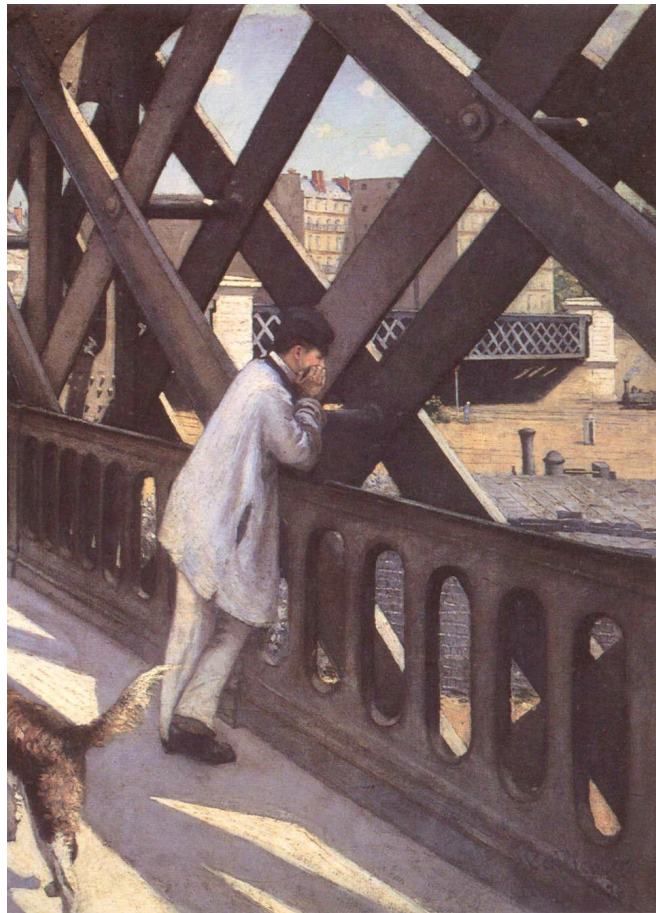


Portaluppi Sauvage
and the construction of the city





Gustave Caillebotte, *Le Pont de l'Europe*, 1876, Geneve, Musée du Petit Palais

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2015-2016

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00 On Method

The aim of this work is to study and to understand some of the ideas underlying behind the construction of the modern city.

As a case study of architectural interventions in the urban landscape, I chose to analyze in parallel, as interwoven stories, the works of two architects, in two cities, in two contexts, more or less in the same years. Their projects became urgent and their architecture necessary in order to answer to newly acquired status and changed life condition.

Henri Sauvage was born in 1873 in Rouen and, still young, moved to Paris, where he spent the rest of his life designing buildings and exploring a type to approach architecture and urban planning.

Piero Portaluppi was born in 1888 in Milan, the city where he worked and which owes him some of its most characterizing buildings.

Both figures are strongly engaged in the redrawing of the image of their cities at two different levels: that of the dwelling, through an approach connected with the Parisian HBM and the Milanese industrial bourgeoisie; and that of the urban development. A strong social commitment is present in the work of both architects, signifying not only awareness of the final user's needs, but also of the city's necessities as a whole.

At the scale of the dwelling, a technological interest and experimentation is present in the work of both architects. Technology for the new housings to get new hygiene conditions and better lifestyles. Topic that is developed together with a decoration sensibility getting its origin from their Art Nouveau/Art Decò formation, also appreciable in their furnitures' design.

Their ironic personalities, witnessed by their comics production and their engagement in satirical magazines, allowed for a special point of view on the cities they were living in. These disenchanted and light-hearted views enabled paradoxically a serious and deep comprehension of the world around them, resulting in the designs of architectures answering real needs and real problems.

At the urban scale, a proper utopian repertoire is present in the drawing of both architects. Sauvage's gigantic projects became an allegory of modernity, while Portaluppi's irony took the form of a hidden criticism to the repetitive schemes toward which urban planning and archi-

ecture were going. In both cases, the resulting approach to the city is to work with its limits, to understand and to respect it before bringing the new.

