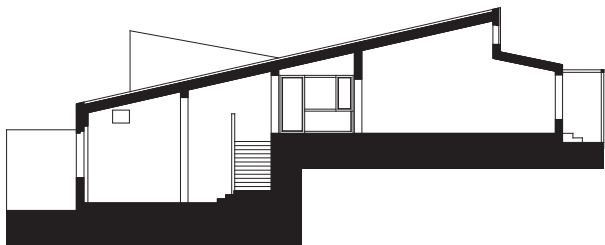
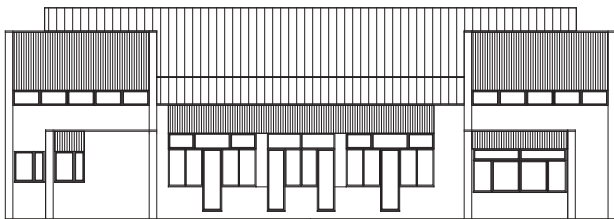
The kindergarten house in Mazzarrone (Sicily) is a reuse of an existing building curated by Maria Giuseppina Grasso Cannizzo. The school, an anonymous project from the 1960s, is reinterpreted by the architect through small variations and adaptations, recognizing the intrinsic value of the qualities of existing architecture and its affordances. MGGC operates on a principle of reducing the action of the project, bringing out how architectural design is above all intellectual work that aims to enhance the unexpected¹. The operation of adaptive reuse, from a kindergarten to a house, is carried out with no radical redesigning of space and with awareness and careful reading of the values that make space habitable, and is very clear: MGGC expresses the value of “making space” through objects. The project is a careful work on the affordances of the interior space that comes into relationship with the new projects, that is, with the system of furnishings that begin to “colonize” the interior space. It is clear that with the reduction of the design sign the need to work on the interiors and with objects emerges vigorously, for the qualification of the space, and therefore here the space becomes a place, inhabited by an archipelago of objects which with their oikological scope manage to design a new spatiality.

Drawings Chronology
1960 / 2018: The project envisages few but significant transformations². An “almost nothing” capable of preparing the architecture for a new and different function. Walls are added to define the room spaces on the upper level, and window shutters are lowered to make the transition to the garden more fluid. Asbestos corrugations in the facade are replaced with fiber cement ones.



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Notes

1. The kindergarten in Mazzarrone is a project that dates back to the 1960s, built by an unknown author. It is located on the edge of the town and was used as a kindergarten for years. Due to rapid obsolescence, it was replaced with a new building, but after that, the kindergarten was abandoned and was repeatedly vandalized. Its restoration of its original state was possible by reconstructing the various steps of its demolition and reconstruction, as illustrated in graphs by architect Maria Giuseppina Grasso Cannizzo. «A long and wide space, positioned at the highest level, crossing the entire building welcomes, establishes and organizes the relations between the rooms; the shortest sides open on one side towards the entrance and on the other towards a common external area. On the right, on one of the long sides, there are the classrooms, on the left the services and the access gates to the staircase: two opposite ramps lead to the lower level opening onto the space for meals and games and through large glass surfaces on the valley and the garden. On the blind sides there are technical and service areas. From all the spaces, at different altitudes, you can reach the garden» in: *Maria Giuseppina Grasso Cannizzo-Intervention on the ordinary*, «Grid Second Life», n° 31, <https://www.gridsecondlife.it/progetto/lcm-2018-intervento-sullordinario/>. Until 2015, the building remains unused and abandoned. Some images in Pippo Ciorra's essay, document the state of abandonment and vandalization (in: Pippo Ciorra, *Anonymous Work. The Kindergarten-House of Maria Giuseppina Grasso Cannizzo*, in «Vesper» n° 2, Materia-autore, Author-Matter, Spring-Summer, 2020). The building is consigned to history as an empty building, whose function as a kindergarten lingers only in the memory of the inhabitants of the area.

2. Maria Giuseppina Grasso Cannizzo operates with a dry precision of graphic mark. There is no self-referentiality in her design, and there are only small variations that reach an almost manic scale of detail. Despite demolition and construction, the kindergarten is still and always there. Small variations have been introduced to diaphragm spaces, to make passages more usable and improve the building's energy efficiency. MGGC also replaces some eternit elements with asbestos inside (and therefore Toxic) with equal ones made of fiber cement, so as not to alter the image of the building. «Outside, nothing

betrays the new intended use. In addition to the new fixtures and roof coverings placed in order to improve energy efficiency, the grey corrugated asbestos was replaced with a latest generation corrugated fibre cement which however preserves the visual effect of the original structure» (in: Pippo Ciorra, op. cit.). In the end, the kindergarten is still there. Nothing from the outside suggests such a radical change in its use, from being a school, then a public space, and finally a family and private residence. The materiality of the building, its proportions remain unchanged, no increase in area or volume, but only slight variations aimed at recognizing the affordances of the pre-existing building. The kindergarten built in the late 1960s is therefore reaffirmed and confirmed. MGGC's design is first and foremost a restoration work aimed at improving the building in both energetic and environmental terms, and is also recognizing the values of this found architecture and assigning it a new dignity as an integral part of the city. The transformation from school to house can be read more boldly in the internal space, which is slowly colonized by objects of various kinds. MGGC is also sensitive to the family history of those who live in the house, who bring with them objects of memory, memorabilia, objects that narrate family events. The “movable” furnishings are positioned in the space to define functional areas with no pretense of fixity, while fixed furnishings and macro-objects colonize the bathrooms and the bedroom space just like parasites. These furnishings have the ability to define space and more precisely to “make space”. On the one hand, they enter into a relationship with the functions that define them, and on the other hand, they resonate with the architecture that welcomes them. The technical drawings of these furnishings, of absolute precision, convey the complexity of MGGC's thinking. «From the gallery one can see the old classrooms converted into bedrooms, look down towards the double-height ceilinged living room, glimpse strange architectural parasites in the bathrooms and in the main bedroom. The new bathrooms are grafted self-supporting steel and wood structures that, on the one hand, suggest an architect's involvement, and on the other [hand,] look as if they could be “removed” and placed elsewhere at any time» (in: Pippo Ciorra, op. cit.).

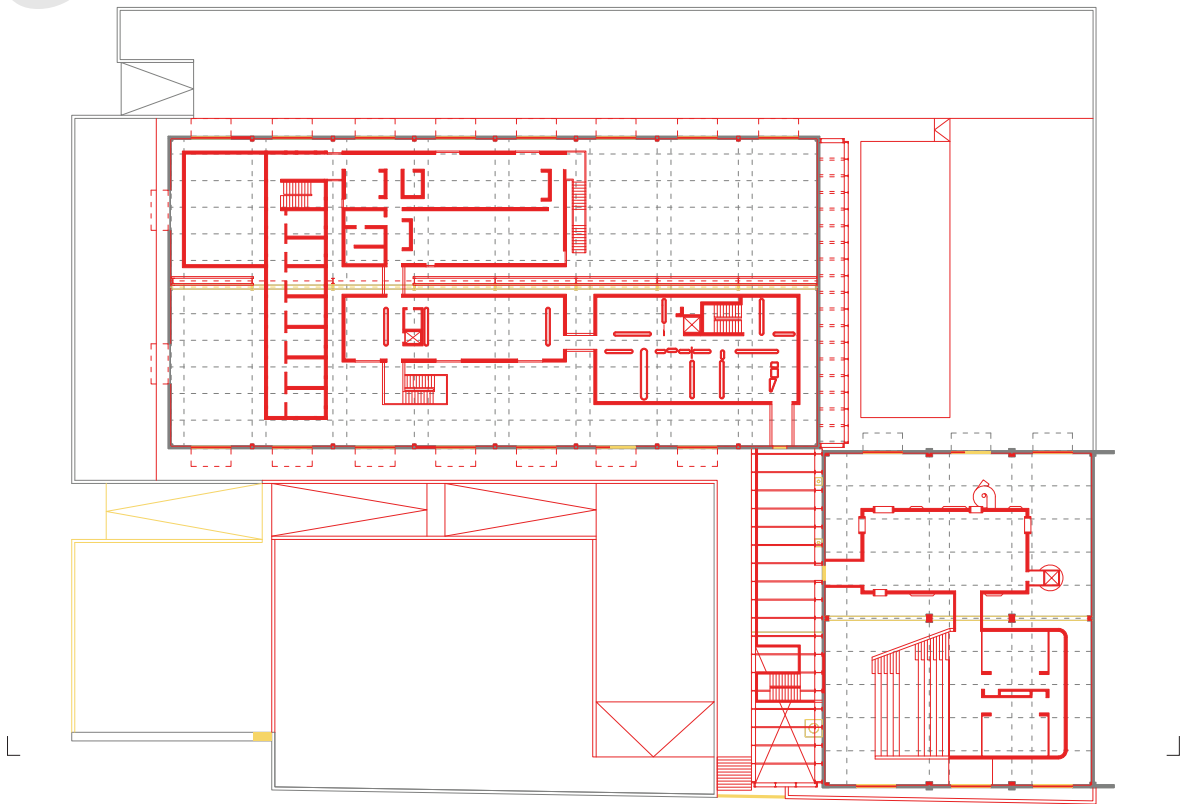
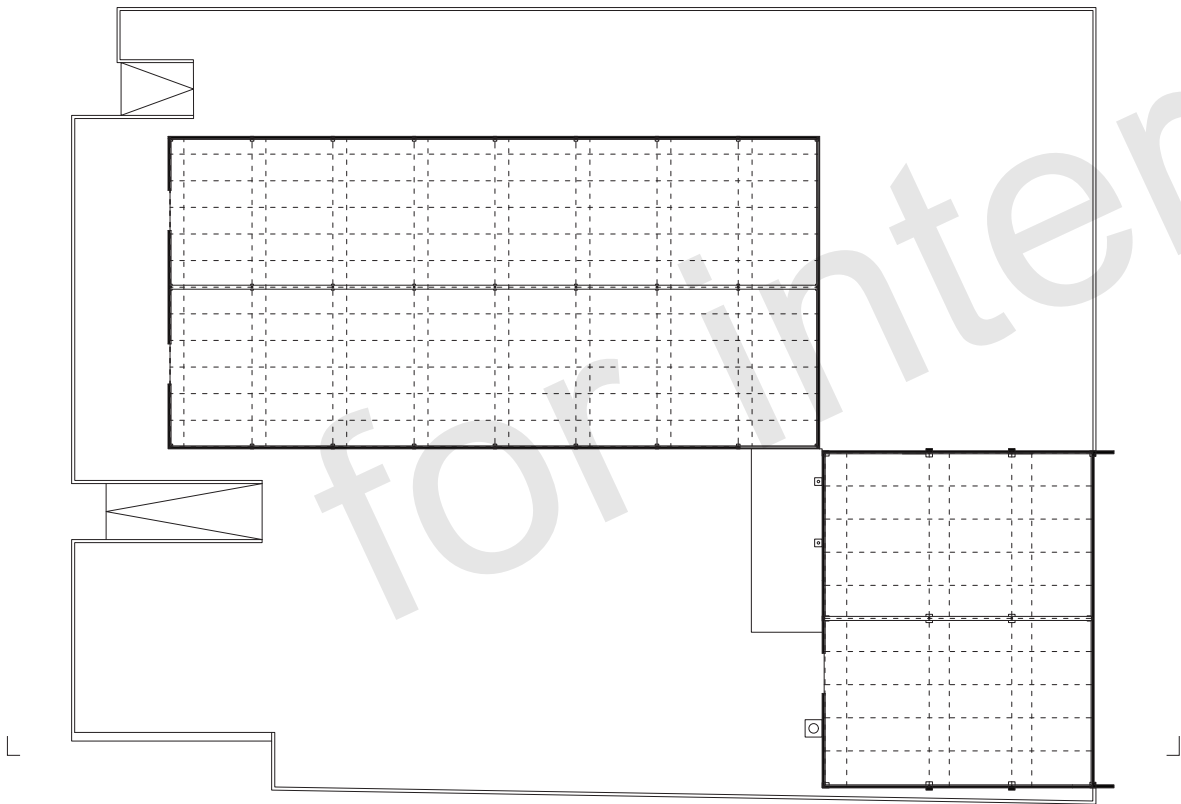
1960s Fonderie SABIEM 2017 Opificio Golinelli - Centro Arti e Scienze Golinelli

