Inhabit Utopia: A new outcome for large regenerated industrial areas in Milan

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URBAN REUSE IN MILAN

Abandoned industrial sites are the most evident signs of the transformations and of the economic, social and functional changes of a city. In fact, these areas are called "terrein vagues" (De Solà-Morales Rubió), "waste lands" (DeSilvey and Edensor), "derelict lands" (Preite), "brownfields" (Armondi and Di Vita), "voids" (Bravo et al.), depending on the idea that in each instance the term intends to underline . Many industrial buildings located in big European cities were abandoned due to the economic crisis that affected the mechanical and manufacturing production sectors in the late '70s. Other large production plants in urban areas were closed down because cargo handling operations, increasingly rapid and efficient, have made these areas no longer strategically suitable for production and they are no longer connected to highway and logistic networks.

The presence of these large abandoned areas inside the city is also due to the continuous transformation of urban centres, a consequence of the complex historical, economic, social and political processes that characterize the relationship between each human group and the territory inhabited. In fact, when cities evolve and change shape, often including areas previously separated from the residential context, changes affect the morphological characteristics of the flows of people, distribution of goods and services and, last but not least, redefine the functions and value of spaces within the urban structure (Saskia. Sassen).

Starting in the mid-70s, Milan experienced a gradual decentralization of the large production plants previously located within the urban structure. This phenomenon brought into being of wide abandoned areas located in the north-east and north-west of the city, to which a belt of medium-large abandoned areas in the area south-east of the centre, along the disused railway tracks, must be added. Also, there are many isolated cases of small and medium-sized abandoned areas scattered in the urban structure, characterized by completely different re-use dynamics and processes. In the mid-90s the total abandoned industrial surface was estimated to be of about 6 million square meters (Trono and Zerbi).

These areas, located within the city of Milan, long remained empty, "disconnected", without functions or connections with the historic city, and shared the common characteristic of lack of regulation and absence of order. They appeared as spaces outside the city, areas of "exclusion" and "separation", which sometimes played dividing and isolating one district to another one (Barron and Mariani).

The last decade of the twentieth century and the first decade of the 2000s, however, were characterized by a proliferation of redevelopment and reuse projects during the transition process of the urban economy of Milan from the production of goods to the supply of advanced services. A new urban plan, approved by the urban Municipality of Milan in 2012, that identified entire districts of the city to be subject to renovation, represented an important stimulus for investment in construction and gave rise to large-scale real estate projects, mostly financed with private capital (Armondi and Di Vita; Trono et al.).

The ways in which these interventions took place, however, were different, depending on the size and location of the areas object of the intervention, the planning purposes that supported the recovery and also the physical condition of the structures located in these areas. The values of these zones, were multiple and often greater than the economic value of the earth itself: they were also "remains" of the long process of transformation of the city and physics elements of change and, therefore, permanent symbols of the continue evolution of urban space (Sennett).

The outcomes of these great reuse interventions were imponderable and unpredictable in the planning phase. On some occasions they were rooted in the very nature of the project, on other they evolved step by step when the buildings were built up or reused and the district changed its shape becoming "something else" for the people who live and visit it.

The present paper argues that in Milan it is possible to identify the cases of "City Life-Portello" and "Porta Nuova", which, starting from the characteristics of the redevelopment, both from the point of view of planning and of location, tend to share the result of a connection of the new district in the urban structure in brand new outcome compared with the traditional urban structure of the city of Milan. In fact, the connection of these abandoned areas with the urban structure of Milan, although it took place in different ways, offered the opportunity to reinvent empty spaces for new uses starting up processes of fruition, denomination and connotation of space that are very similar. At the same time, however, in both cases, the link between past and future is too weak to create a real regeneration process of the industrial historic heritage as happened in other neighborhood of the city, and the end result is

something completely new, "something else" within the city of Milan, from which it differs in shapes, colours, heights and meanings. The paper will consider the redevelopment of these two areas considering the visual, iconic and structural aspect of the project. In particular, it will be observed how the new buildings relate to the neighbourhood in which they are inserted, trying to identify the ways in which the industrial heritage structures have been used within the masterplan to connect the new spaces to the old city.

