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70125 Bari - Italy

Phone: +39 080 5963564

E-mail: info@artecweb.org - tema@artecweb.org

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# THE REWRITING OF THE URBAN PALIMPSEST THROUGH AN "EVOCATIVE BUILDING RENEWAL" OF TWO MILANESE ARCHITECTURES



Danilo Di Donato, Alessandra Tosone, Matteo Abita

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#### Abstract

The topic of urban regeneration consistently involves a reflection on the relationship between pre-existence and transformation, between permanence and the research for an image renovation of the buildings that participate in the construction of the urban palimpsest. A contemporary architectural narrative cannot overlook the fundamental coherence between what it was – and now what is lost – and what remains. That point is symbolic of what happened in some industrial districts, which were subject to a functional conversion that is still in progress. As a result, these industrial archaeologies appear as silent buildings without any function. Otherwise, a building could still be used and play a leading role in the urban setting as an integral part of the contemporary urban story. In this instance, the conservation requests frequently prevail over the transformation requirements. However, this does not preclude design strategies that can also encompass the partial or complete renovation of the building, solely focusing on the functional and technological enhancement of the exterior envelope or even the reorganization of the interior spaces. Two significant examples of these directions – namely the first pertaining to the recuperation of industrial archaeology heritage that has been incorporated into the urban fabric, and the second aimed at reshaping buildings that necessitate urgent technological and formal renovation – were executed by Park Associati in the past decade.

#### **Keywords**

Urban palimpsest, Building renewal, Envelope retrofitting, Milan, 20th-Century architectural heritage.

#### Danilo Di Donato\*

DICEAA - Dipartimento di Ingegneria Civile, Edile-Architettura e Ambientale, Università degli Studi dell'Aquila, L'Aquila (Italy)

#### **Alessandra Tosone**

DICEAA - Dipartimento di Ingegneria Civile, Edile-Architettura e Ambientale, Università degli Studi dell'Aquila, L'Aquila (Italy)

#### Matteo Abita

DICEAA - Dipartimento di Ingegneria Civile, Edile-Architettura e Ambientale, Università degli Studi dell'Aquila, L'Aquila (Italy)

\* Corresponding author: e-mail: danilo.didonato@univaq.it

#### 1. INTRODUCTION

Paul Ricoeur believes that «to build coherent temporal sets» means, in the very activity of the story, taking the form of «configuring time» [1]. However, the selection of a temporal whole and the research of a coherence – which can be internal if it is solely related to the events already included or external if it crosses multiple sets – are not straightforward actions and cannot always be attributed to objective criteria. They are the outcome of a critical-in-

terpretive process that cannot abstain from the fundamental moment of selecting the data of each set. This selection phase appears to be even more essential in projects involving existing buildings, namely "to build on the built". Indeed, the determination to proceed with a contemporary architectural narrative that does not overlook the essential coherence between what was — and what is now lost — and what remains, can only be derived from a

meticulous examination of past fragments and traces, of relationships and rules in each structure. All this information can translate the nature of the built heritage into a comprehensible and interpretable whole, as a prerequisite for the ability to work on it. The process of transcoding the signs' inheritance which in this way is transferred by the existing heritage leads to the identification of some features of permanence that allow to establish in a new story the diachronic coherence between before and after, between yesterday, which could be more or less far, and tomorrow, closer as envisaged by the project [2]. Therefore, these characteristics constitute the essential temporal connection required to establish continuity between diverse ages, which can be expressed in various manners. At times, it manifests itself as the mere preservation of the built heritage, encompassing the complete or partial preservation of its material consistency; other times, it corresponds to the rediscovery of a system of architectural rules and signs that belong to the existing buildings and are adopted by the designers charged with the renovation to give life to seemingly new buildings; other times, it is the outcome of a balanced process that acts as a mediator between the aforementioned topics. Consequently, the design style exhibits varying degrees of coherence with the original structure and the associated transformation phases. They progress from meticulous precision to the urban palimpsest, wherein the building engages in a more explicit freedom of expression, with the aim of presenting a renewed image of the existing building. However, this relationship recovers the system of rules that guide it or takes from the alphabet of signs that defines it.