Their personality between the line but critically outsider had a repercussion on their works and to study them can today bring an interest cross section of a method to be applied in a specific condition to answer to specific needs in a specific moment. Their approach to design didn't simplify but rather embraced the complexity of the architectural world. This enabled their buildings to become typical, classic, almost ordinary in the city where they belong. This non-extraordinary presence is astonishing considering the innovation they introduced, and it was achieved through a strong commitment to their work and to the society they were working for.

This work is organized as an intertwined narration: the story of one of them is interrupted by the other and continues once again in the following chapter, finishing in the end by the same topics and a general reflection behind the works of those temporarily, and surely subjectively, friends.

This work is accompanied by the drawings of the building taking part of the narration: plans, sections and elevations; as well as they become interesting for the comprehension of the topic covered in the relevant section. The drawings are always presented in the same scale, 1:500, to enable an easier comparison between them.

Finally a photographic section is developed for every couple of buildings proposed in each chapter, aiming at pointing out some of their issues touched through the camera medium.

This work doesn't want to be an exhaustive monograph, but a point of view focusing the reader's attention on some of the most relevant problematics present in the two architects' work, a subjective selection and vision that has the ambition to be a tool for the comprehension of contemporary's architecture and perhaps for its practice.

01 Sauvage

Working-class housing in the HBM experience and the ‘*Société des logements hygiéniques à bon marché*’

7, Rue de Tretaigne and 163, Boulevard de l’Hopital

At the end of the XIX Century the quality of low-cost housing became a central issue in the new cities’ regulations as well as in the medical and in the architectural professions.

In 1889, just after the Universal exhibition, was set up in France the *Société Française des habitations à bon marché* followed, in 1894, in France as well, by the Siegfried Law, the first law on worker’s housing. The importance of this law doesn’t laid in the buildings designed after this norm, whose number is not considerable, but in the indication of the rising of the new workers class’ hopes and needs, whose living condition’s awareness started for the first time to be heard and considered.

A few years later, in 1902, the new streets’ regulations in Paris involved important changes in the morphology of the city and in the control of the sanitary aspects of the buildings.

First of all the acquisition of the elevator in the dwellings inverted the floors’ importance turning last floors, with more light, into the more attractive and needing a new facades’ treatment. Secondly the rules softened the limit protrusions of the elevations to permit Parisian streets to achieve a more picturesque aspect than the haussmannian one. The horizontality and the flatness of the haussmannian facades make room to plasticity, decorations and vertical rhythm. The bow-windows and the loggias were authorized with a projection of maximum 1,20 meters on the biggest street. Finally this regulation permitted a bigger habitable density surface, but it also stated stricter aeration and ventilation principles that bring in the respect for new windows surfaces connected with direct sunlight and the limits of habitable volumes and surfaces. These norms were strictly consequential to the medical discovery that tuberculosis, disease killing every year fifteen thousands Parisians, was intrinsically connected to the dwellings’ insalubrity. At that time some neighborhood guaranteed to their inhabitants a 100% probability to contract tuberculosis in ten years¹.

¹ Jean-Baptiste Minnaert, *Exposition Henri Sauvage (1873 - 1932) Projets et Architectures à Paris*, in *Colonnes*, n. 6, Septembre 1994, p. 5.

It is indeed in the same years that the work of scientists such as Georges Picot, Jules Siegfried and Emile Cheysson started to be widespread. Their aim was to spread the new medical hygiene knowledge in the real estate and their theories represented the basis of the rethinking underlying behind the *logement hygiénique*.

In 1904 Paul Juillerat, member of the Hygiene and Public health of the Seine Council, published the *Casier sanitaire des maisons de Paris* finally and officially establishing a connection between the tuberculosis' spreading and the wretchedness of the Parisian housings, laying the basis of the 1904 sanitarian Parisian regulation.

The conception of new workers' housing became soon the application field of a technical architecture, where architects and insureds started considering at the same time and at the same level financial returns, streets' limits and sanitarian regulation providing hygiene and educational equipment to the architectural complex.

Thanks to the norms and the development of the medical research, the *logements à bon marché* became an exploration theme for the young architect's generation and a new type allocated to be the centre of new competitions and mandates. It is then understandable how young and ambitious architects started to be interested in this field as new possibilities for commissions and investigations.

In this context, when the attention and the research on both economical and hygienic housings were central, was founded, in Autumn 1903, the *Société des logements hygiéniques à bon marché*.