A NEW OUTCOME: BECOMING "SOMETHING ELSE"

In Milan, the recovery of large industrial abandoned areas did not always enhance structural restoration but often followed more strictly economic goals, exploiting the strategic nature of the sites' location, enhancing their potential to become sites able to trigger new processes of transformation and reorganization of the urban structure. Contemporary cities, in fact, must today relate to an increasingly articulated, complex and dynamic territorial and infrastructural context. It is necessary to respond to new needs related to housing, production and the tertiary sector, which require a different modulation of spaces in order to allow companies, but also city-users, to be increasingly competitive (Saskia Sassen).

This strategy is clearly noticeable in the redevelopment that includes the sites of the former "Fiera Campionaria" exhibition's area with the former "Alfa Romeo Portello" car factory, located in the north-west quadrant of the city and in the coordinated project for the recovery of the abandoned railway sites "Porta Nuova-Garibaldi-Varesine-Isola", in the northern area of Milan.

These projects, despite the peculiarity that each one present, are united by the fact that the two areas were completely subverted with regard to their previous missions, radically transforming not only the original urban structure but also changing the role they had inside the city. The two projects introduced iconic landmark buildings with unusual shapes that strongly changed the physical shape of the historic neighbourhoods and the image of the city, both for inhabitants and city users.

In a city such as Milan, with a traditional urban layout, in which the predominant architectural forms follow aesthetic canons that can easily be traced back to the historical periods in which they were constructed, but in which, above all, height elevation is rarely particularly meaningful, the construction of tall buildings helps to raise the "sense of the place" and increases the imageability of the city (Al-Kodmany).

According to Kevin Lynch's theory, in fact, these new constructive modalities created a strong identification of the places, conferring precise readability to the environment thanks to the shapes, materials and the height of the buildings , out of scale with respect to the surrounding ones. In addition, the physical visibility of the constructions establishes the city's new nodes and landmarks in the memory of its users, creating orientation paths that are fundamental for liveability in an ever-changing urban environment (Lynch).

In Milan, where the view of skyscrapers is a very recent experience, these places in which the "the new" is represented by shapes, colours, lights, materials and dimensions, also became spaces to meet people, to socialize, spaces that emotionally affect the senses and contribute to create the image of a city which is today openly competing with the big European capitals.

CITY LIFE-PORTELLO

In the quadrilateral renamed "City Life", located in the historic Milan "Fiera Campionaria" exhibition's area, the intervention of the "starchitects" Libeskind, Hadid and Isozaki completely redesigned the spaces through a process of total demolition and replacement of the existing buildings. The project completely redesigned the district in an innovative perspective in which aesthetics and functionality combined positively to generate a better quality of life, promote tourism and leisure, cultural activities and civic events, to offer improved traffic, and new opportunities for saving energy (Camerin; Ogrodnik; Roditi).

Fig. 1. City Life – Portello (Image by Maristella Bergaglio)

In fact, the setting envisages residential areas and spaces for offices inserted in a large park surrounding a series of buildings for commercial/tertiary services, a Museum and a centre for Contemporary Arts. The traditional Milan of the past, on the other hand, remains visible in the recovery of some buildings of the historic "Fiera Campionaria", opened in 1923, such as the "Palazzine Degli Orafi" in Liberty style, the historic "Padiglione 3", designed by the architect Paolo Vietti Violi, and the "Velodromo Vigorelli" (Di Vita).

The project is clearly defined both by the visual impact and by its personality, expressed by shapes, colours, spaces and dynamics of usability that make the system harmonious. Architects introduced in the masterplan disruptive forms and volumes that are totally unrelated with the existing urban structure, creating a strong discontinuity in the landscape of the city of Milan. Zaha Hadid's residential buildings are characterized by smooth shapes, slightly curved facades, with all corners rounded, wooden panels and transparent balconies. On the other hand, the multifamily buildings by Liebeskind are composed vertically through a fluid movement of edges and plastic perspectives clearly far from the perspective-structural regularity of the historic buildings in Milan.

In the centre of the area, three iconic skyscrapers, stand very close to each other creating what might seem like a "traditional square", but actually designing a "new centre", where the old Milan is reflected in the "glass architecture" of the new Milan (Hadid et al.). The "three towers" not only connote the space physically, through the dialogical diversity of their straight, crooked, winding shapes but have also acquired an identity of their own. In fact, they are architectural "subjects", thanks to the name given to them by the business firms that own them, that can be read on large signs which make them immediately recognizable and visible by day and by night.