The headquarters of Fonderie SABIEM, a flagship elevator manufacturing company and worldwide industry brand established in 1918, was built in the 1960s in the western industrial outskirts of Bologna. Following the economic crisis of the 1970s, the company has a slow decline until it was dismantled and permanently closed in 2008. In 2013, Fondazione Golinelli purchased part of the industrial area belonging to Fonderie SABIEM with the goal of revitalizing this lifeless industrial surface to create a cultural and educational center for people of all ages. The wealth of large unused parking lots were a hopeful promise of attracting visitors from central Italy. Opificio Golinelli was completed in 2015 under the design by diverserighestudio. It is conceived as a citadel where each activity related to the city is identified in the volumes created within the former foundry. Indeed, the activities envisioned in the center are housed in the School of Ideas, Science in Practice, Educating to Educate, the Garden of Enterprise, Art Science and Knowledge, and Science in the Piazza, which respectively embody kindergartens and children’s spaces, secondary schools, institutions, gardens and squares, infrastructure, and enterprises. Therefore, an ideal articulated urban fabric is formed that encompasses all the activities of the autonomous city that constitutes the cultural and educational center according to the desire of Fondazione Golinelli. Due to the success of the Opificio, Mario Cucinella Architects was subsequently commissioned to design the Centro Arte e Scienza adjacent to the Opificio complex, whose ex-novo building, completed in 2017, celebrates artistic and technological evolution in relation to the existing built environment. This space is characterized by total versatility that allows for the insertion of movable walls, exhibitions and installations without making any changes to the cubic building, whose hollow volumes jutting outward detail its facade and the practicable roof that can be reached via external stairs.

Drawings Chronology¹

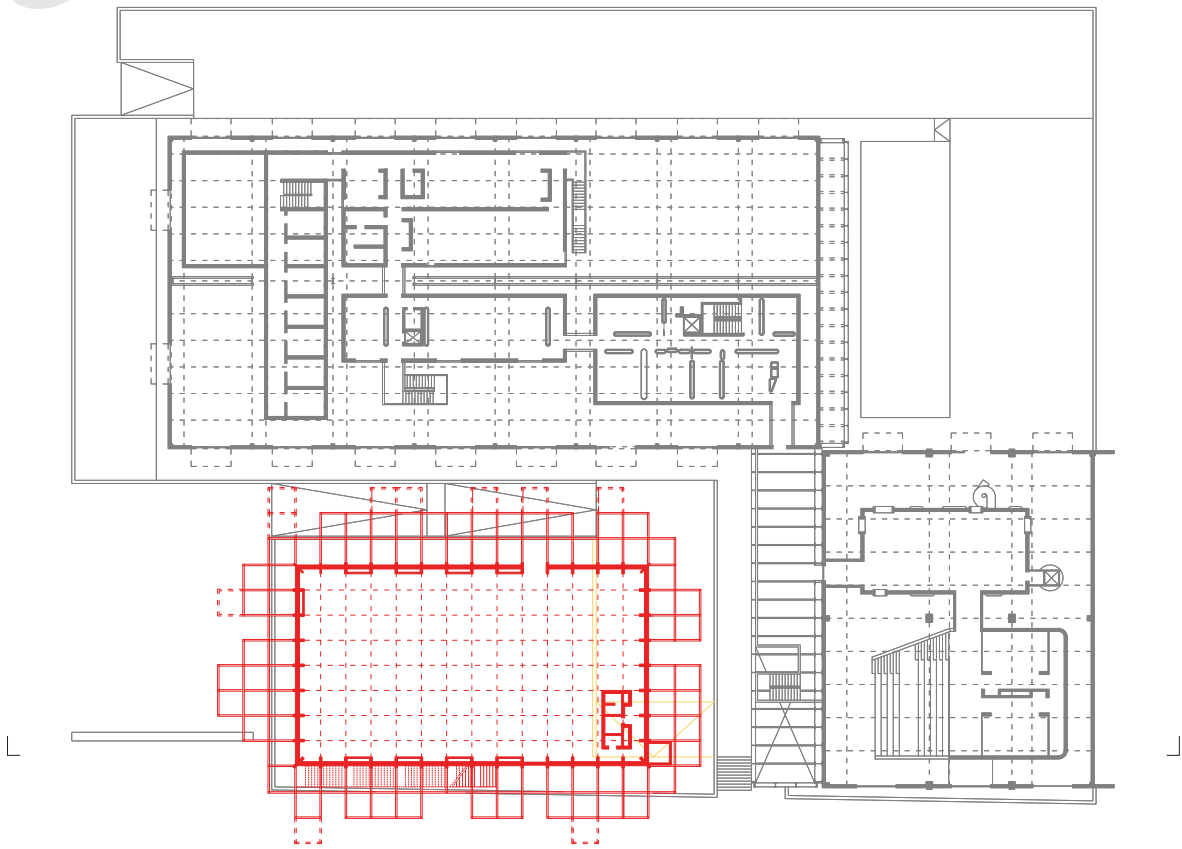
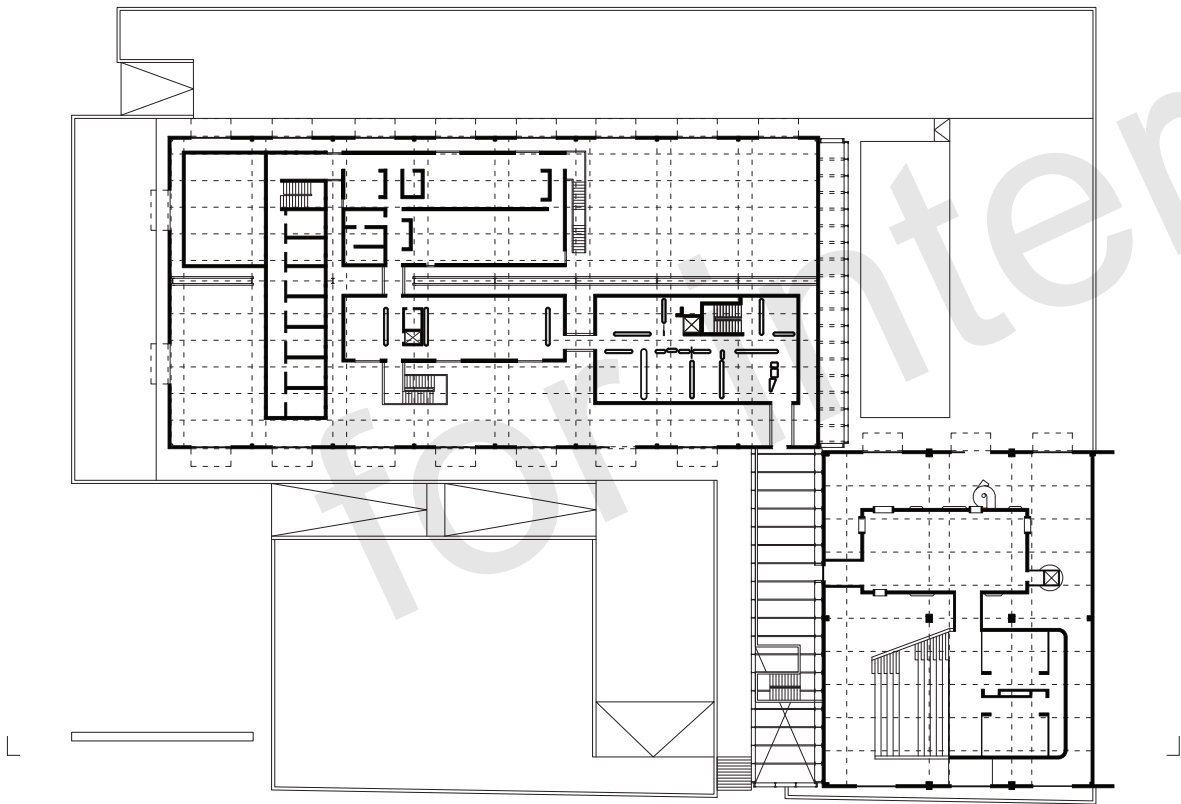
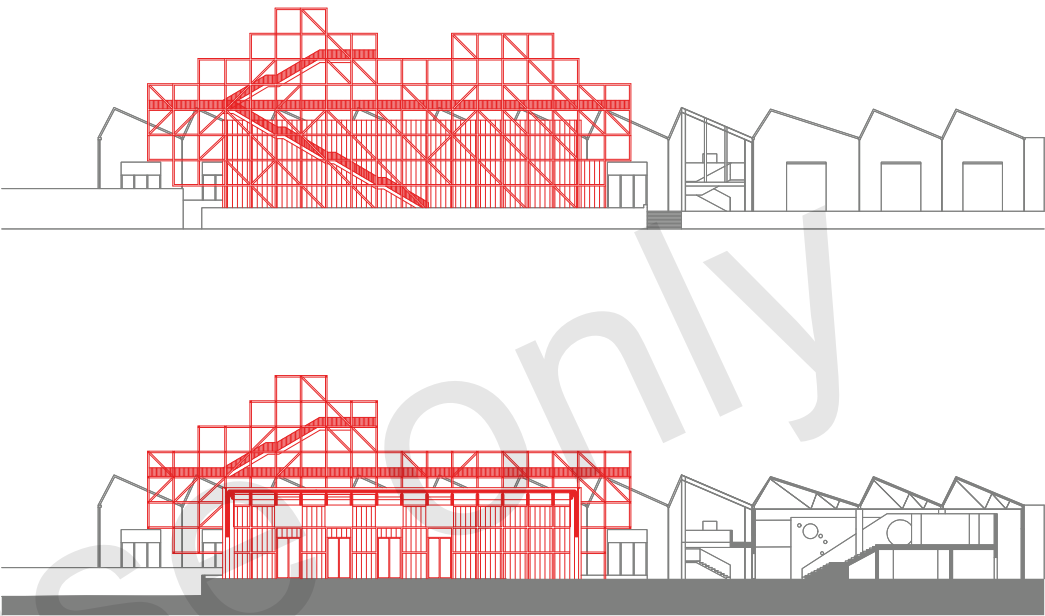
ca. 1960 / 2015: A component of the perimetral walls was removed in front of the main entrance to ensure maximum openness to visitors, the stairs were added and part of the fence wall was demolished to allow for direct access from the parking lot. The structural changes included strengthening the vertical supports while the roof remained unchanged to maintain the external aspect of traditional industrial sheds².