The foundation date of the *Société des logements hygiéniques à bon marché* in 1903, coincides with a period of incredible development in modern architecture and in modern construction techniques. It goes back exactly to 1903 the Vienna Post Office Savings Bank's competition and Otto Wagner's attempt to a new monumentality with his metal frames and stone coatings, the Frank Lloyd Wright's Larkin building and the Charles Rennie Mackintosh's Hill House. In France, instead, 1903 was the year of Auguste Perret's building at 25 bis, Rue Franklin and, in Paris as well, was the year of the first low-cost housing of the *Société des logements hygiéniques à bon marché* at 7, Rue de Trétaigne.

The *Société des logements hygiéniques à bon marché*, was a small society set up as other 21 *habitations à bon marché* (HBM) societies in Paris and 109 in France. The aim of these HBM societies was to acquire landholdings and to built and to manage workers housings conforming

to the status defined by the Siegfried Law. This law limited to 4% the annual return of the HBM societies, permitting proportional lower rent and an income slightly higher than the long term interest taxes of the time, without falling in speculation problems. The construction and the management of the buildings were exclusively allotted to private societies and HBM foundations, as well as to their architects.

The *Société des logements hygiéniques à bon marché* was so part of the former generation of little private societies anticipating the time of the bigger HBM foundation as the Fondation Rothschild (1905). The possibilities of these societies were therefore more limited and so was the surface of the terrains they could have build in. This is important considering the different designing possibilities offered to architects: the former societies were not facing the problems of implantation of an entire parcel. As a consequence the architects couldn't handle the problematic of lighting and ventilation in a volumetric dimension as the reduced dimension of the surfaces obliged them to a street alignment option.

The terrains were usually acquired through loans to the city of Paris and often in the occasion of new streets' opening. They were usually chosen in outskirt *arrondissements*, offering affordable prices, and considering the proximity to services such as school or the presence of an edge parcel permitting better exposition and ventilation. These features permitted architects to work in a reduced scale in which the decorative detail still conserved its importance.

The founders members of the *Société des logements hygiéniques à bon marché* were Horace Weill, engineer of the Ponts et Chaussées, and Frantz Jourdain, president and administrator. The stockholders were personalities belonging to the finance and the political world as well as members of the arts and of the sciences society.

Henri Sauvage and Charles Sarazin were the only and exclusive architects.

The destiny of the two architects have been strictly linked on their work on the *immeubles à bon marché*, whose projects designed between 1900 and 1914 have been signed by both. Sarazin, born in 1873 in Bourges from a Strasbourgeoise family, moved to Paris to attend the *École des beaux-arts*, where he became friend with Sauvage; their friendship last also after their working separation in 1916². In their working activities it is probable that Sarazin was filling the role of

2 http://www.citechailot.fr/ressources/expositions_virtuelles/portraits_architectes/biographic_SARAZIN.html.

the businessman and Sauvage the one of the proper project designer³, hypothesis confirmed by the drawing's style adopted during their collaboration.

As a young 30 years old architect, moment when he became part of the *Société des logements hygiéniques à bon marché*, Sauvage didn't seem intended to become a specialist in low-cost housings.

Sauvage started his career studying at the *Ecole des Beaux-Arts* in Rouen, where he became friends with Jacques Majorelle and Jourdain. His interests at that time laid more in the decorative arts world and in drawings, as witnessed by magazine's cover and satirical comics he did. Through his friends, he was introduced to the sculptor Alexandre Charpentier, one of the Art Nouveau masters in Paris. He married the artist's daughter and, after having moved to Paris, he started running his own wall-paper shop for two years, promoting his work in the decoration field as well as managing his family (*Maison Jolly et Sauvage*) wall paper design firm. This brilliant beginning permitted him to have the first mandates as architect: Villa Majorelle in Nancy and two pavilions for the 1900 exhibitions (Guignol and Loie Fuller theatre) commissioned by Majorelle and Jourdain⁴.

Sauvage's interest in low-cost housing arrived as a possibility to develop his architecture and business thanks to the role of Jourdain in the society. Even if little and limited in his possibilities, the society of *Habitations à bon marché* enabled Sauvage and Sarazin to develop and experiment new variations on the theme of the *immeuble the rapport*.