Public gardens of the new City Life complex are concentrated almost exclusively into the inner parts of the area, which is surrounded by busy roads, very difficult to be crossed by pedestrians. In fact, City Life can be accessed more easily by car, via subterranean roads, or using the underground, which create a real "physical distance" separating the new district from the city around it.

Furthermore, the novelty in shapes and dimensions of the new architectural constructions generates a powerful "sensorial distance", which enhances the beauty, the wonder and the enchantment experienced by the people who visit this place. City Life appears to those who look at it from the outside, as well as from the inside, as a world on its own, a space separated from the city, "other" because of its colours, shapes and dimensions.

North of "City Life" where once stood the historic headquarters of the Alfa Romeo car factory there is the large area of the "Portello" that underwent a varied re-functionalization at different times and with different purposes. The section called "Portello South", directly connected with "City Life", is occupied by the "Milano Convention Center", one of the largest conference facilities in Europe designed by Marco Bellini in 1987, and a block of pavilions hosting small fairs (Di Vita).

Altre Modernità / Otras Modernidades / Autres Modernités / Other Modernities

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The northern area of the former Alfa Romeo factory, called "Portello North", has been completely re-functionalized on the basis of a 2003 masterplan by Studio Gino Valle Architetti Associati, developed by different design teams. Unlike what happened to City Life, a clear separation between functions in the different five sub-areas of the plan was made, two intended for residential use, while the remaining were designed for commercial use, to house offices and a park. In this masterplan architects used the combination of different shapes and architectural traits, which, recalling each other, replicated an urban variety inspired by the "Milanese" architectural models of the 50s (Valle, Zucchi, Canali, and Jencks).

Fig. 2. Isozaki and Hadid towers (Photo by Maristella Bergaglio)

The section of "Portello Nord" located north of Viale Renato Serra, includes three sub-areas. The first, intended for commercial use where a number of services for citizens are located, is entirely pedestrianized and is conceived as a small traditional urban centre, with partially covered paths and spaces for socializing and meeting.

The second sub-area, north of Viale Renato Serra, includes a redevelopment intervention, based on a plan by Cino Zucchi Architetti, that involves the recovery of the former canteen building of the Alfa Romeo, which is preserved only in the external façade and is intended for offices (Pagetti). The remains of the industrial buildings of the car factory, however, were completely removed and new blocks of multi-storey houses were built with large internal courtyards, green spaces and walkways. The project "Residenze Cino Zucchi" includes three eight-storey horizontal blocks and two corner towers and can be interpreted as something in between a district and a single building that interacts with the urban context, to maximize the relation between the city and the adjacent park (Croci). The architectural choices, in fact, are an attempt to open up the spaces between the buildings and make them accessible to the community, in order to overcome the difficulties posed by the close proximity of a large road network. The result appears very suitable and integrated into the urban historic district thanks to the pedestrian walkways that allow to coast the buildings, cross the area or stop to rest, feeling almost protected by the traffic jam (Zucchi).

The section of the masterplan located north of Viale Renato Serra, was completed by the new "Parco del Portello", designed by architect Charles Jencks and LAND studio. This is a green area of 65,000 square meters, conceptually innovative, that develops with a progressive elevation from the street level with a spiral shape. Although the park opened a few years ago, this space is not often used by the population of the neighbourhood, because of its physical and architectural characteristics, very suitable for people practising sports rather than the elderly and children (Molinari et al.).

The "Shopping Centre", the "Residenze Cino Zucchi" and the "Parco Portello" are connected by a footbridge, that crosses Viale Renato Serra, with the two southern sub-areas of the redevelopment masterplan "Portello North".

The first southern sub-area hosts three triangular geometric buildings and the large "Piazza Gino Valle". Because of their shape, the office buildings recall large "urban mountains" and constitute, in the intentions of the designers, an extremely strong iconic element that connotes the entrance to the city for those coming from the north. By contrast, the public space of the large square, descending in the shape of a fan, with a deforming paving grid, expands and creates a dynamic dimensional game which emphasizes volumes and shapes of the buildings, to arouse amazement in the pedestrians that cross the square.