Different modulations of the operational style cannot be entrusted to a mere arbitrary choice of designers. Nevertheless, it must be measured based on the nature of the urban palimpsests and the relationship the selected building establishes with them. With this perspective, it is imperative to comprehend its significance in the urban setting and its pivotal role in the narrative [3]. It is even more important if a state of abandonment of the existing buildings has led to a substantial loss of meaning, considering the inevitable and evolutionary process that the palimpsest faces. Moreover, it is noteworthy that certain industrial districts have undergone a transformation that is still in progress, even though it has already resulted in a

profoundly altered urban landscape, wherein the vestiges of industrial archaeology appear to be "silent" buildings, devoid of any function. In this case, the building stands as a historical testimony, but it has now lost its character as an urban living space. The renovation project aims to reclaim the abandoned spaces and reclaim their "voice", transforming them from "mutes" to "singers" through distinctive solutions that, depending on the circumstances, act as a mediator between conservation and transformation [4].

Otherwise, a building can still be used and play a leading role in the urban set and in such cases, the conservation request typically prevails over the transformation one. However, this distinction does not exclude design strategies that can also consider the renovation of the entire building or only a portion of it, with a focus on the theme of the functional and technological updating of the envelope, as an essential element of the contemporary urban story, or even the new arrangement of the interior spaces.

Among the most significant examples of the operational strategies are two works developed in Milan in the last decade by the Milanese studio Park Associati: the renovation of the former General Electric factory, which hosts offices and laboratories of an important company, and Palazzo Campari, a building built in the 1960s. The first one aims at renovating the heritage of industrial archaeology now included in the urban texture, and the second one is aimed at restyling buildings that need an urgent and undelayable technological and figurative renewal. Following two distinct strategies, the designers adopted the same approach for both interventions, which could be described as an «evocative building renewal» [5].

## 2. THE REDEVELOPMENT OF AN INDUSTRIAL AREA: THE LUXOTTICA DIGITAL FACTORY

The renovation project of the former General Electric factory entails the search for rules that could be able to affect, according to a different story of what it acquires as a narrative trace, the palimpsest of the Milanese industrial area flourished near Porta Genova in the middle of the 19th century. The related building texture, organized on a road grid parallel to the railway line and characterized by the large industrial blocks, is originally over-

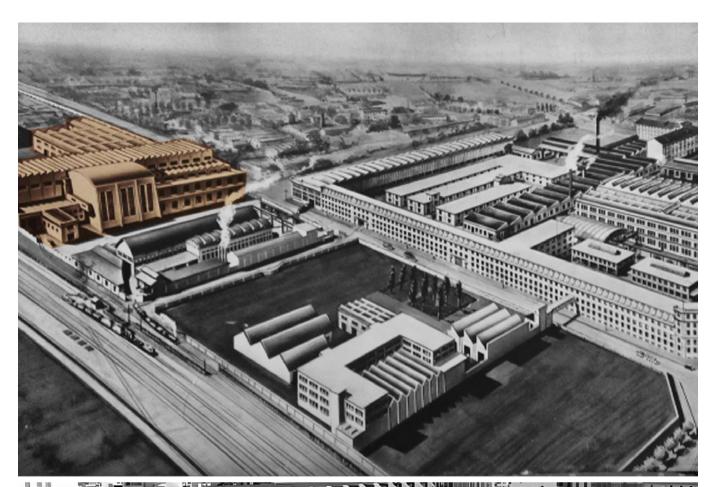




Fig. 1. The former General Electric factory in the industrial district close to the railway station of Porta Genova and the factory before the renovation design. Source: © MUMI Ecomuseo MilanoSud.



Fig. 2. The façade along Via Tortona and the interior space of the GE factory placed next to the building block redesigned by Alfredo Beretta and Matteo Thun. Source: © Park Associati.

written on the rural layouts and the agricultural partitions determined by irrigation infrastructures and crops. The defining elements of the agricultural landscape, such as farmsteads, irrigation ditches, borders, and fences, establish the boundaries for the designation of district blocks. These blocks, since the initial urban development, have been shaped by regular forms of large size with a singular function, soon occupied by both Italian and foreign industrial companies, as well as the initial workers housing and, gradually, schools and services [6].

In Via Tortona, at number 35, the factory of the Compagnia Generale di Elettricità S.p.A. – an associate of the

multinational General Electric – was built in the 1920s to set up a plant for turbine production in an area of 30,000 m<sup>2</sup> (Fig. 1). After the lively economic development of the 1960s, the industrial site was affected by a phase of decline due to the transformation of production systems and the energy crises. Many factories were decommissioned and, in a few years, either abandoned or subject to easy resettlement processes of other productive activities. After the phase of decommissioning and disuse of the plant, at the end of the 1990s, an American group settled in the former General Electric area, using the building for television production and as a data centre [7].