In 1903 Sauvage and the Society published the project *type M* revealing the intention to diffuse their work to a larger and not necessarily specialistic public: *type M* was a prototype defining the goals of the society and was at the same time an efficient way to promote the first built project.

3 Lise Grenier, Maurice Culot, *Henri Sauvage, l'Âme Fantastique*, in *Henri Sauvage 1873-1932*, Mardaga Archives, Liège, 1987, p. 15.

4 Francois Loyer, Hélène Guéné, *Henri Sauvage, Les immeubles à gradins*, Mardaga Archives, Liège, 1987.

Arch^{te} M^r Sauvage

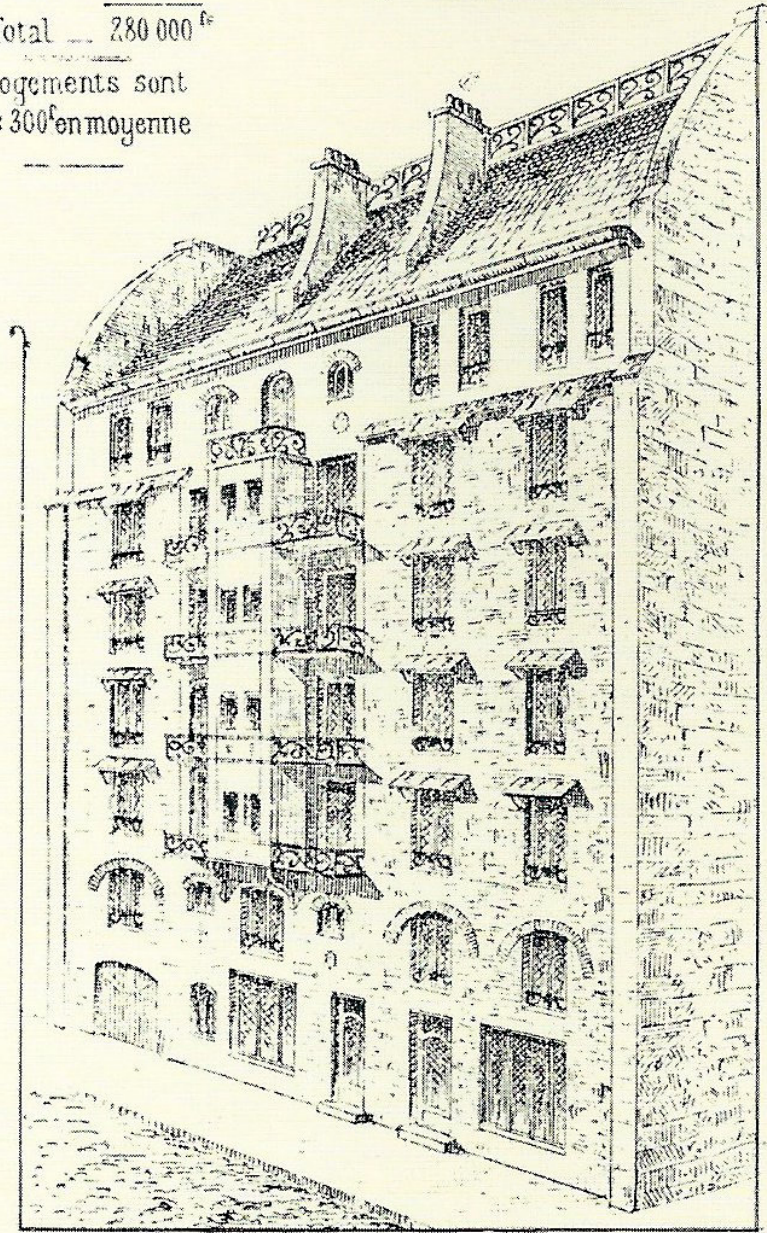
Terrain — 80 000

Construction 190 000

Total — 280 000^{fr}

Les logements sont
loués 300^{fr} en moyenne

Type M, de la Société
les Habitations Hygiéniques
à bon marché.



Type M, 1903.

The first occasion to experiment the principles of the Society arrived in 1903 with the building in 7, Rue de Trétagne.