2015 / 2017: The new Centro Arti e Scienze Golinelli designed by Mario Cucinella Architects in 2017 takes shape in the outdoor space enclosed by the L-shape of the existing Opificio Golinelli³. Mario Cucinella Architets’ architecture complements and continues the development of the pioneering urban renewal project initiated by diverserighestudio in 2015⁴.



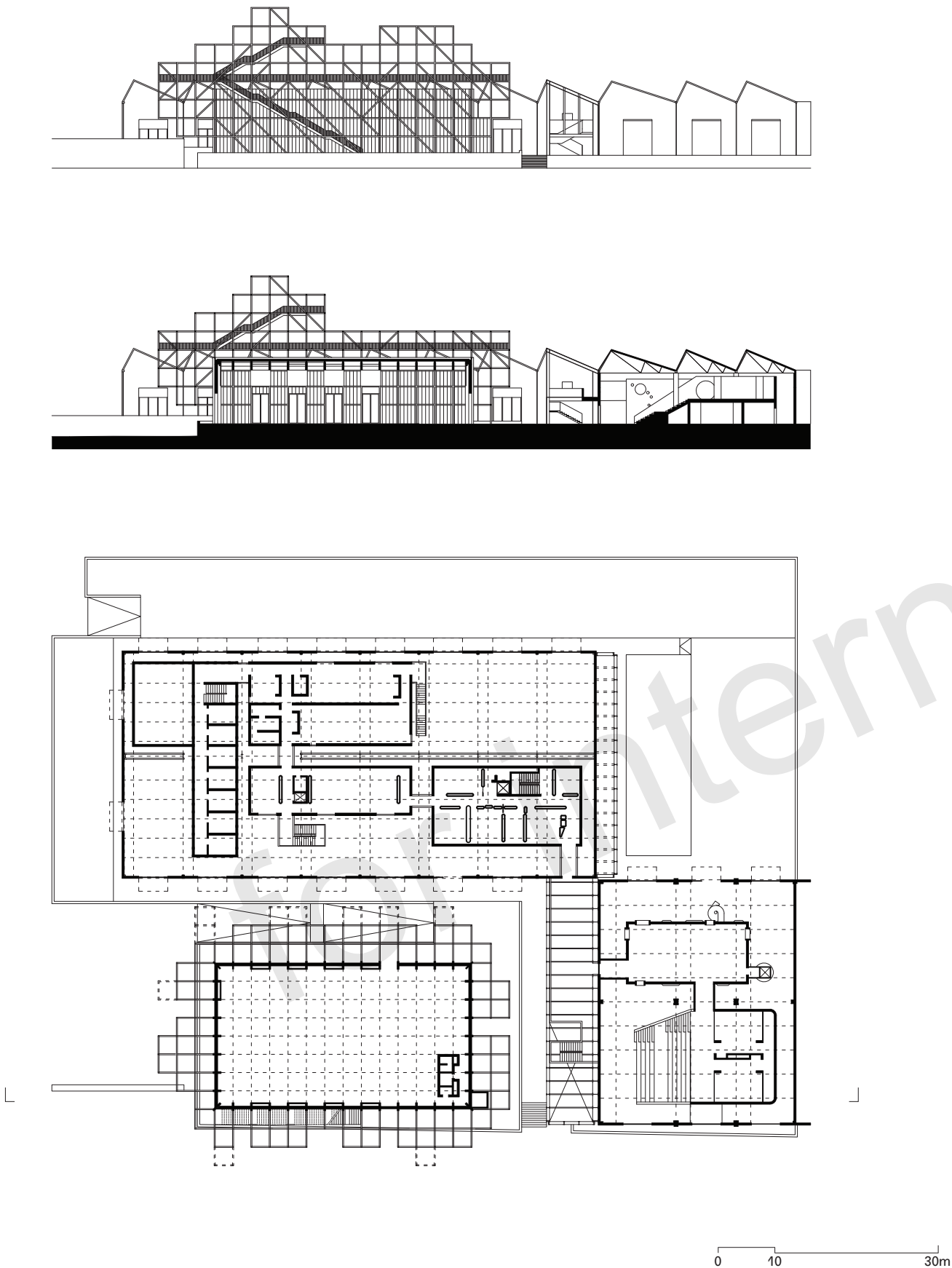
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Notes

1. Fonderie SABIEM in Bologna was built during the 1960s, and its designer and / or architect is unknown. Without any original drawings at hand, the ground floor, the section, and the elevation have been edited retrospectively, starting from the actual configuration of Opificio Golinelli, based on drawings from 2015 and historical pictures. Both the structural organization and the pattern of the outer enclosure walls was suggested by historical frames (in: M. F. González, *Opificio Golinelli* / *diverserigestudio*, in ArchDaily: www.archdaily.com/898553/opificio-golinelli-diverserigestudio).

2. The revitalization of former Fonderia SABIEM by Fondazione Golinelli involved the demolition of small components, mainly the fence, some reinforced concrete columns and beams then replaced with prefabricated steel systems, the flues and the small volume adjacent to them, which was also replaced with a new closed steel structure (in: *Opificio Golinelli Diverserigestudio*, in «The Plan», www.theplan.it/award-2016-education/opificio-golinelli-2). For its upgrading of the Opificio Golinelli's 9,000 m², in 2015 Diverserigestudio was awarded the Planning Prize by Istituto Nazionale di Urbanistica (City Planning National Institute) in the category "Qualità delle infrastrutture e degli spazi pubblici" (Quality of infrastructures and public spaces) category and the work was also selected for the Italian pavilion at the 15th International Architecture Exhibition in Venice (in: Guida di Bologna, *Opificio Golinelli: Città della per la conoscenza e la cultura*, in www.guidadibologna.com/opificio-golinelli-cittadella-per-la-conoscenza-e-la-cultura/#).

3. The reconstruction of the first floor of the Arts and Science Center designed by Mario Cucinella Architects was possible through the interpretation of low-quality drawings showing the possible interior layouts of the new 700 m² exhibition volume. (in: *Centro Arti e Scienze Fondazione Golinelli. Un luogo dove arte, scienza e tecnologia dialogano*, in www.mcarchitects.it/progetti/centro-arte-e-scienze-golinelli). The façade and the section has been redrawn thanks to the original drawings provided by architects to the online magazine. (in: P. Pintos, *Centro "Arti e Scienze" Golinelli, Mario Cucinella Architects*, in «ArchDaily», www.archdaily.com/913871/centro-arte-e-scienze-golinelli-mario-cucinella-architects).

4. Opificio Golinelli is «an innovation ecosystem that coherently integrates Fondazione Golinelli's activities in the fields of education, training, research and technology transfer, venture capital in synergy with business incubation and acceleration, and the fostering of the arts and sciences», as reported in the website of the first fully operational private philanthropic foundation in Italy related to education, research, innovation, business, and culture, housed all together harmoniously in the center. Indeed, Opificio Golinelli represents the first successful prototype in the Italian context of a cultural, educational and research center that is developed through the rehabilitation of existing industrial wrecks. Thanks to its more than 600.000 visitors and to the 150 scientific and institutional partners, this ecosystem tends to expand increasingly in the future as in those recent years by figuring as an excellent example of adaptive reuse. (in: Fondazione Golinelli, *Opificio Golinelli: where knowledge, innovation and culture meet*, in www.fondazionegolinelli.it/en).

1961 University Building 1985 School of Architecture Politecnico di Milano

The transformation of the School of Architecture at Politecnico di Milano was a strategic intervention on an existing service building in the University’s campus. The original building was first designed and built by Giordano Forti, Gio Ponti and Piero Portaluppi in the 1953-1961 period, to serve the University’s needs¹. In 1985 the project by Vittoriano Viganó to transform it into the School of Architecture was concluded².

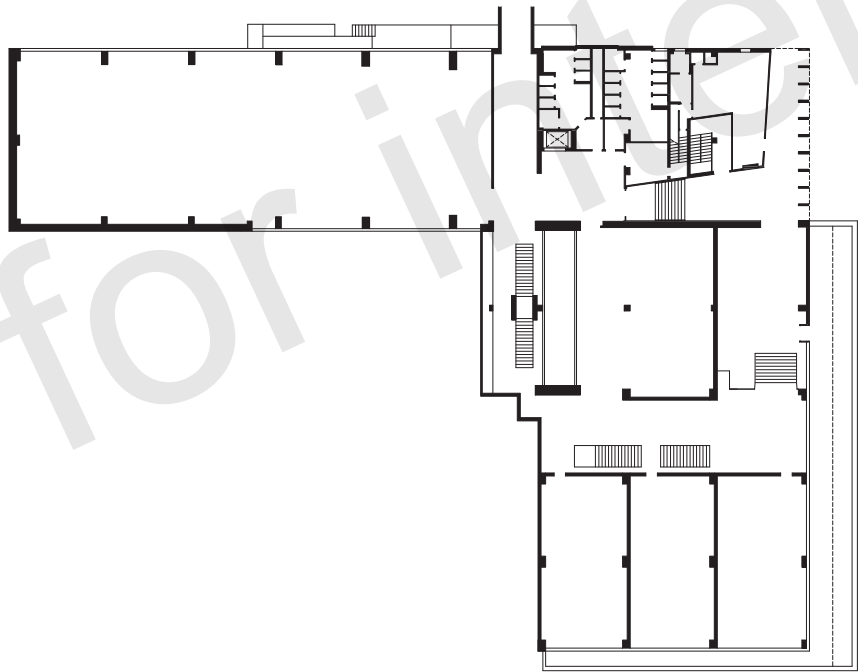
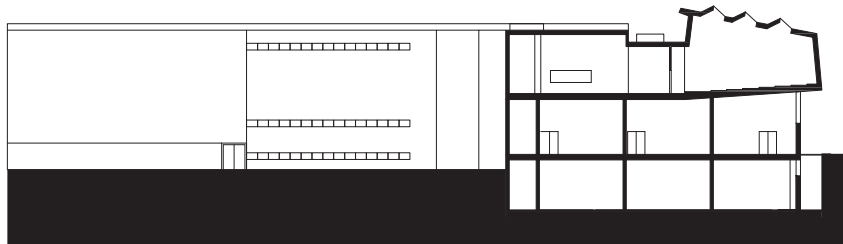
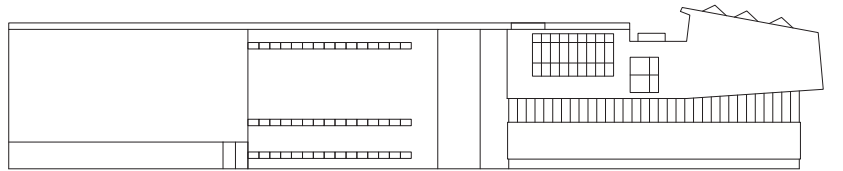
The intervention works as an expansion of the existing structure. The primary addition is a modular metal structure – with an equipped roof – that harmonizes with the established building patterns, covering a newly created central courtyard. This canopy not only introduces new functions to the educational building but also creates a dynamic central gathering space for students and faculty. To meet the evolving needs of the school, classrooms were strategically added to both the east existing side and a new exhibition space was added on the north side, with a resulting U-shaped footprint. The courtyard’s final shape is defined by the projection of the roof and the circulation elements added on the east side facade. In the pursuit of functional efficiency, minor adjustments were made to the main block’s interior facade on the south side. These alterations ensure smooth circulation between the pre-existing and the new and promote seamless connection between the existing structure and the extension. On the contrary, the west block’s facade has remained almost untouched, preserving most of its original character.