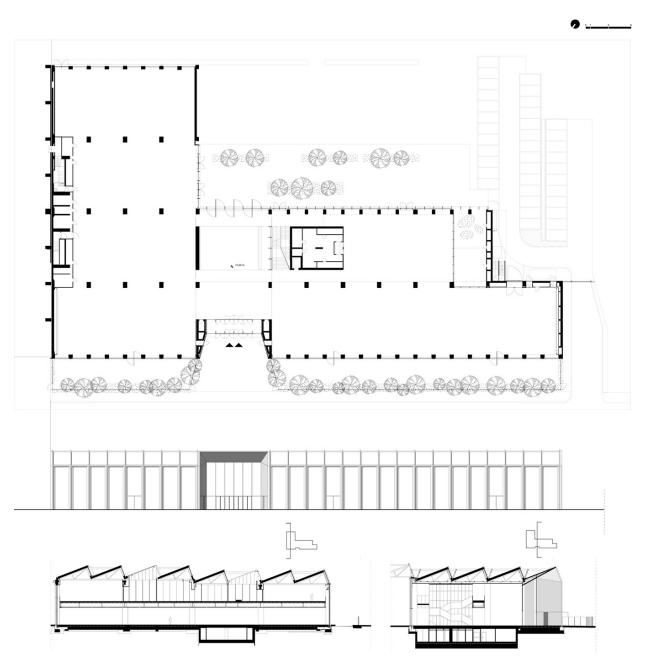


Fig. 3. The layout of the building designed by Park Associati that replaces the former GE factory. Source: © Park Associati.

In 1983 a process of transformation and regeneration of the industrial quartier began: the first example, the creation of Flavio Lucchini's Superstudio in the locomotives' garages of the Porta Genova station and a bicycle factory, was followed starting from the 1990s by the redevelopment of the Ansaldo area, the establishment of the Domus Academy in Via Savona, the Armani Theater in the Nestlè factory, the Arnaldo Pomodoro Foundation, etc.

This process of regeneration continued with additional significant private interventions, which were subsequently supplemented by public initiatives that significantly altered the role and image of the district [8]. In this scenario, the area of the former GE industry was also interested in 2006 by the renovation of the tall block located on the edge of the production site to host the Nhow Hotel designed by

Alfredo Beretta and Matteo Thun and by an architectural competition call for the design of the Luxottica Digital Factory (Fig. 2). The winning project, which was developed by Park Associati in collaboration with MSC Associati, best exemplifies the identity principles of the client, which include utmost care for quality and technological innovation of materials, exploration of avant-garde architectural solutions, and acknowledgement of the unique values of the location, taking into account the social composition of the neighborhood that will host the new functions [9].

The project area has a depth of 64 m and a length of 113 m, wherein the shed pavilions are arranged side-by-side. Additionally, the continuity of the front, which is 13 m high, is clearly visible on Via Tortona. The structural typology of the original building – a large single or dou-

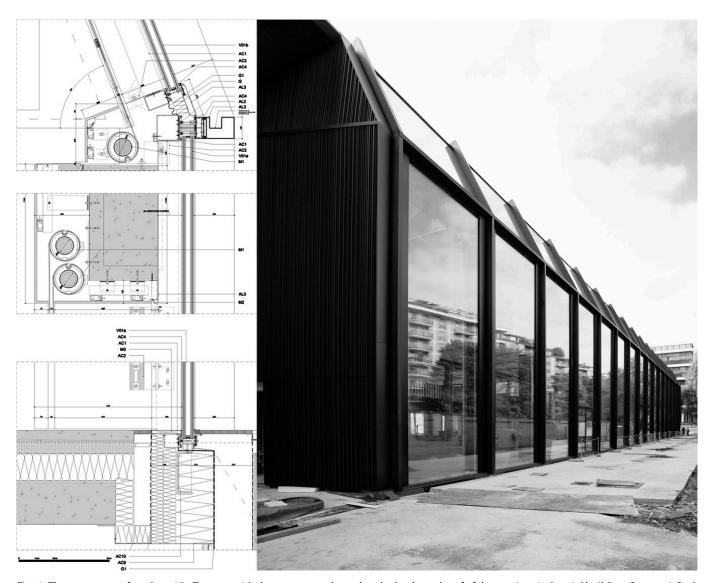


Fig. 4. The transparent façade on Via Tortona with the upper part shaped as the backward roof of the previous industrial building. Source: © Park Associati.