The solutions adopted by Sauvage and Sarazin refer to the *phalanstère* typology, as the one used by Jean-Baptiste-Godin for the *Familistère de Guise* (1859- 1879). The interest of this building today lies not really in the technical solutions adopted, but in the social and urban ambition as well as in the hygienic issues' attention. Sauvage and Sarazin tried to design a block including not only housing but also communal facilities as a hygienic restaurant, a co-operative shop, a bath house, a working men's university, a single person's hostel and a garden roof, revealing a new social attention together with an alternative urban organization.

The building was realized with a reinforced concrete structure and brick infill panels, according to a system already experimented and diffused at that time. The choice of this material has not been done to follow rationalist principles of structural realism, but for practical reason. First of all, the bad condition of the soil made the choice of concrete foundations the best one. Secondly the concrete frame turned out to be the best option considering the desired filling material: the elevation walls were in fact initially conceived in semi-transparent glass brick to satisfy the hygienic exigence of antituberculosis fight through the direct sunlight action in the dwelling⁵. Finally the difficulties connected to the implementation of the material brought to the use of traditional brick, but the reinforced concrete skeleton remained. The search for economy in the casing realization lead to the use of a module in the design choices. As an example, the windows were conceived as four-module wide considering the space of one larder occupying two wings and the aeration one wing.

The hygienic issues were present also in the decisions concerning the interior disposition and materiality. The walls were painted with washable glaze with a tiled base, the floors were in *porphyrolithe*, an easily washable material, and the plinth basis, as well as the corniche, were designed to create curves to avoid as much as possible the dust accumulation. The twenty-nine apartments range from one to three-pieces in addition to kitchen, toilet, utility room and basement. The interior organization offered worker families the possibility to live in different kind of apartments than the mostly diffused two-pieces one.

The final utilization of the traditional bricks marked a separation between the structure and the decoration, while, in the same period, Auguste Perret was avoiding the use of visible reinforced

5 Minnaert, *op. cit.*, p. 7.

concrete in 25 bis, rue Franklin. Sauvage exposed the concrete and the brick to the exterior, founding the elevation's rhythm to an empty-and-full game showing the internal distribution inside the rigid skeleton of the structure⁶.

The reduced economical availability lead to an attentive selection of the decoration details: only the entrance door and the balcony had a vegetal theme decoration and the staircases were realized with parallel metal tubes to allow children's utilization.

The presence of collective equipment as well as the technical decisions adopted permitted them to win the first price in the *Concours d'habitation à bon marché du département de la Seine*.

Despite the success of the building, the *Société*'s decision to be stricter in terms of economical impact of the construction together with the aggravation of the building sector crisis, made this building the first and the only one realized encompassing all the HBM issues. The choice towards a greater attention into the economic impact is perhaps due to the change of direction of the society: the administrator changed from Jourdain, more sensible to the social issues embodied by the dwellings, to Sarazin, more interested in their rentability. From that moment, the *Société* preferred to orient its works to an economy of construction, to an individual sanitarian comfort and to the profit of the habitable surface, addressing its works to more well-off renters.

After five years of research on the low-cost housing field, in 1908 Sauvage had the possibility to build again at 163, Rue de l'Hopital. He continued his experimentation on the possibilities of the reinforced concrete structure, but this time taking finally a different direction.

To give to the building a new aspect, he exploited the orthogonality and symmetry of the parcel unobstructed on three sides, that permitted a frontal vision, process that can be connected to classical compositional methods.

He designed a symmetric facade with a tripartite vertical rhythm punctuated by three bow-windows ending with loggias. The loggias here embody a double functions, they are in fact connected both to the hygienic issues of the air and the sun cleaning, and are also designed to hide the chimneys that otherwise will stick out from the roof-terrace.

Also the horizontal rhythm respect a classical tripartition order and the floors were unified by the window-strips that balance the vertical movement of the bow-windows.

The building is crowned by an attic placed backwards respect to the facade line, as in the haussmannian tradition. This floor was initially conceived as decorated by a prefabricated concrete

6 François Loyer, *Sauvage, ou le Renoncement*, in *Henri Sauvage 1873-1932* cit., p. 48.

frieze with molten glass pieces, but finally it was just provided with the alternation of curved and plain elements in a cornice.