Drawings Chronology³

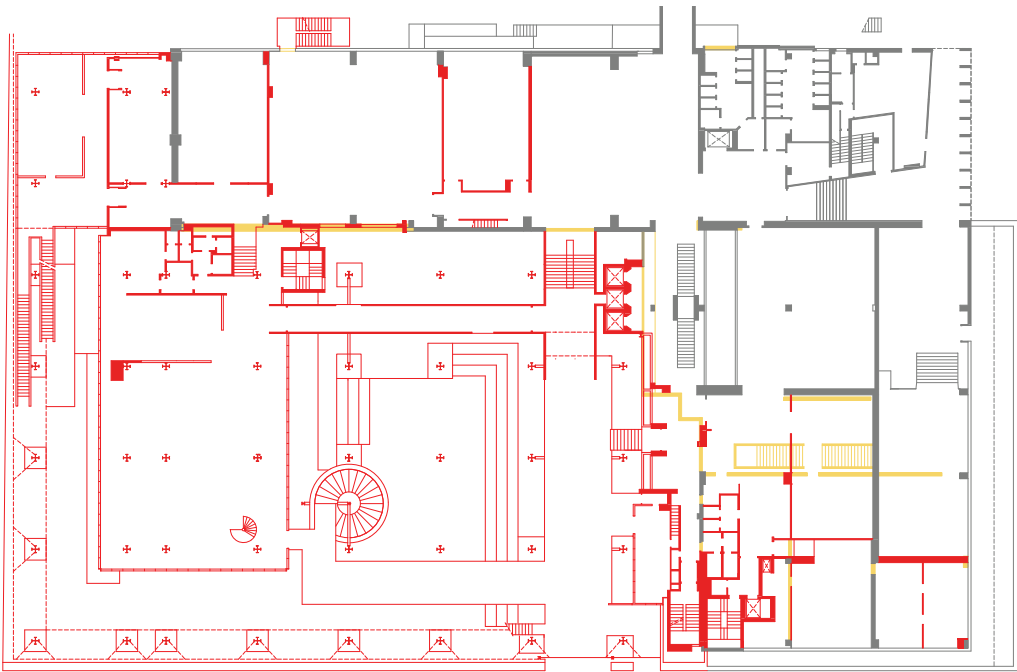
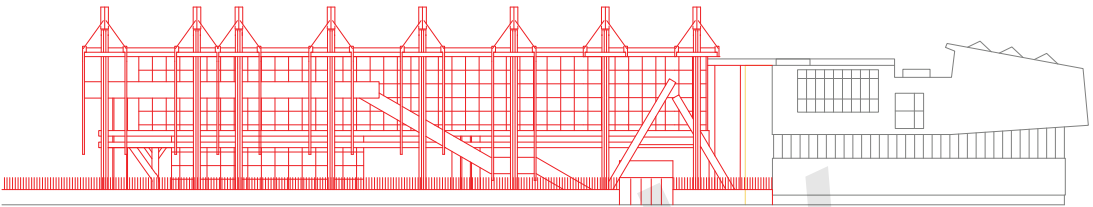
1961 / 1985: The expansion was achieved with a modular metal structure that follows the existing grid and covers the central courtyard. New spaces were added on the existing east and new north sides, forming a U-shaped footprint. The courtyard’s fourth side is defined by the introduced roof’s projection and the circulation elements on the east facade. Minor adjustments to the south side’s interior facade ensure efficient circulation between the pre-existing and the new intervention⁴.

Atrio Politecnico di Milano
 Milan, Italy

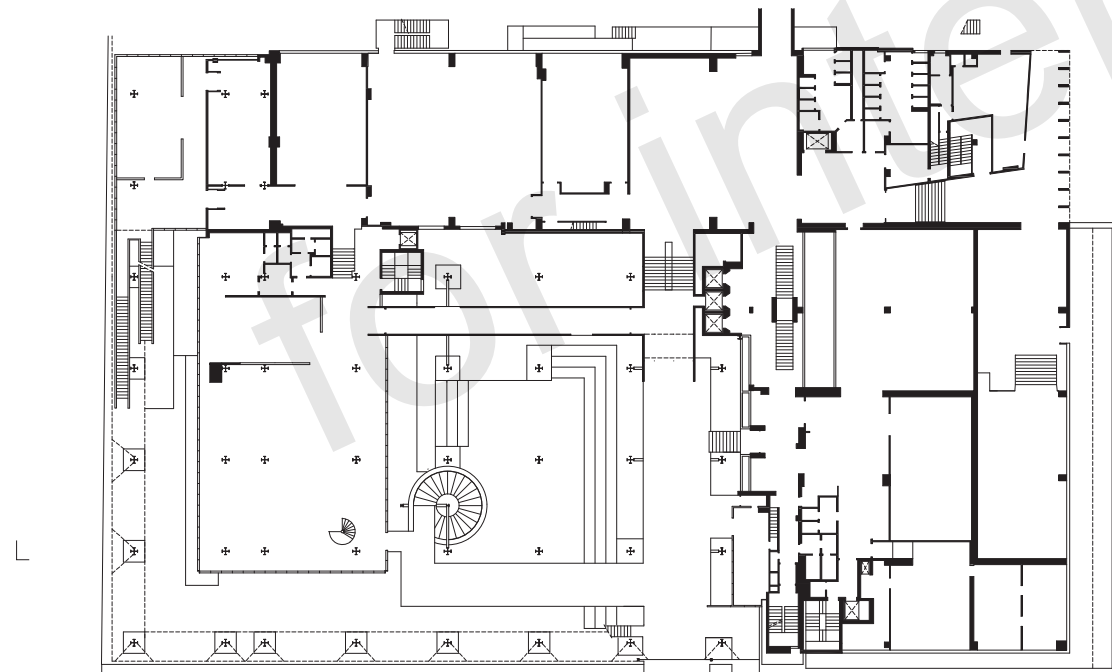
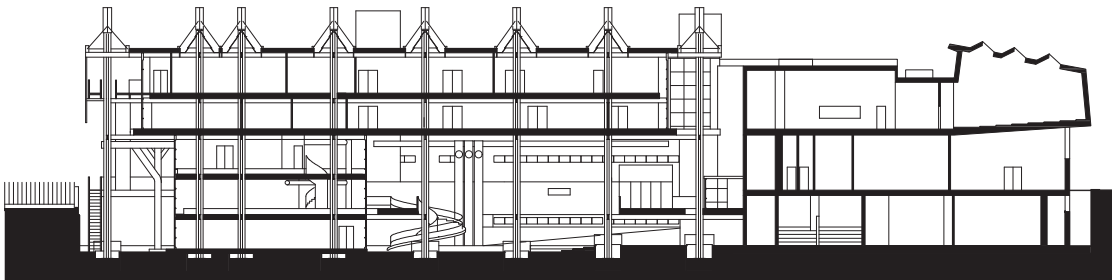
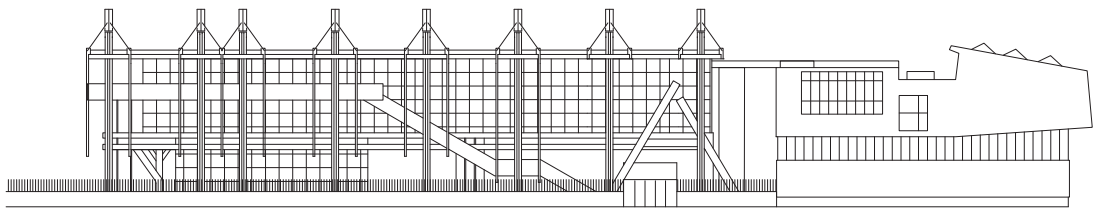
1961: University Building Politecnico di Milano –architect: Giordano Forti, Gio Ponti and Piero Portaluppi
 1985: School of Architecture Politecnico di Milano –architect: Vittoriano Viganò



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Notes

1. "Le planimetrie del complesso edilizio del Politecnico" in: *Il Centenario del Politecnico di Milano: 1863-1963*, Politecnico di Milano, 1964, pp. 245-254.
2. *Un'architettura Politecnica: Progetto di Vittoriano Viganò per l'ampliamento della Facoltà di Architettura*, in «Casabella», n° 481, giugno 1982, p. 36.
3. The floorplan of the original building was based on the plans found in "Le planimetrie del complesso edilizio del Politecnico", cit. The section and elevation of the original building were schemed based on the found floorplan, the intervention section and elevation, and photographic documentation (photo by Cristiano Ossoli).
4. The floorplan of the intervention were provided by Politecnico di Milano. The section and elevations of the intervention were based on the documents found in *Un'architettura Politecnica: Progetto di Vittoriano Viganò per l'ampliamento della Facoltà di Architettura*, cit.
5. Hypothetic drawing based on the pictures found in "Le planimetrie del complesso edilizio del Politecnico" cit.
6. Hypothetic drawing based on current pictures of the Faculty building.