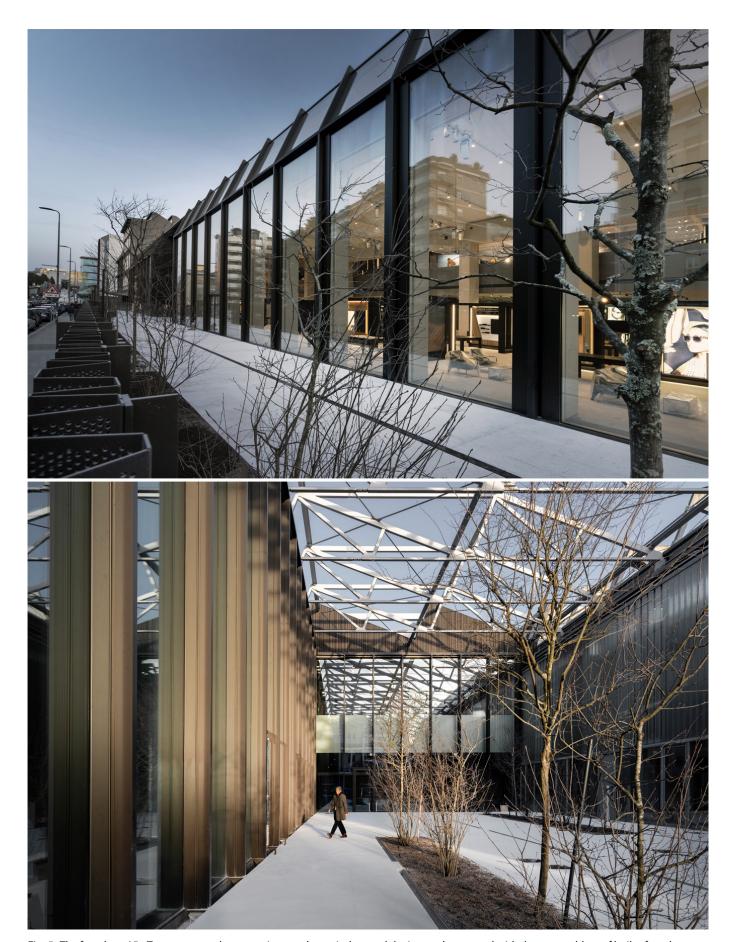


Fig. 5. The façade on Via Tortona treated as a continuous shop window and the internal courtyard with the permeable roof built of steel trusses. Source: © Andrea Martiradonna.

ble-span block – characterized by reinforced concrete frames and a roof built of truss beams to facilitate the movement of bridge cranes, was strongly compromised by the refurbishment works of the 1990s.

The interior space of the pavilions was divided, with the construction of several floors catering to the functional requirements of the new television broadcasting. This also influenced the darkening of the skylights and the new arrangement of the window system, resulting in a significant reduction of the symbolic identity of the former industrial plant and the assumption of the anonymous character of a service building situated in the outskirts.

The objective of the project was to identify and restore, through a careful critical and interpreting process, all those elements that were capable of ensuring a comprehensible re-reading of its past, even recent, and to identify those that were capable of advancing in the narration of a contemporary tale through fresh and coherent episodes to reinterpret traces, logics and intentions. Two rewriting keys were used: an "introverted" one, which concerned the return of the original free internal space, and the "extroverted" one, which involved the maintenance of the original shape on which the episodes of the contemporary project were grafted (Fig. 3). The strategy of preserving the external volume shape and re-reading the structural elements of the building resulted in precise design choices that primarily focused on the front of Via Tortona. The compact shape of the old factory was underlined and emphasized by the opaque envelope that marks the head profile and the depth and height of the two walls, forming the large and squared fornix to mark a different relationship between the building and the city. The façade, which is shaped by full-height windows and separated by dark, slender columns constructed from bronzed metal, reinterprets the metric of the previous structure. It accentuates its verticality by doubling the structural elements and following the rhythm of the shed beams, which propose the same shape as the pre-existing reinforced concrete elements with a steel frame (Fig. 4).

The building's exterior envelope was the result of technological and structural research, which resulted in maximum transparency and brightness; the same transparency applied to the interior spaces, made with precious materials that emphasize the monumental character of the internal naves facing the enclosed courtyards, designed by the landscape architect Marco Bay (Fig. 5).