Behind the office area, stands the residential building complex of "Parco Vittoria", designed by the architect Guido Canali. The project consists of six coupled towers of eleven floors each and two buildings of five floors standing next to each other, for a total of 536 apartments of various types. Unlike the north sub-area of Portello, in this residential sub-area buildings are placed along the edge of the area that is completely fenced, with green spaces on the inside only, open to the public at set times.

Fig.3. "Parco Vittoria" buildings and gardens. (Photo by Maristella Bergaglio)

However, the alternation of full and empty shapes projecting upwards and the intertwining of the geometries of the towers, partially different one from the other, conceal the high population density. At the same time green beds, creeping in between the buildings, cut out private gardens that are unusual for such a central urban area (Valle, Zucchi, Canali, Jencks, et al.).

In the case of the project for the redevelopment of the residences of "Portello North" area, the architectural context is high quality. However, what prevails here is the philosophy of a close-knit residential model, revolved around daily life and families, which is in clear contrasts with the stage-residency, that exhibits itself like "City Life". However, in the section of the masterplan called "Portello", since the removal of the old industrial buildings was almost total, nothing allows to reconnect the new buildings with the industrial past that constituted the historical cultural heritage of this area. The new residential complexes took the name of the companies that invested the capitals useful for their construction, while the memory of the industrial past stayed in the shadows, entrusted to the names of cars models attributed to the buildings and not fully valued.

PORTA NUOVA

The second example in Milan where the redevelopment of an abandoned industrial area completely redefined the deep meaning of the entire urban district and repositioned the paths and the nodes of the city introducing new iconic landmarks is the project named "Porta Nuova" located in between the two railway stations of Porta Garibaldi and Central Station.
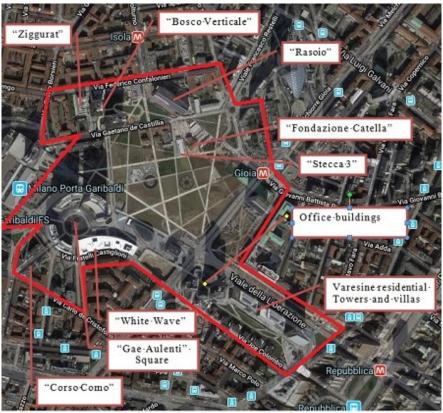
Fig.4. Porta Nuova (Image By Maristella Bergaglio)

As for "City Life-Portello", the redevelopment of "Porta Nuova" involved several sub-areas: "Porta Nuova-Garibaldi", "Porta Nuova-Varesine", and "Porta Nuova-Isola". The transformation greatly affected the structure of the city for its centrality, the size of the project and the history of the areas involved. But above all, the project changed the skyline of Milan thanks to the construction of showy tall buildings and to the complete redefinition of spaces on the basis of smart city design models (Murgante and Borruso).

Over 290,000 square meters of abandoned and disconnected industrial and railway areas were remodelled and reassembled, favouring a vision explicitly oriented towards sustainability, liveability and urban quality thanks to three masterplans developed respectively by the Pelli Clarke Pelli Architects, Kohn Pedersen Fox Architects and Boeri Studio (Oberti and Pavesi).

The proximity of the railway junction of "Porta Garibaldi" and the geographic central position within the city, which allows to access the "Brera" fashion district by foot, along the new pedestrianized streets of "Corso Como" and "Corso Garibaldi", increased the connectivity of the whole complex and "encouraged the performances of people crossing the district with their temporalities" (Faravelli and Clerici 198).

However, at "Porta Nuova" as wel as "City Life", planners made the choice to create an undivided space closed to traffic of over 160,000 square meters and to build

iconic landmarks of great visual and architectural impact: this makes the district appears almost like an island that is suspended over the pre-existing city.

The recovery plan, in fact, is structured in a system of different sub-areas, whose virtual pivot is "Gae Aulenti" square, a circular space, placed on a "podium" about six meters above the road level. All the buildings of the project are connected to the square by a pedestrian bridge and placed on bases that raise them above ground level, isolating them from the rest of the city.

The complex of buildings consists in hosting service industries (50,485 sqm), housing estates (15,000 sqm), accommodation facilities (15,000 sqm), commercial spaces (10,000 sqm), locations for shows and cultural events (20,000 sqm) and a large urban park (90,000 sqm) (Migliacci et al.).