Peveril Gardens
 London, United Kingdom

1967: Peveril House Parking Loads
 2017: Peveril Gardens –architect: Sanchez Benton Architects

1967 Peveril House Parking Loads 2017 Peveril Gardens

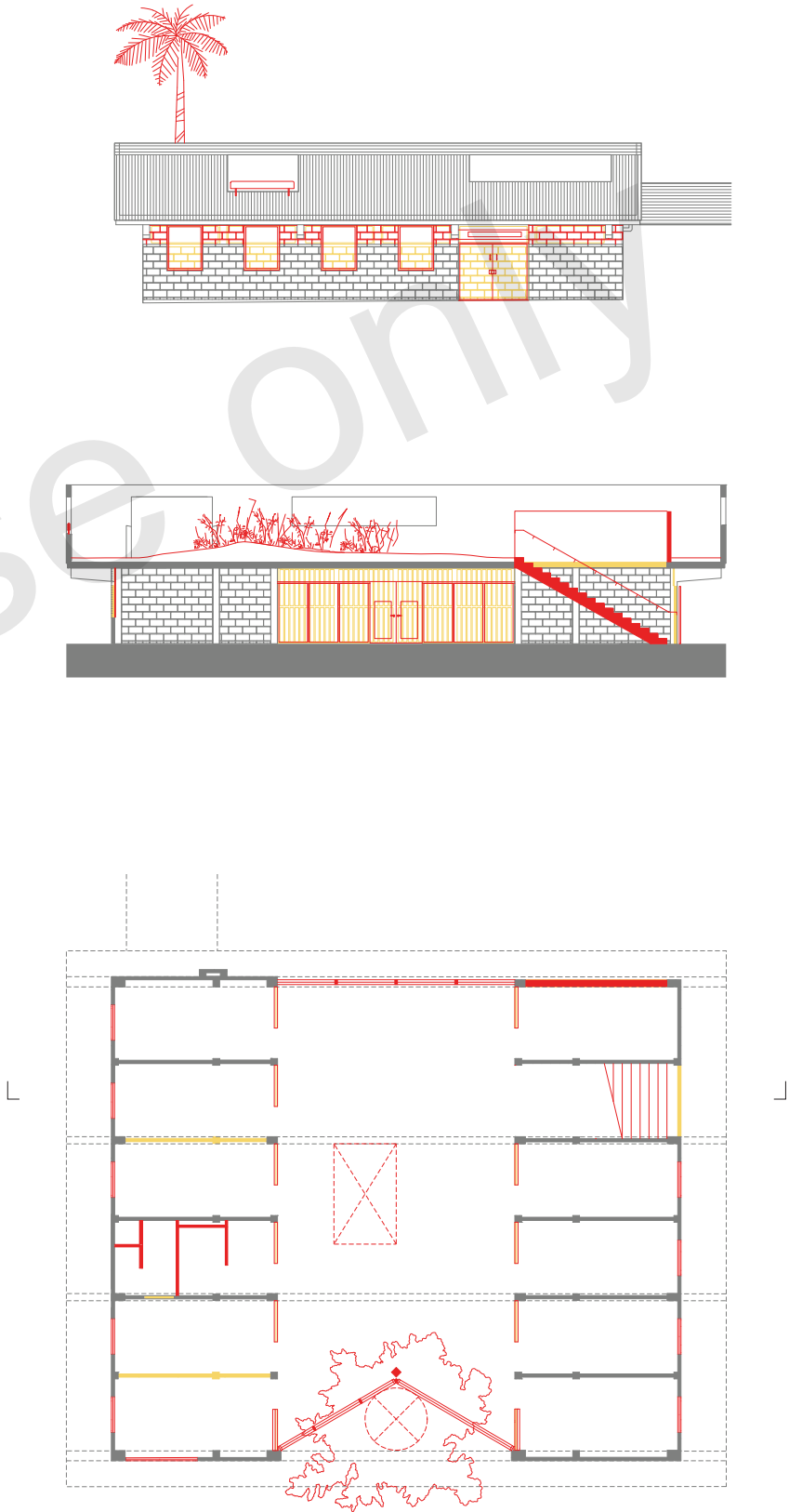
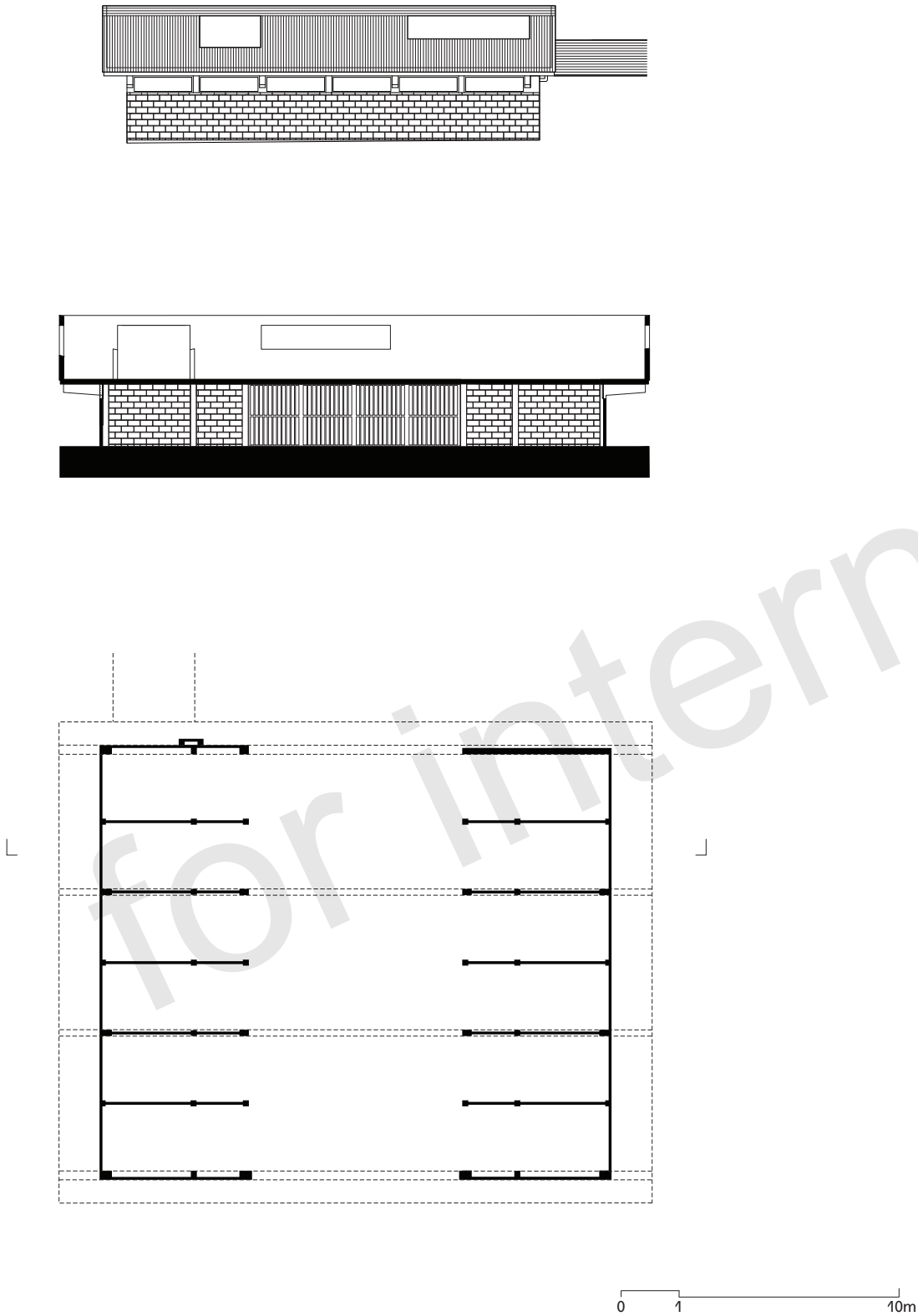
In the dynamic backdrop of south London’s Old Kent Road, Sanchez Benton Architects and artist Gabriel Kuri undertook a visionary transformation of Peveril House, a 1960s housing block. Prompted by the urgent need to reassess urban public spaces, the project re-imagined underused parking garages and a rooftop deck. The architects went beyond the original scope of the work commissioned by the Southwark Council, to which they added the aim of giving the area a civic character and celebrating the local communities.

Departing from the conventional redevelopment fate of ancillary buildings, the architects meticulously redesigned the structure. Garages were transformed into artists’ studios and a central public room, fostering community engagement. A repurposed public stair granted access to a replanted rooftop terrace, expanding public space in a context where green areas are unevenly distributed.

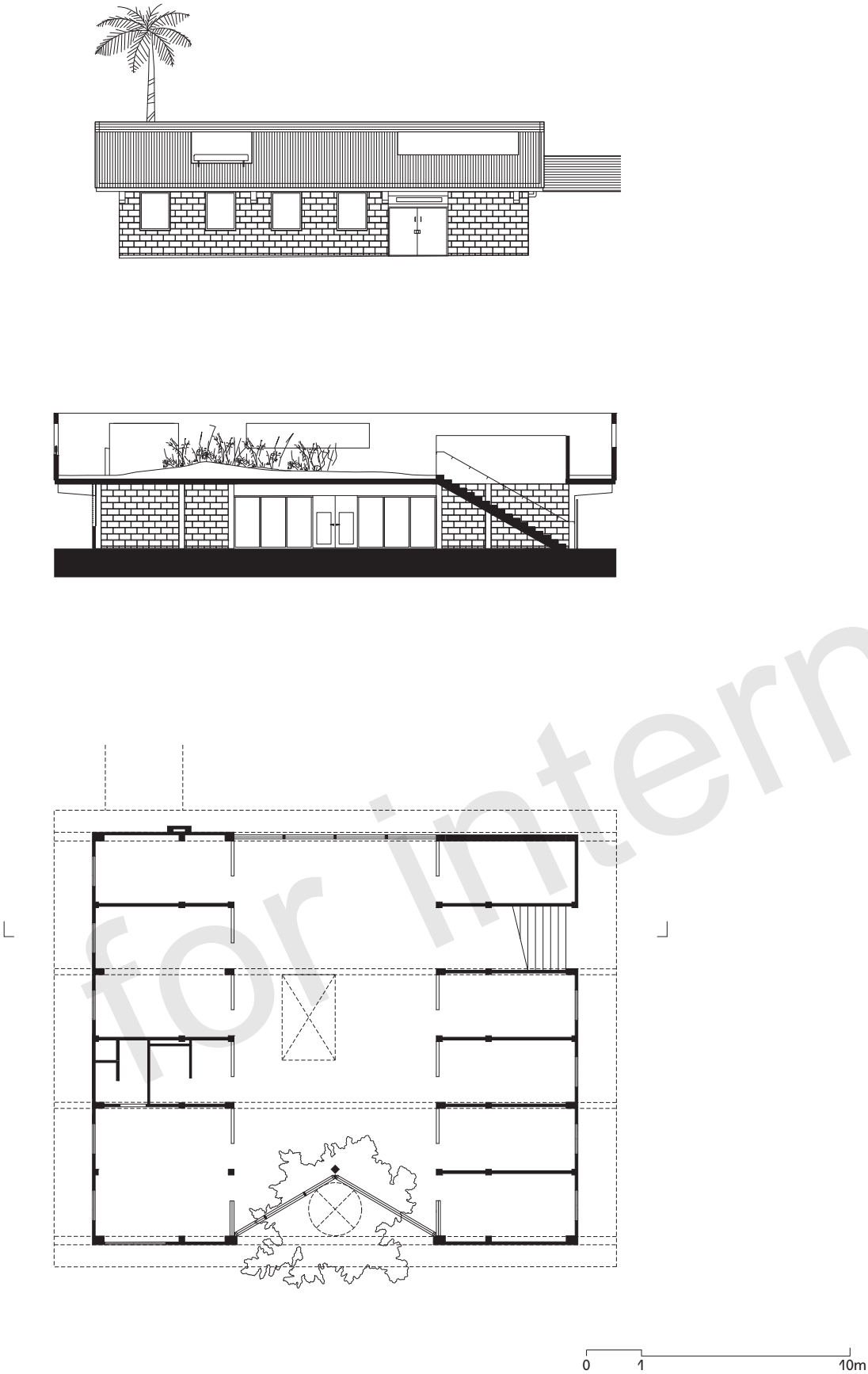
The design process, led by co-founder Carlos Sanchez, involved careful removal and unpeeling and the creation of a playful geometry with tropical modernist influences. An adjusted front threshold allowed new trees, which initially had to be palms, to punctuate the garden with a joyful infusion into the architectural narrative. Measures to waterproof the terrace and facades extended the building’s life. A glowing orange membrane, creatively integrated, contrasted starkly with the facades, forming a visually compelling element. The final result, Peveril Gardens, emerges as a transformative public architecture, celebrating innovation, community engagement, and the repurposing of urban spaces. Its success lies in balancing continuity with change, achieving high-quality design despite budget constraints, and is a testament to the architect’s bold vision and sensitivity to local cultural intricacies. The project stands as a dynamic celebration of urban renewal and inclusive design in response to contemporary urban challenges.