Regarding the correlation between material preservation and novel functional requirements, a reconstruction of the structure was anticipated, preserving a portion of the original pillars that were appropriately reinforced. In the latest functional layout, the incorporation of an intermediate floor aimed at supporting high overloads necessitated the incorporation of essential steel structures of the deck. Relevant interventions were undertaken on the ground floor to underlie the existing foundation plinths and construct the basement. With an overall and integral retrofitting project, the building is then suitable for the parameters of safety and sustainable living with the adoption of the LEED protocol and the attempt at a GOLD class certification [10].

The factory hosts a meeting place for production and use, showrooms with commercial spaces on the ground floor and the Digital lab with the high-tech innovation centre on the upper floor, according to a distribution model that foresees two cores of lift systems and stairs covered in burnished brass. Around them, the whole internal space is organized. It remains possible to establish novel and unexpected visual connections by precisely defining transparency gradients between the wings of the internal courtyard, the surfaces and textures of the steel roof beams, and the metric of the glazing of the new façade with the city.

### 3. THE NEW BUILDING DRESS IN THE CITY CENTRE: THE PALAZZO LA SERENISSIMA

The Palazzo La Serenissima restyling project was mainly aimed at renewing the ambitious urban concept of the "Gran Milano". The building overlooks the Via Filippo Turati, which connects Piazza della Repubblica with Piazza Cavour. The current layout of the road axis is due to the provisions of the City Plan, which was drawn up in 1863 by engineer Garavaglia. A long series of following changes starting from the mid-nineteenth century, well describe the process of transformation of the historic city and, consequently, the overwriting of the urban palimpsest according to the rules and methods of a "modern" language [11]. The district that arose around Via Turati

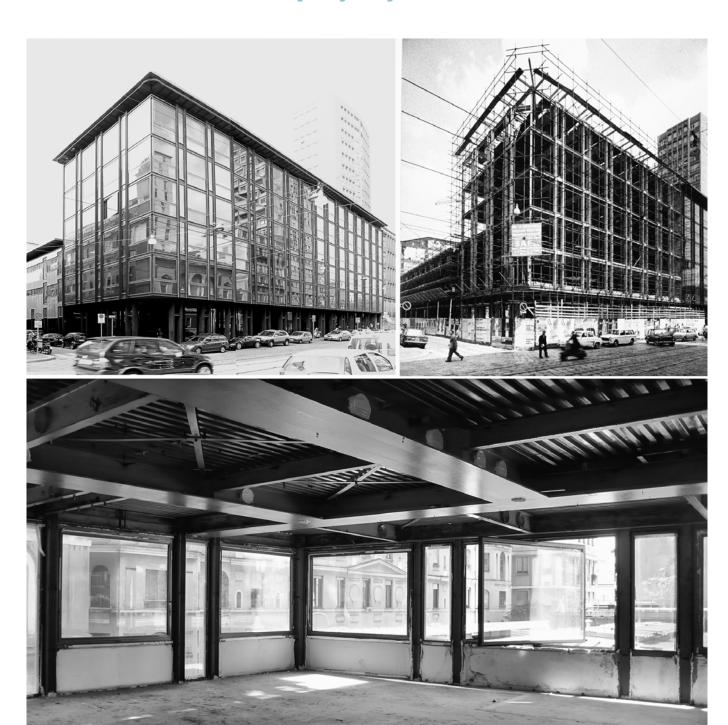


Fig. 6. The original office building La Serenissima placed on Via Turati and designed by Ermenegildo and Eugenio Soncini. Sources: © Park Associati; Archivio Soncini – © Comune di Milano – CASVA; © General Planning.

mainly developed during the kingdom of Umberto I of Italy. The residential buildings and the headquarters of the Society for Fine Arts and the Permanent Exhibition filled the area's capacity in the early 20th century.

In the first years after the First World War, three significant architectures changed the configuration of Via Turati. The first one, in 1922, was the Ca' Brutta, designed by Giovanni Muzio, a singular building in terms

of size, height, and eclectic style of the façades [12], followed in 1931 by the new monumental Central Station designed by Ulisse Stacchini according to "Teutonic typological models" [13], and completed in 1936, by the Palazzo Montecatini by Studio Ponti-Fornaroli-Soncini with its smooth and compact façades, clad by marble slabs and marked by the rhythm of the flush-to-wall windows [14].