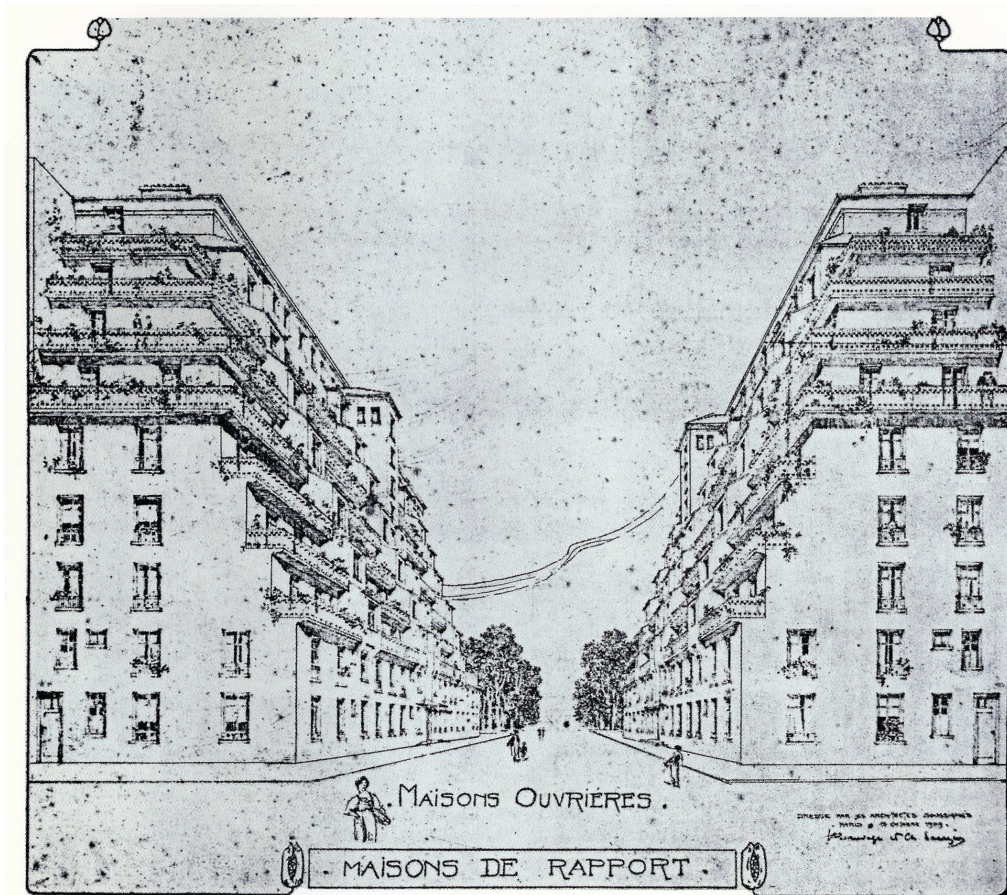
After the attempt of a semi-transparent facade with visible concrete structure in Rue de Trétaigne, Sauvage decided to cover the entire street elevation with sandstone tiles. The mosaic and ceramic stoneware covering the concrete structure respected the hygienist precept of the washing or self-cleaning surfaces and opened a new field of research that will lead to more daring attempts as the use of *metro* tiles in Rue Vavin. After the desertion of the glass brick in Rue de Trétaigne, the experimentation of the use of a visible concrete structure together with a filling, made Sauvage attempts less stimulating. With the use of a casing as a protective and decorative skin in Boulevard de l'Hopital, Sauvage experimented for the first time the mass possibilities in opposition to the skeleton visibility. The role of the mass in the solidity and durability of the building didn't gainsay Viollet-le-Duc structural rationalism, firstly researched in the concrete skeleton visibility, but replaced Sauvage choices to the one taken, for example, by Otto Wagner in the Majolika Haus (1898) and to Adolf Loos' position about the covering primacy on the structure. To go a bit further Semper considered that the origin of Architecture didn't lie in Vitruvio's cabane skeleton, but in the architectural space itself organized by the covered wall surfaces.

The proximity to Semper's thoughts about the origin of architecture will lead to an even more radical conclusion about the role of the ornament that will be expressed by Sauvage in his principles for the *immeuble à gradins*: building leaning on an invisible concrete structure with completely tiled volumes.