Drawings Chronology¹

1967: Based on original drawings by Sanchez-Benton architects, 2017². Three large openings were punched in the existing concrete deck, one for a public staircase to the garden; the second one for a large central skylight to provide daylight to the center of the deep plan; the third one as an opening in the slab for a new tree to provide shade at first floor level. The existing lock up garages were converted into a mix of studios and café, organized around a central events space³.



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Notes

1. The original building was a private parking lot divided into twelve units. The first floor was dedicated to the community living in the apartment which is located next to it. The materials used were bricks and aluminum single glazed windows. Without any original drawings at hand, the ground floor, the section and the facade have been edited based on a film (London & Suburbs, *Communist building in London*. Peveril House, 15 April 2019, <https://youtu.be/8-ue8nPXwZs?si=VmyQLUWWYStXTJ3>).
2. The building was transformed by new openings, windows, a reworked rooftop, a public staircase, and a modern aesthetic. On the first floor, plants were added in addition to a new soil. At the end of the transformations, the building

is used as an office for the Sanchez Benton architects. The garage units became offices, stocking spaces, restrooms, neutral spaces, etc. For the ground floor, the connection with the apartment units was kept, to provide the continuity with the terrace. The architects wanted to keep the community aspect of the garden. In 2017, the transformations ended. The building became an office for architects as well as a public garden. This drawing features a meeting room and a working space. Drawings based on original plans (by Sanchez Benton Architects, plan, section, facade, 2017).

3. See *Peveril Gardens and Artists Studios*, in «Casabella», n° 930, February 2022, pp. 84-91.

1973 Aerhotel Executive 2022 ED.G.E.

Aerhotel Executive was built in 1973. Located in front of the Porta Garibaldi railway station in Milan, the hotel provided accommodation to passengers in transit from Malpensa airport as well as Alitalia staff. The hotel complex had 400 rooms and an underground park for cars and buses¹.

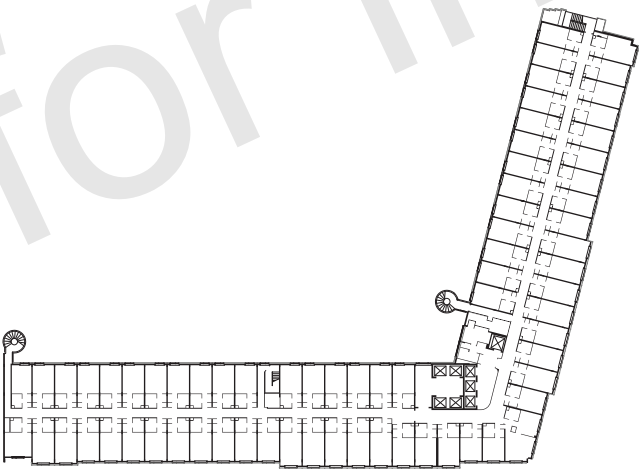
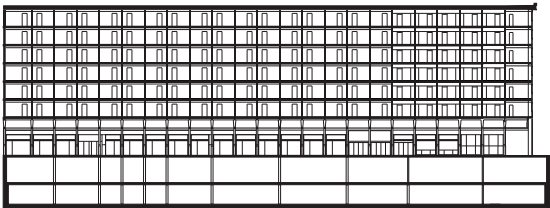
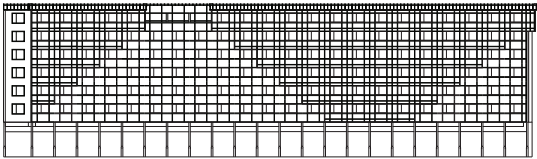
The six-storey volume ran along Via Sturzo, in front of the rail terminal, before turning into via D’Azeglio, a street parallel to the Bussa flyover, built just a few years before. With a 25 m. wide footprint, the building sets back from the inner courtyard by 18 m from the second floor upwards. Each floor is accessible from the vertical block located at the corner, and was served through a central distribution corridor. The building has series of external circular emergency stairwells placed on inner front of the urban block.

Following an acquisition, Onsitestudio won the design competition by invitation launched by Antirion S.g.r in 2014 to transform the hotel into a multi-tenant tertiary complex. The proposal follows a series of subtractions and additions aimed at reconfiguring the preexisting L-shaped volume into an ensemble of three buildings, different in height and characteristic, transforming this monobloc into a triptych.

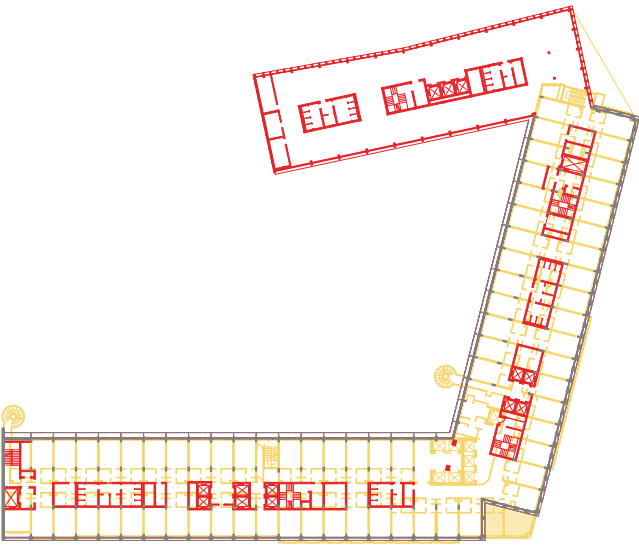
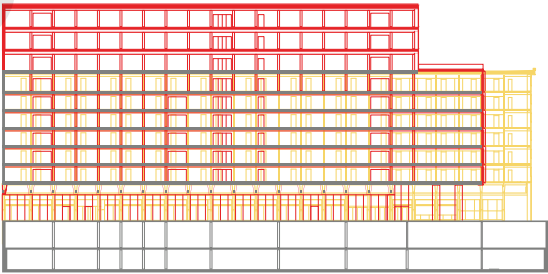
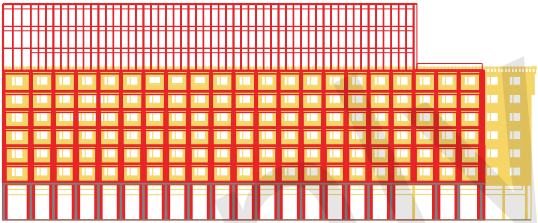
Drawings Chronology

1973: The form of the hotel was derived for the 1967 Centro Direzionale² proposal³.

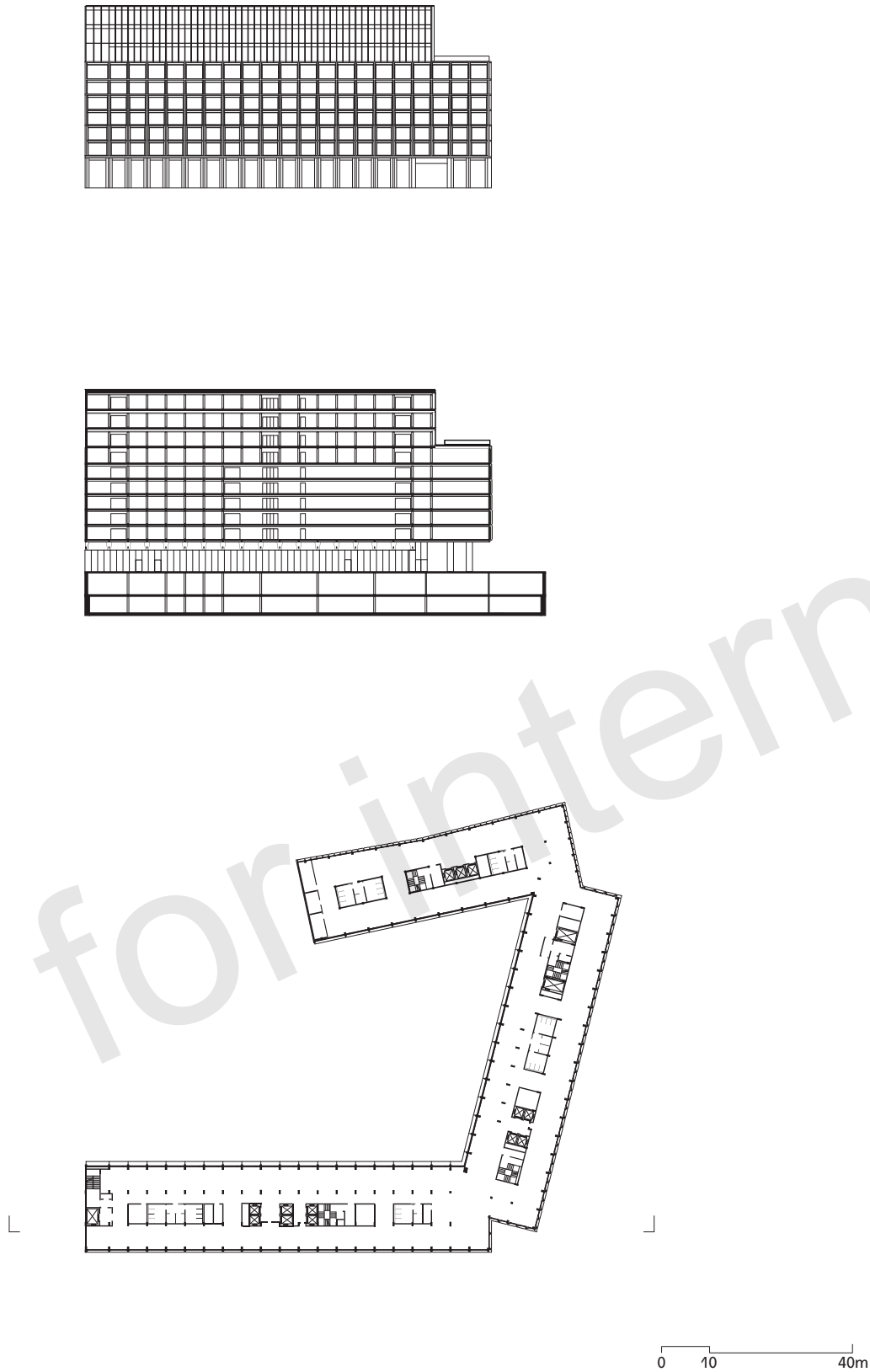
1973 / 2022: The transformation of the hotel into a multi-tenant complex can be summarized into the following significant aspects: the single “L” shaped monobloc is transformed into 3 semi-detached volumes, each with their particular heights and facade modules corresponding to different urban conditions⁴; while maintaining the existing footprint, a new distribution system replaces the preexisting single centralized hotel service core⁵; the introduction of a lushes courtyard gravitating around the public porticoed ground floor, open terraces on the floor above, and the visual comfort of the upper office levels⁶.