 $\label{eq:continuous} \textbf{Fig. 7. The façade, the porch and the internal courtyard of the building La Serenissima. Source: Archivio Soncini - © Comune di Milano - CASVA.}$ 

The transformations of the 1920s were followed by those of the 1950s and 1960s, favoured by the building replacement with volumetric increase foreseen first by the 1949 Reconstruction Plan and then by the 1953 City Plan. Some of the transformations concerned the

building of well-known architectures in the Milanese scenario: the thirteen-storey tower of Montecatini, designed by the Ponti-Fornaroli-Soncini studio and inaugurated in 1951; the two towers at the entrance to Via Turati, designed by Giovanni Muzio and his pupil Luigi

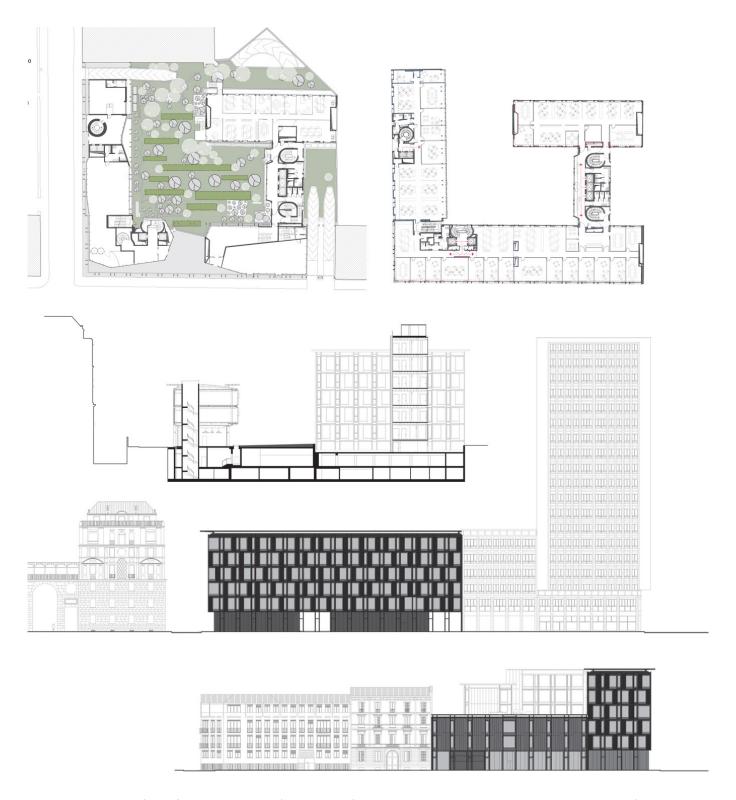


Fig. 8. The new layout of the offices and the project of the two main façades showing the relationship with the other buildings of the urban context. Source: © Park Associati.

Mattioni. Another important building, the Palazzo La Serenissima, played a significant role in the dynamics of the transformation process of this late 19th-century Milanese district (Fig. 6). The building, conceived by the brothers Eugenio and Ermenegildo Soncini, who had previously worked in the same urban area, initially acquired its name from the real estate firm that promoted its construction to replace two residential structures situated adjacent to the Turati Tower [15]. It was completed in 1969 and it hosted apartments and office spaces of some international companies (Fig. 7) – including Campari, indeed it was also known as the "Campari building" – until its recent purchase by a foreign real estate fund, which favoured the refurbishment.

In 2008, the building complex was incorporated into the real estate portfolio of Morgan Stanley Sgr, prompting the announcement of a design competition for a comprehensive renovation that included both structural and energy retrofitting. The restricted competition process concluded in January of the ensuing year with the triumph of the Milanese studio Park Associati. The management of building works and the structural and plant design was entrusted to the engineering company General Planning [16].

The Park project was focused on the redesign of the façades. Between the extremes of conservation and modernization, the designers sought a third way capable of preserving the complex of symbolic and characterizing values of the building, without renunciation with respect to use and market values.

The building is, in fact, based on the replacement of the original envelope; its texture is reinterpreted in the project to create a "new architectural dress" that fits the dimensional and proportional metrics of the Soncini building and, in particular, of its structural layout. For the new envelope, the designers selected non-standardized solutions based on distinct schemes on the street fronts of Via Turati and Via Cavalieri, as well as the internal courtyard.