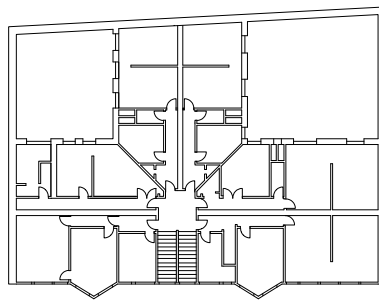
With the designing of the first HBM, Sauvage overtake the Art Nouveau elitism and take distances from the ideal *oeuvre d'art total*. The rentability issues lead to an austerity that required a rethinking of the ornament status as it has been done in 163, Boulevard de l'Hopital where the concrete's use enlace a new relation with the decoration and the decorative skin.

The willingness to pleasure the public, already present in the *type M*, is also evident in the project of the 1909 *Maison de rapport - Maison ouvrières* where for the first time is represented a set-back building. Sauvage is trying to deal with the HBM at an urban scale, considering the entire street and the green spaces. The invention of the set-back buildings system represent the conclusion of Sauvage's first experiences with the *Société des logements hygiéniques à bon marché* as well as the consequence and the achievement of his research concerning HBM,

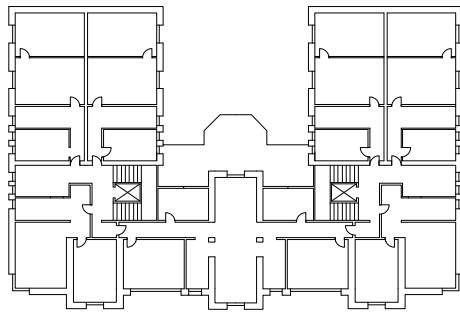
their decoration and hygienic issues and the first attempt to look at their urban impact in the construction of the city.



Maison de rapport - Maison ouvrières, 1909.





























02 Portaluppi

Dwelling as monument: use of classical language to celebrate the Milanese industrial and lifestyle's changes

Palazzo della Società Buonarroti - Carpaccio - Giotto and Palazzo Crespi

At the end of the XIX Century Milan experienced an important transformation that will turn the city into one of the most active industrial centers in Italy. The city's economy will be no longer the expression of an agricultural - commercial balance focused on silk production, which had lead the development for a long stretch of the XIX Century sanctioning his fortune. Milan began to find his motor in the industry, as detected by the mayor Gaetano Negri, who, in 1885, pointed out how Milan was becoming “*un centro attivissimo di industrie*”¹, metamorphosis by then difficult to stop. Proof of this transformation is also detectable in the succession statements presented to the Court Register. The documentation for the period 1862-1890 denote an image of a landowner class composed by nobles and rentiers of various kind joined by a significant number of trade and industry representatives. A first phase of industrialization of the Lombard chief town that sees, overpassed the difficult phase of the days of May 1898, the beginning of a Milanese *belle époque*. A new upper class bourgeoisie composed by entrepreneurs and industrialists emerges and is characterized by a strong sense of community. This new elite frequented the same circles, they attended the same social rituals and they felt bearers of a new world view. A high view of the duties of a class that feels to be carrying a plan of modernization that was not only confined to the world of production. The action to support the development by the local ruling class is visible in the attention to human capital formation and in the choices concerning infrastructure and transport.

With the background of this new historical situation, the new upper middle class started to be looking for a certain type of representation also in their private life. The living condition and the habitat became so an experimentation field to stand for a new social and economical status for a new class looking for elegance and for a discreet monumentality in interiors as well as in the streets overlooking of the new Milan, expression of the “*Italia che fa*”² (Italy that does, used

1 “An active center of industries”, Gaetano Negri, *Comunicazioni del sindaco*, in *Atti del consiglio comunale ACC*, 9th February 1885, p. 154.

2 Giorgio Bigatti, “*Un centro attivissimo di industrie*”: *Milano 1880-1940*, in *Portaluppi, Linea errante nell'architettura del Novecento*, Skira, Milan, 2003, p. 229.

in contraposition with the “*Italia che parla*”, Italy that speaks, represented by Rome).