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Notes

1. *Aerhotel Executive a Milano*, in «Trasparenze», n° 15-16, 1973.
2. The Centro Direzionale plan was an outcome of an urban redevelopment competition in 1948, and was first elaborated in 1953. The aim was creating a main axis between the Garibaldi and Centrale railway terminals. (Virgilio Ferrari, *Milano: il piano regolatore generale 1953*, Edizioni di “Urbanistica”, Torino 1956, p. 12.) Despite some sporadic interventions in the 1950s-1970s, including the construction of several skyscrapers, the area was not fully defined until the 1980s.
3. The form of the hotel came from the 1967 version of the Centro Direzionale urban development plan (*Carte Tecniche Comunali*, Comune di Milano, Milano 1967). It introduced a new road, Via Sturzo, running under the Bussa flyover parallel to Via D’Azeglio, and subsequently, the L-shaped urban block of the hotel and the linear corporate headquarters next to it along Via Sturzo. The L-shaped hotel block responded mainly to the needs of the new urban transport infrastructure in the north as well as the adjacent Bussa flyover that ran parallel to Via D’Azeglio. On the southern inner street of Via Tocqueville was a one-storey storage volume with a ramp for buses that created a central void in the hotel complex. However, the building was unable to give an urban tone that was in line with the neighboring historical fabric.
4. The project proposes a building composed of buildings. Each of them is identified by different façades and heights, addressing different urban fronts, with different shades of concrete color, evoking the complexity of a block in the historic city. The first volume on Via Sturzo, overlooking the Porta Garibaldi station has three extra floors added to it, totaling 9 storeys, aligning to the neighboring height. A new 5-storey block is added along the inner quiet street of Via Tocqueville toward southern historical fabric; on Via D’Azeglio, the volume retained the existing 6 stories height, mediating the transition between two urban fabrics.

As a result of the subtraction of corners, all three volumes appear to be partly detached from each other, which allows for the lobby entrances to be easily identified. The building is a quiet presence that seeks to convey the characteristics of the historic city within the contemporary city, thus also attempting to introduce the qualities of duration, belonging and continuity rather than total abstraction.

5. The new building retains the existing footprint, 17.5 m wide, and introduces a new distribution system that replaces the preexisting single centralized hotel service core. Elements are arranged longitudinally, slightly asymmetric with respect to the central structural span, and compact, so that each side is maximized. along the entire perimeter of the façades for premium workspace characterized by different degrees of openness and transparency. This radical change in distribution, with new vertical connections and service nuclei inside the core of each building, equipped with a seismic bracing system, ensures flexibility in catering to a different configuration.

6. The central void has been transformed into an urban garden. A contemporary interpretation of a Milan courtyard. It is circumscribed by a broad, porticoed, unified passageway that connects the two sides of the lot and their entrances, making the building accessible from both Corso Como and Fondazione Feltrinelli to the south and the Garibaldi-Isola district to the north. On the floors above, terraces benefit from the view on the extended green area, while offices have all visual comforts, and respond to the dialogue between the internal courtyard and the undulating external facade. The organism formed by the buildings seeks an archetypal quality in the simplicity of the courtyard typology as opposed to the linear urban block, from which a single idea emerges: the urban building-island, the building of buildings, the form of the void.

Andreas Lechner is an Associate Professor of Architecture at TU Graz and founding principal of Studio Andreas Lechner. He studied architecture at TU Graz and after formative study stays in Los Angeles, trained as an architect living and working in Berlin, Tokyo and Vienna. He holds a PhD in Architecture (2009) and was post-doc visiting researcher at the Università luav di Venezia and the Royal Danish Academy of Fine Arts and published his habilitation as awards winning *Thinking Design– Blueprint for an Architecture of Typology* (2021). He lectures and teaches internationally and is a visiting professor at the Politecnico di Milano. His research group *Counterintuitive Typologies* is funded by the Austrian Research Promotion Agency, he is a co-editor of «Graz Architecture Magazine» and of a forthcoming special issue of «The Journal of Architecture».

Gennaro Postiglione holds a PhD in Interior Architecture (1994) and is a Professor at Politecnico di Milano, where he teaches design studio courses, but he has been also a visiting fellow and professor at many European schools. He led several national and international research projects, such as The Atlantic Wall Linear Museum (2005-06), Museum and Libraries in the Age of Migrations (2010-15), and Unconventional Affordable Housing (2022-25). As a member of national and international editorial boards, he has published extensively on Scandinavian architecture, adaptive reuse, and conflict heritage. In 2013, he was awarded Officer of The Norwegian Order of Merit.

Francesca Serrazanetti obtained her degree and PhD in Architecture at Politecnico di Milano. She also studied in Spain and in the United States. Since 2011 she has been Adjunct Professor at the Politecnico di Milano, DASTU Department, where she is currently a Research Fellow for the UAH! Unconventional Affordable Housing project. Her activity is guided by an editorial commitment, considering writing and criticism as research tools. She is part of the editorial board of the magazine «Casabella». She directed the editorial series *Inspiration and Process in Architecture* (ed. Moleskine), in which she has edited several monographs dedicated to the creative process. She is co-founder and co-director of the multidisciplinary peer-reviewed magazine «Stratagemmi».

Maike Gold is a Research Assistant and PhD Candidate at TU Graz. She studied architecture in Weimar, Lucerne and Graz and worked as an editorial assistant for the peer-reviewed «Graz Architecture Magazine» and for several architecture offices in Germany. Since 2013 she has been freelancing in the field of PR and print design and is also involved in architectural mediation and the promotion of young talents. As a member of the research group *Counterintuitive Typologies*, funded by the Austrian Research Promotion Agency, she focuses on the transformative potential of functional building typologies.

Contributors and Scientific Board

Matthias Ballestrem is an architect and since 2024 Professor of Fundamentals of Architecture at the Technische Universität Dortmund. From 2022 to 2024 he was founding program director of the Bauhaus Earth Fellowship Program at Bauhaus Earth and co-managing director of Experimental. Since 2006 he has held teaching positions at various institutions, including HafenCity University Hamburg, TU Berlin and Cornell University. His research focuses on the methodology of practice-and-design-based research, experimental design, spatial perception and complexity and the typology of public space.

Marco Bovati, M.Arch.PhD, Associate Professor in Architectural and Urban Design at DASTu, Politecnico di Milano. Member of AUID PhD program College and Rector’s delegate for coordinating the internationalization of the AUIC School’s Architecture study courses. Research focuses on sustainable architecture and urban regeneration, including the reuse of abandoned spaces and the role of environmental factors, emphasizing intermediate-scale projects, and also involved in academic collaborations with Asia and Africa.

António Carvalho holds a PhD degree in Architecture with a thesis on housing design for older people. He is an Associate Professor at Politecnico di Milano (PoliMi), Italy, and a researcher at DASTU- PoliMi, and his research interests are age-friendly housing, intergenerational spaces, inclusive environments, neighborhood spaces, placemaking. Antonio is an awarded practising architect and urban designer who runs his own practice in Lisbon since 1988, with extensive built work in Portugal.

Lorenzo De Chiffre is an architect, Senior Scientist at the TU Wien, and the author of various texts and exhibitions on architecture. He studied at the Royal Danish Academy of Fine Arts and the University of East London. In 2016, he completed his doctoral thesis on the Viennese Terrassenhaus at the TU Wien. His current work focuses on changes in architectural design strategies and didactic methods following the shift towards transformation and adaptive reuse of existing buildings.’

Hermann Czech (b. Vienna, 1936) studied architecture at the Technische Hochschule and at the Academy of Fine Arts Vienna under Ernst A. Plischke. He attended Konrad Wachsmann’s seminars at the Salzburg Summer Academy in 1958 and 1959. Czech began architectural projects in 1960 and critical publications in 1963. Selected writings are translated in *Hermann Czech: Essays on Architecture and City Planning* (2019); of a monograph by Eva Kuss (2018) there is an English translation: *Hermann Czech. An Architect in Vienna* (2023). Czech has been a visiting professor at Harvard, ETH Zurich, TU Vienna, and the Academy of Fine Arts Vienna. His work has earned him numerous awards including the Grand Austrian State Prize in 2024. He participated several times in the Venice Architecture Biennale, recently 2023 with the collective AKT. He lives and works in Vienna.

Victoria Easton studied architecture at the EPF Lausanne and ETH Zurich, where she graduated with a master’s degree in 2005. Since then, she has been a collaborator of Christ & Gantenbein, where she was named Partner in 2023. Besides working on projects, she manages Christ & Gantenbein’s publication and exhibition department. Parallel to her activity in the firm, she has been leading the ETH Zurich research Typology since 2010. A member of the Swiss Federal Art Commission since 2017, she is part of the jury of the Swiss Art Awards for art, curating and architecture.

Eva Kuss is an architect and architectural historian, author of the book Hermann Czech. An Architect in Vienna. She studied architecture at the TU Graz and the ETH Zurich and received her PhD at the University of Applied Arts in Vienna with a thesis in architectural history on Viennese Modernism and critique of language with a focus on Hermann Czech. Since 2009 she runs her own practice with focus on conversion “coabitare” in Graz. She recently co-curated an exhibition on the work of Hermann Czech and presented her research on conversion at a symposium at the TU Munich.

Angelo Lunati graduated at Politecnico di Milano in 1998, Angelo studied also at Faculdade de Arquitectura do Porto; he received his Phd at ETH Zurich in 2018 with a dissertation on Modern Milan. In 2006 he established Onsitestudio, an architectural practice based in Milan and run together with Giancarlo Floridi. Angelo is currently Unit professor of Architectural Design and lecturer at Politecnico di Milano, he has also been visiting professor at IUAV Venice (2018-2020), TU Wien (2021-2022), Harvard GSD (2022-2024).

Paola Scala, architect, Ph.D, is associate professor of Architectural and Urban Composition at DIARC_Architecture Department of Federico II in Naples. She is a member of the ATESIP Doctoral College Architecture for the Ecological Transition Between Internal Spaces and Landscape of the University of Palermo. In 2018 she founded the ICDS_Informal City Design Studio, a research laboratory on the design of public spaces starting from the recognition and interpretation of uses and informal relationships between different communities.

Atlas Contributors

Noora Aljabi is an architect and designer with an interest in advancing issues of spatial justice as they relate to the political dimensions of architecture. Noora has previously worked as a designer at Studio Gang Architects in Chicago and has taught design studio at the Illinois Institute of Technology College of Architecture. Noora is a licensed architect in the state of North Carolina. She holds a B.S. in Mathematics from the University of Kentucky and received her M.Arch at the Massachusetts Institute of Technology.

> 63rd House

Fabrizia Berlingieri is associate professor at the Department of Architecture and Urban Studies (DASTU), Politecnico di Milano. From 2012 to 2015 she has been visiting researcher at the Department of Architecture TU Delft, and from 2014 to 2016 assistant curator and researcher at the International Bauhaustellung (IBA) Parkstad collaborating with the curator prof. arch. Jo Coenen. From 2009 and until 2019 she is principal at BAS_Berlingieri Architetti Studio, based in Cosenza.