A preparatory phase for the transformation of the curtain wall was the recognition of the "regulatory" value of the steel structure, designed by the Soncini brothers with the company Società Anonima Elettrificazione di Lecco and characterized by the repetition of an exposed struc-

tural pattern, which consists of single span frames oriented in the short side of the building facing Via Turati [17]. This "regulatory weft" was entirely preserved, with the exception of limited reinforcements and remediation for asbestos. It was exposed with the removal of the curtain wall to serve as a syntactic rule, thereby guaranteeing continuity between the old and new narration by overwriting the urban palimpsest.

The steel weft was transformed on Via Turati into an exposed lattice with a glass surface placed backwards, characterized by an updated composition of vertical and horizontal elements to reconfigure a contrasting image with the stereotomic rules of the close Ca' Brutta and to achieve a renewed analogy with the tectonic principles followed by the adjacent buildings. The structure established the design modularity of the new façade, which was interrupted and arranged by incorporating a perforated aluminium panel that was appropriately proportioned to the coupled columns and variedly repeated, introducing asymmetry and dissonance with novel formal guidelines. The addition of new steel elements provided further flexibility for the partition walls, and the integration of an LED lighting system allowed the building to transform into a large "lantern" during the night.

A similar arrangement of the façade was proposed for all fronts of the courtyard, but it was based on a different position of the glass, which was shaped as a flat surface with all coplanar components. This strategy ensured maximum penetration of light and enhanced the visual relationship with the garden (Fig. 8). It was designed with the advice of landscape architect Marco Bay and made visible from the outside by a large atrium shaped in the covered walkway of the porch [18, 19]. A different strategy was adopted for the building envelope located in Via dei Cavalieri, originally designed for residential use and characterized by a prevalent opaque front to guarantee the necessary privacy. A distinct arrangement of the ground floor resulted in a more seamless connection with the principal structure and a modification of the porch height. Moreover, a novel reflecting and flat glass façade proposed a direct dialogue with the side of Ca' Brutta. Even in the new façade arrangement, the choice of coupled columns was confirmed as a regulatory pattern for

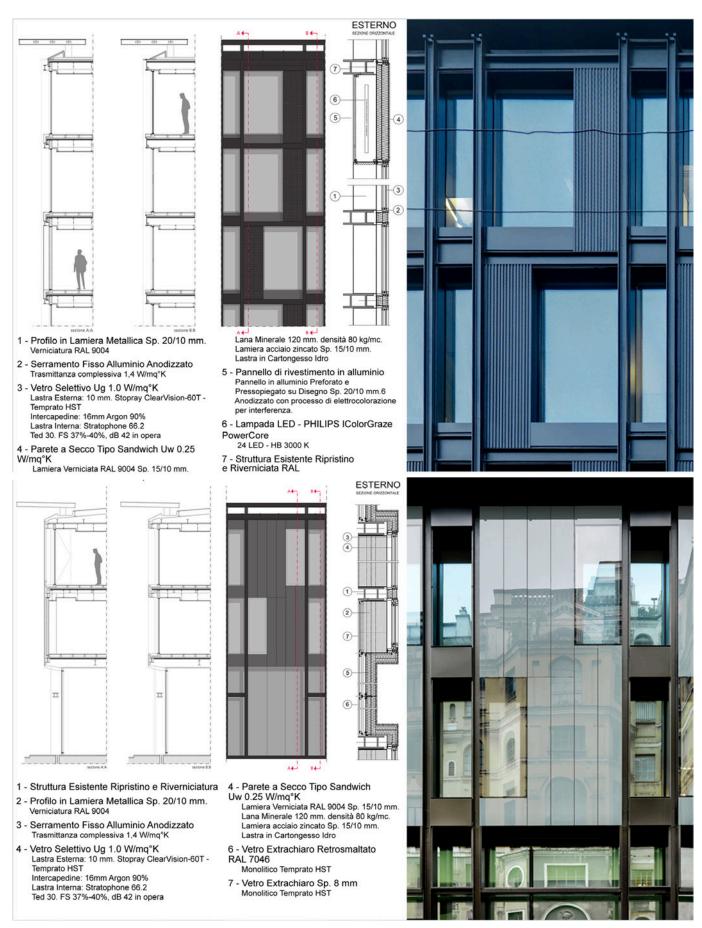


Fig. 9. The two façades respectively conceived for the blocks of Via Turati and Via Cavalieri with a different relationship between steel frame and glazing. Sources: © Park Associati; © Andrea Martiradonna.

the window module (Fig. 9), which was repeated according to different rules [20].