The project has a lot of iconic elements which define architectural landmarks that are very different from the rest of the city. New buildings create a great impact, both from the shape and the view, because they seem to be forcefully put into the structure of old historic Milan. This produces an emotional and sensorial involvement in people watching, triggered by the brightness, reflexes and the colour scheme of the facades, by dimensions, spacing, rhythm and alignment of buildings (Al-Kodmany).

The first sub-area, that of "Porta Nuova-Garibaldi", consists in the main square "Gae Aulenti" and the three office towers of the "UniCredit Campus", winding and shaping a semicircle that surrounds the observer and projects the gaze upwards to the highness of the towers. On the other side, the wooden structure of the "Unicredit Pavillon" and the "White Wave" office building, act as a counterpoint to the dazzling brightness of the windows of the skyscrapers. The crystal envelope created by the circular buildings of the square is directly connected to the "Porta Garibaldi" railway station by a set of pedestrian walkways that lead to the shopping street "Corso Como", flanked by restaurants, fashion flagship shops and two completely new residential accomodations.

The second sub-area of "Porta Nuova-Varesine" is divided into two parts set on a large three-level podium. The first one includes the "Diamond Tower", a thirty-one-storey building and two nine-storey buildings named "Diamantini" (small diamonds), each one hosting offices and lounges for cultural events. The second part of the sub-area includes six urban villas and three high luxury housing towers, "Aria", "Solea" and "Solaria", respectively of fifteen, seventeen and thirty-four floors.

The third sub-area, "Porta Nuova-Isola", is a large garden-green in which were built some new design buildings: The "Ziggurat" and the "Rasoio" host offices of big firms like Google, while the "Town Homes" and the two famous towers named the "Bosco Verticale" are housing estates. These two skyscrapers of nineteen and twenty-seven floors, are the innovative buildings, designed by Stefano Boeri, where terraces contain large trees form a forest that merges with the architectural elements. In 2014, Bosco Verticale won the International Highrise Award, given every two years to the world's most beautiful and innovative high rise (Scott).

Fig. 5. The House of Memory, Bosco vertical tower and Unicredit tower (Photo by Maristella Bergaglio)

The idea realized in the "Porta Nuova" project is completely different from what we saw in the redevelopment of the "City Life-Portello" area. In this area, in fact, the buildings expand their formal iconicity beyond the architectural dimension appearing as floating on the surface of the city.

In this area, in fact, the buildings expand their formal iconicity beyond the architectural dimension, suggesting and appearing as floating on the surface of the city. The detachment of the new residential buildings from the urban context in which they stand in "Porta Nuova" is prominent and appears to be a choice of the planners. All the buildings stand two or three floors up from the ground and the masterplan is also outlined by careful marketing strategies, confirmed by very high real estate prices and aimed at underlining the image of a "uniqueness" that generates prestige.

The value of the place is also amplified by the attribution to every single building of a precise name that gives to each one its own identity and makes it possible to distinguish one from the other (Semi).

In the redevelopment project of "Porta Nuova" architects tried to create a connection between the novelty of shapes, functions and spaces with the story of the city of Milan thanks to a set of allusions and suggestions obtained by the architectural materials and by preserving some pre-existing buildings (Cafiero and Saitto). However, in this case, the only building remaining from the past industrial railway area is that of the " Fondazione Catella" in "Porta nuova-Isola" sub-area, that was built in the late 1800s, actually used as a multifunctional space for events. The redevelopment plan for "Porta Nuova" intended to interlace dynamic relationships with the surrounding urban structure in which it is included, by leaving large spaces completely empty and dedicated to public green, but also by preserving many historical residential buildings

of the old Milan that had been left standing together with the new buildings with iconic design.

Moreover, the memory of history is fostered by the specific will to preserve the past through the construction of two new buildings: the "Stecca3" and the "Casa della Memoria" (the house of memory). The first one is a public space whose function is to accommodate cultural associations and artisans of the neighbourhood. The second building hosts the headquarters of some social groups that preserve the memory of the conquest of freedom and democracy in Italy and has all its external walls covered with images of important moments in the history of Milan World War II (Studio Associato Baukuh).

In "Porta Nuova" the recovery of abandoned industrial areas to build "new places" of the city, exceeds the purely technical dimension, introducing a humanistic one and reactivating the meanings and cultural values contained in the "deep layers" of the city. This way, these transformations became no longer only architectural, but had a boosting effect on large areas of the city that gain or recover complexity, reinventing, recreating or reactivating "new cycles of life" (Bocchi and Marini).