> Soane Museum

Dorđe Bulajić, M. Arch, is an architect involved in teaching, research, architectural design and cinematography. He is a PhD candidate at AUID PhD Program in the Department of Architecture and Urban Studies of Politecnico di Milano and Teaching Assistant in the Department of Architecture at University of Belgrade. His interdisciplinary research focuses on exploring experimental methodologies and techniques in architectural design, specifically at the intersections of architecture and media.

> Museum of Contemporary Art of Republic of Srpska

Patrick Thomas Byrne and **Je Yen Tan** are students at the Department of Architecture at the Technical University of Berlin and developed the case studies as part of the seminar “Affordances of Architectural Typology: Architecture beyond Function” under the supervision of Gennaro Postiglione (PoliMi), Francesca Serrazanetti (PoliMi) and Maike Gold (TU Graz).

> Deutsches Architekturmuseum

Camila Burgos Vargas is an architect and PhD student at Universidad Politécnica de Madrid in joint supervision with Università IUAV di Venezia. Her research is focused on contemporary interventions on architectural heritage. She is an invited member of the research group AIPA (Análisis e intervención en el Patrimonio Arquitectónico) from ETSAM-UPM. She has worked in rehabilitation and real estate development and recently she has worked as teaching assistant at IUAV.

> Espacio expositivo Serrería Belga

Denis Dalladaku is an architect and researcher. He graduated with a Master’s degree in Architecture in 2019 from the University of Prishtina and with a 2nd level Master’s degree in Architecture, Landscape and Archaeology from the Sapienza Università di Roma in 2023. He has been a practicing architect since 2017, joining and developing the group Architecture for Humans, a collective of young professionals from Kosovo, dedicated to interdisciplinary research and design in the fields of architecture, urban design and planning.

> Bourse de Commerce

Stephanie Davidson is an architect and educator. She earned a degree in Fine Art from Mount Allison University in Sackville, New Brunswick, Canada, before studying architecture at Dalhousie University in Halifax, Nova Scotia and at the Architectural Association School of Architecture in London, England. Davidson has taught in Germany, the United States, Canada and Greece and is co-founder of DAVIDSON RAFAILIDIS.

> 577 Niagara Street

Fabiana Dicuonzo is an Italian architect and curator based in Porto (PT). She is currently a PhD student in Museology at Faculdade de Letras, University of Porto. Since 2016 she writes for Artwort-online magazine, and since 2021 she is co-founder of Artwort Gallery. She is Antilia Gallery’s co-curator and co-founder of PROFFERLO Architecture (PT-UK). She holds a Master in Architecture, Polytechnic of Bari (2015) and attended the Postgraduate School in Architectural and Landscape Heritage, La Sapienza University of Rome (2018).

> Casa de Serralves Museum

Emilio Ellena studied Architecture at Politecnico di Milano and at Pontificia Universidad Católica de Chile, Santiago. Since 2018 he has worked as an architect with Onsitestudio. During these years he has been involved in architectural design for residential, hospitality, tertiary and urban planning. The main projects on which he worked on are the expansion of the Crowne Plaza Brussels Hotel, the Pirelli Learning Centre in Milan, the expansion of the former Collegio dei Nobili Hotel in Ravenna, and the Tabacchi Area project in Piacenza. He has worked as a teaching assistant at *Politecnico di Milano*, IUAV in Venice and has been a lecturer at *TU* in Vienna.

> Palazzo Madama

Luca Esposito is a PhD student in Architectural Interior Philosophy at the Department of Humanities of the University of Naples Federico II, with a thesis entitled “Digital craftsmanship for flexible living”. Mainly engaged in the study of interior architecture and the phenomenology of living, in the relationship between inhabited space and multisensory perception in the case of the adaptive reuse of pre-existing architecture. In the same University, in the Department of Architecture, he carries out teaching support activities as subject expert.

> Casa Asilo

GAFFA was established in 2008 by architects Floris De Bruyn, Philippe De Berlangier and Frederick Verschueren, shortly after finishing their studies at Sint-Lucas in Gent. The architectural firm from Gent is known for its pragmatic approach. They dismantle an existing context and transform it into a new reality. This method of systematic deconstruction results invariably in new interpretations of architecture, a vocabulary all of their own.

> Chapel House

Giuseppe Felice Greppi has trained as an art gallery assistant, photographer, cultural mediator, and architect. He co-founded Zattere, an architecture collective that focuses on the profession’s practical aspect, bringing together the designer and the builder in one single figure. The last work delves into the process of unweaving discarded objects produced by construction sites. He has worked as an assistant professor at Éav&t-Paris and at the Politecnico di Milano for two years.

> Palazzo della Ragione

Takumi Kondo and **Ala Talebian** are students at the Department of Architecture at the Technical University of Berlin and developed the case studies as part of the seminar “Affordances of Architectural Typology: Architecture beyond Function” under the supervision of Gennaro Postiglione (POLIMI), Francesca Serrazanetti (POLIMI) and Maike Gold (TU Graz).

> UPF Library

Yingqi Lan and **Che Xiao** are students at the Department of Architecture at the Technical University of Berlin and developed the case studies as part of the seminar “Affordances of Architectural Typology: Architecture beyond Function” under the supervision of Gennaro Postiglione (POLIMI), Francesca Serrazanetti (POLIMI) and Maike Gold (TU Graz).

> Het Predikheren

Tomás Martínez García and **Mariya Romanosova** are students at the Department of Architecture at the Technical University of Berlin and developed the case studies as part of the seminar “Affordances of Architectural Typology: Architecture beyond Function” under the supervision of Gennaro Postiglione (POLIMI), Francesca Serrazanetti (POLIMI) and Maike Gold (TU Graz).

> Atrio Politecnico di Milano

Nuno Valentim, Arquitetura e Reabilitação is an architecture studio founded in 1997 in Porto. It has over 150 projects of different scales, programs and frameworks. Among these: the Rehabilitation of Casa Andresen / Galeria da Biodiversidade and Casa Salabert in the Porto Botanical Garden, the extension of the Lycée Français do Porto and the Rehabilitation / Modernization project of Mercado do Bolhão.

> Casa Andresen

Onsitestudio is an architectural practice based in Milan since 2006 and headed by Angelo Lunati and Giancarlo Floridi, sharing a boundless fascination for architecture and the city. Onsitestudio is a group of 20 architects: after more than 15 years of intense collaboration, the practice has achieved an international reputation for design and professionalism.

> ED.G.E. Office Building

Filippo Oppimitti is an architect and a PhD candidate at the DASTU Department in Politecnico di Milano, where he is also teaching assistant in an Architectural Design Studio. His investigation is developed inside the *PON-GREEN Research Field* program. Before this experience he worked as a research fellow at *LaborA* Model Laboratory in Politecnico di Milano, and he was part of the educational project *Ri-Formare Periferie. Milano Metropolitana*.

> The New Farm

Katharina Paschburg is an architect working between Zurich and Vienna. As a researcher, her dissertation addresses adaptive reuse from the perspective of ‘metahabilitation’. Since 2022 she is a teaching assistant at TU Vienna, Professur Stauffer & Hasler and part of the ‘Reuse in Teaching’ research group. Beforehand she taught at TU Berlin, Prof. Mechthild Stuhl-macher. As a freelance architect as well as in offices she gained professional experience in various competitions concerning conversion.

> ZHAW School of Architecture

Loris Luigi Perillo graduated from Politecnico di Milano in 2020 completing his MSc at PUC in Santiago (Chile). Actually, he works as a freelance architect at OperaStudio and he is tutor assistant at Politecnico di Milano in Design Studio Class. His research “Milano Event City” was hosted at New Urban Challenges exhibition at Spanish Academy in Rome. He has been lecturer at Politecnico di Torino and his research about Housing in Perù during 60s is currently under publication with Aisu.

> Palazzo della Ragione

Clara Presa is currently studying in the Master of Architecture and Urban Design at Politecnico di Milano. She developed the subject of the call for paper “Architectural Affordances” in her bachelor thesis, supervised by Francesca Serrazanetti.

> Provianda Santa Marta

Georg Rafailidis (b. Fürstentfeldbruck, Germany) studied at the University of Applied Sciences, Munich and the Architectural Association School of Architecture in London, England (DAAD scholarship recipient). Rafailidis has taught in Germany, Canada, Greece and the United States, where he’s an associate professor at the State University of New York at Buffalo. Rafailidis is co-founder of DAVIDSON RAFAILIDIS.

> 577 Niagara Street

Fabian Tobias Reiner is an Austrian architect and architectural theorist. He holds an MA with distinction in History and Critical Thinking from the Architectural Association in London and an MSc in Architecture from ETH Zurich. He has worked for Camponovo Baumgartner in Zurich and Leth & Gori in Copenhagen. In 2021, he published *Architectural Comfort-Discovering Conceptions in Modern Viennese Concretisations*. He has written for magazines such as werk, bauen & wohnen, and ‘paprka’ (Yale).

> Architectural Association

Susanna Risi is an architect and researcher from Italy. She graduated with a Bachelor’s Degree in Architecture from Sapienza Università di Roma and is currently studying in the Master of Architecture and Urban Design at Politecnico di Milano. A common recurring theme on her work is how to tackle the urban decay of our cities, also regarding archeological and industrial heritage.

> Bourse de Commerce

Spridd is an architecture office founded in Stockholm by Klas Ruin and Ola Broms Wessel in 2005. It has established itself as one of Sweden’s most innovative architectural offices through success in competitions, research, debates and completed projects. The projects range in a wide field from interior design to urban development as well as from conceptual thinking to construction drawings. Spridd currently consists of ten architects with a network of established partners.

> Mötesplats Mariatorget

Pavle Stamenović, PhD, dipl.ing.arch. is an architect engaged in teaching, architectural design and research, with a PhD in Architecture and Urbanism from University of Belgrade (2016), where he is employed as assistant professor at the Department of Architecture. Engaged as a guest lecturer at Estonian Academy of Arts / EKA (Tallinn, Estonia). He is committed to critical approaches to design learning and he practices research in the field of methodology and process of architectural design.

> Museum of Contemporary Art of Republic of Srpska

Laura Suvieri studied for a Master’s degree at the Department of Civil and Environmental Engineering at the University of Perugia. She developed her contribution as part of her Master’s thesis, which was co-supervised by Andreas Lechner as part of an academic collaboration with Graz University of Technology.

> Opificio Gotinelli

Jean-Benoît Vétillard Architecture is an architectural practice based in Paris since 2014. The projects developed by the studio all began or ended their lives as drawings. Some are built, others are under construction. The studio questions the architectural design process as much as the built reality, exploring the causes as much as the consequences, the route as much as the destination. It strives to address the different scales of architecture, scenography and design, without any preconceived hierarchy.

> Palazzo Medici Riccardi

Leonardo Zuccaro Marchi is Assistant Professor (RTDA) at Politecnico di Milano. After completing the PhD at IUAV and TU Delft (“The Heart of the City” published by Routledge in 2018), he developed his research in international post-doc research projects and fellowships in collaboration with renowned academic institutions (TU Delft, KTH Stockholm, IIT-Chicago, ETH-Zurich). He has taught at TU Delft, PoliMi, UDEM, and IUAV. He is co-Founder of {Co-P-E} which won European 14 in 2017.

> Martin Luther King Jr. Memorial Library

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