The renovation design involved a new definition of the crowning element, which was proportioned to the new volumetric arrangement. The biggest overhang of the projecting roof allowed the integration of the glass cleaning system, and the different façade sides were marked with a deep shadow line (Fig. 10).

The retrofitted façade enhanced the energy efficiency of the envelope by combining an opaque and transparent module, resulting in a reduction in heat dispersion and superior acoustic insulation. The containment of energy resources was confirmed with the achievement of LEED Gold certification and the transition from G to B energy class with a halving of specific building consumption [21].

The revised functional layout of the La Serenissima building resulted in an available area of approximately 15,000 m<sup>2</sup> for the underground floor and about 8,000 m<sup>2</sup> for the upper floors which were distinguished by open space offices.

#### 4. CONCLUSIONS

The project on existing buildings appears to be a valuable practice that could regenerate a story aimed at continuing and representing the architectural heritage in a coherent temporal configuration. The new narrative must establish a *fil rouge* between urban dimensions, arranged in chronological order, referring to distinct moments in the creation of the palimpsest.

The two case studies illustrate the dynamic character of the "Gran Milano" entrepreneurial spirit, which tries to preserve its roots without renouncing them to promote its image through a contemporary architectural narrative. As per the definition of an "evocative building renewal", the project adheres to the development of a dual design register that can be tailored to the functional and technological update in accordance with the principle of control and sustainable management. Furthermore, it also collaborates in the rewriting of the urban palimpsest, particularly expressed through formal codes of the façade elements, restoring a distinct narrative of the public space inherited from the "dusty"

industrial districts or the elegant quartiers of the late 19th century.

The city's regeneration is, in fact, a practice that involves the awareness of updated assessments of needs and spaces and the definition of vulnerability and potentiality aimed at its sustainable management. It is also linked to the opportunity to reactivate the transformation process that, with the persistence of certain conditions, spontaneously generated the «enormous deposit of signs and practices» of the palimpsest, which «stratifying, overlapping, deforming and sometimes contradicting itself, has produced surprising and often barely interpretable results» [22]. In an unpredictable time frame, the evolution and transformation of the palimpsest transpired in accordance with a natural chronology, acquiring the characteristics of a self-regulating process. Taking into account the actual complexity of the problems and the variation speed of the urban dynamics, the work on the urban palimpsest should involve the character and methods of «an active process that reports an effective and constant suitability to experiment and to explore the various plots of relationships compatible with what can be called the "edge of the possible transformation", namely the ability to vary and the suitability to change without compromising the continuity of which any notion of identity, even the weakest, cannot fail to feed on» [23].

Therefore, «to design for the existing buildings» can identify the perspective overturning in which the choice or indeed the need for one or more categories of the design work – restoration, refurbishment, reuse, redevelopment, etc. - represents the coherence of a methodological approach with the dimension of foreseen operations that must be chosen case-by-case. The interpretation, namely «to say of the saying» which «has remembrance as its own dimension, as a factor that is able every time to raise the hidden potentiality in the primitive object reached by memory», shapes a different and possible condition of the pre-existence according to a «faithful and free project at the same time: it has to be faithful because it is compliant with what has already been said and free because it gradually adds that much which is recognizable as virtually included in the original saying» [24].

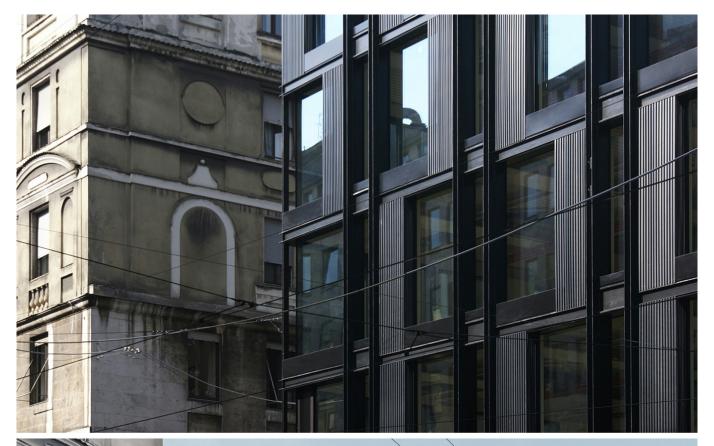




Fig. 10. The new configuration of the steel building that reaffirms the contrast with the ecleptic façades of the Ca' Brutta. Source: © Andrea Martiradonna.

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