INHABIT UTOPIA

Even though abandoned industrial areas in urban contexts have been for a long time relegated to the role of silent sentinels of decay, their presence always preserved memories, suggestions and meanings of the city's past. However, in an era that privileges the present, the order, the structured and functionalized architecture of integrated projects, in which shapes are regulated and distributed in space according to scenic and spectacular orchestrations, these redevelopments often transformed entire districts of Milan radically.

This study aimed to highlight the case of two major interventions in Milan, in which redevelopment takes on as primary role not only in the reuse of space "itself", but also as a way to rethink the entire shape of the district architecturally, structurally, socially, culturally and geographically. In these two cases, the final outcome must be considered also from a perspective that takes into consideration the "sense of place" and the symbolic and authentic relations between people and the city (Sennett).

Both in "City Life-Portello" and in "Porta Nuova", the recovery interventions deeply modified the *urban milieu*, that is the complexity of cultural, social, productive, environmental, artistic and urban values in which they were carried out. At the same time, transformations induced by new urban settings activated processes of reorganization of the structural networks, completely redesigning the geography of the city and the perception of people which live in there (Dematteis; Governa).

The general direction, in the cases analyzed above, is to reinterpret space, fill it by inserting buildings that are key-element, generally large-scale self-referential architectural monuments, representative of the economic investments they are the result of. For this purpose, it must be underlined that in these new projects architects always give a "name" to almost all the buildings, which has a strong symbolic meaning for the city-users. In this way new buildings are presented to the public with their own

individual, strongly connoted profile, creating a new link between architecture, city and economy (Musial).

These skyscrapers, iconic and often very tall, have in fact a primary function in urban strategies. They convey, by virtue of their towering height, representation, distinction, prestige and visibility for those who occupy them, for investors and for the political class for which they form a symbolic instrument of power. At the same time, as place markers, they redesign the profile of the city alongside the historical and religious buildings and define a renewed skyline (Appert and Montes).

The architectural and shape characteristics of the masterplans and buildings themselves contribute to strengthening the iconic power of these projects as place makers. The specific quality of the proportions, the arrangement and the alignment of the buildings in space, the rhythm of their succession in space and, last but not least, the harmony, style and design characterizing them, endow the building complex with the power of inspiring strong mental images in observers. However, all these projects, despite their elevation, also respond to the needs of a human dimension thanks to a ground floor interface tailored to respond to human scale and human-friendly built that reduces the perceived tower's verticality and massiveness (Al-Kodmany).

The results obtained in the two different contexts observed in this study, in fact, were the result of an alchemical reaction that could hardly, or only partially, be predictable or foreseeable before the end of the construction and renovation works.

Fig. 6. Old and new Iconic elements in Porta Nuova (Photo by Maristella Bergaglio)

The introduction of new strong iconic elements, tall buildings, glass architecture, theatrical spaces with a very high visual impact on the city, produced clear discontinuities in the urban structure and in the perception of its users. At the same time, these innovative plans created spaces clearly connoted and with a strong imageability, tracing visionary bridges between past and future. The image of the city was redefined in its basic and structural elements, in which its identity remains, such as paths, landmarks, edges and nodes, giving rise to completely new landscapes, with a figurability and readability that are sometimes difficult to understand completely. The use of landmarks of great connotative and semantic force led these areas to emerge as "new places" and has completely reshaped the two districts of the city, endowing them with strong symbolic elements and with a quite new identity that made them become "something else" compared to what they were before (DeSilvey and Edensor).

In other districts of Milan, such as the "Tortona - Porta Genova", the urban structure is very peculiar and characterized by a close coexistence between residential buildings and productive activities of all sizes, with well-preserved buildings of medium-small size and flexible spaces. Here the reuse of abandoned industrial buildings are engrossed in the surrounding urban structure without disruption of continuity between old and new buildings (Bocchi and Marini; Jansson and Power; Mazzoleni).

The neighborhood "Tortona – Porta Genova" of Milan where, thanks to a series of recovery interventions, many abandoned industrial spaces present in this sector of the city were transformed into fashion ateliers, showrooms, professional offices, offices or creative spaces. In this way, the reuse, particularly intense but at the same time precisely defined in its new functions, of entire industrial buildings and inner courtyards, previously hidden by degradation and neglect, transformed an entire neighborhood, characterized by fragmentation and abandon in a place dynamic, creative and full of opportunities for socializing and for art (Natoli et al.; Borelli).

This peculiar way of reusing abandoned industrial areas through the conservation and reinterpretation of existing buildings that become containers for creative services activated new forms of dialogue between physical spaces and economic and social functions. This process was possible in this Milan neighbourhood thanks to the presence of many industrial buildings with well-preserved structures of medium-small size, with flexible spaces, to the absence of a masterplan and to the close coexistence between residential buildings and production activities (Ferlenga).

On the other hand, in the two large regenerated areas of "City Life-Portello" and in "Porta Nuova", designed through very complex and structured projects, it is impossible to recognize an outcome of common reuse of the historical industrial heritage because of nature, shape and dimensions of the architectural elements introduced that are very much powerful and overwhelm the weak symbols of the remaining past heritage. In different ways, in both sites past and present, old and new, were compared in a dialoguing and continuous juxtaposition by activating creative experiments and promoting completely new designs, with, however, very different modalities of entering into relation with the pre-existing urban structure but preserving a clear separation between present and past.

In the case of "City Life-Portello" the connection with the city of Milan and its history is shaped by separation and juxtaposition. The entire area is completely surrounded by a well-defined perimeter of fences, boundaries and well designed physical barriers. On the one hand, these contribute to enhancing the architectural identity in a physical and spatial sense, but on the other, they accentuate the "insularity" and the isolation from adjacent neighbourhoods. The dialogue with the past takes place creating juxtaposition with individual elements such as the historic building "Pavilion 3", whose west façade faces the three towers, the buildings in Liberty style of "Porta Domodossola", which serve as a eastern gate for the new complex and, to the south, the "Fontana delle Quattro stagioni", a fountain designed by Renzo Gerla in 1927, that introduces the new public green park.

In the case of "Porta Nuova" the connection with the city is marked by elevation and intrusion. In fact, it is the entire complex that creates a continuous play of counterpoints with the surrounding urban structure, obtained with the elevation of the new buildings which stand higher than the old city. The entrance to "Gae Aulenti" square, in fact, entry is via an upward path that leads to a space which is physically and morphologically elevated with respect to its surrounding. All the buildings that stand in each one of the three sub-areas of "Porta Nuova", rest on lift up bases several meters above the ground. In the basements of the buildings there usually are shops, lounges for cultural events but in housing real estate sometimes this wide lobbies are left intentionally empty. The connection with the past is shaped not so much by conservation and restoration of historical buildings but by a precise desire to preserve and foster memory in the activities of the cultural associations of the neighbourhood. In addition, unlike what happens in City Life-Portello, dialogue with the urban structure is achieved through the intrusion of residential buildings of the historic Milan inside the reused area of intervention that is not enclosed by structured boundaries or walls but whose perimeter appears frayed.

The three main elements of the "smart city", which are high-quality residency, shopping and finance, and the presence large companies, are all present in the projects of "City Life-Portello" and "Porta Nuova". Furthermore, a network of highly attractive events was created. Both areas are located in a semi-central position within the urban structure of Milan, and the projects have implemented the existing road and transport interconnections (Armondi and Di Vita).

These areas are "signifying epicentres" where high level financial services and knowledge-based firms and institutions, culture and leisure activities, produce an eclectic clustering of particular new urban economic activities (Gospodini). In Milan, these places have also become new squares where people everyday meet, walk, spend time and be astonished; places where the city's past persists in the streets and mixes with the bright new city.

Paradoxically, in fact, the extraordinary transformation occurred in these two sites and the contrast between the city that in these neighbourhoods "was before" and "is no longer" today, has strengthened its identity, keeping some memories of the past alive in a continuous contrast/opposition. New landscapes and astonishing buildings nourishing in people the desire to enjoy space, to experience it in its new theatrical and vibrant form. At the same time, these areas cannot be considered a real

regeneration operation and reuse of industrial heritage because the result of the two projects is a completely new outcome. In both the analyzed sites, the few old buildings remain almost unchanged without undergoing structural transformations or changes in use to take on only the role of memories of the past and dialoguing elements with the new design spaces.

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