In this context, a young Piero Portaluppi, born in Milan in 1888, attended the Faculty of Architecture of the Polytechnic of Milan, in those years characterized by a preparatory two-years period and a practice three-years period as conceived by Camillo Boito in 1865, to reconcile the technical with the artistic knowledge. Graduated with honors in 1910, Portaluppi begins immediately his career as architect, scholar, satirical and decorative drawers. Just the year after his degree he get the nomination of “temporary assistant to Superior Architecture” in the course of Gaetano Moretti and therefore he began his academic career. Simultaneously he started his professional activity. In 1924 he published *Aedilitia*, an illustrated catalog of his early works, among which there are several interventions on facades, followed in 1930 by *Aedilitia II*.

The writings about the history of Architecture have constantly accompanied the activities of Portaluppi from the early years after his graduation with “The architecture of the Renaissance in the former duchy of Milan, 1450-1500” (1914) up to the studies on the hospital Maggiore (1956). His intensive research is interpreted and elaborated in a special way compared to his contemporaries. It is significant the relationship with the Milanese Neoclassicism: while Giovanni Muzio neoclassical studies meant “the re-establishment of the principle of order for which architecture - art eminently social - in a country must first of all be continuous in its stylistic features to be susceptible of diffusion and to form with the buildings a harmonious and homogenous complex”³, for Portaluppi the reference to tradition focuses from time to time in purely formal exercises, related to an artistic vocation he had chosen firstly in the Lombard Renaissance and, later, in the Milan aspects of Mannerism and Baroque. Portaluppi has therefore chosen a reference to the past with a relatively large temporal development, but with a specific local boundary⁴.

3 Giovanni Muzio, *L'architettura a Milano intorno all'Ottocento*, in *Emporium*, n. 317, May 1921, pp. 241-258.

4 Some historical studies had a strong contribution to his education and were that claiming a prominent place of the Lombard Art and Architecture within the Italian Renaissance as the ones by Francesco Malaguzzi Valeri (*GA Amadeo sculptor and architect*, 1904; *The court of Ludovico il Moro*, 1915-1929), by Costantino Baroni (*The Lombard architecture from Bramante to Richini*, 1936; *Leonardo Architect*, 1940), by Mario Salmi (*The origins of the Lombard Renaissance*, 1931; *The Filaret*, 1938), by G. Mongeri (*The Art in Milan*, 1870) and by G.T. Rivoira (*The Origins of Lombard architecture*, 1908). Moreover have been decisive some publications of German scholars and architects, who first recognized in the late XIX Century the great value of the Northern Italy art and architecture from the XIV to the XVI Century, as *Terracotta Architektur in Norditalien* by L. Gruner (1867) and *Oberitalienische Frührenaissance* by A. Gotthold Meyer (1897-1900). These last texts of interest for the presence of reference examples, surveys, construction details and particulars whose interest was aimed at finding a specific character of modernity. Were also part of his library some books belonging to the more established tradition of the history of architecture as *The Ten Books of Architecture* by Vitruvius and *The principles of civil architecture, with comments by Antolini* (1832).

The role of the past and the history in the work of Portaluppi is not only evident through his readings and his formation, but in its project activity itself: working with the new has always been considered a continuation of the intervention on the ancient, and it is interesting to recall how his early years are characterized by a number of restoration projects such as the Casa degli Atellani in Corso Magenta (1919 -1921), the transformation of the San Vittore cloister to host the Museum of Science and Technology (1947-1953) and the Ospedale Maggiore reconverted in University (1949), works that demonstrate a sensitivity to the pre-existence and the context even in the ex-novo projects.

Together with the interest in history, Portaluppi demonstrates throughout his career also a particular attention to the decorative arts. The centuries-old tradition of handicraft in Italy is a production and artistic heritage of great importance and the spread of laboratories and craftsmen workshops dedicated to the production of objects, furniture and textiles is significant to understand this⁵. As far as the application in the field of architecture is concerned, Portaluppi is without doubt one of the most emblematic figures. In Portaluppi, “déco” doesn’t become a design rule or a style, but remains a taste’s orientation, in which the various iconographic references are handled in an ironic way. The “déco” attention brought to the space can therefore be seen as a participant element in the quality sought in its architecture: space livable and at the same time suitable to be extrapolated and felt like an ornamental piece, in a poetic and witty game⁶.

The activity in the residential field results constant in Portaluppi’s work, from the year Ten until the second half of the Sixties. This constancy is nevertheless present with different intensity and outcomes. Between 1910 and 1926 the works were limited to few facades and windows details in the context of the city of Milan. After his marriage, in June 1913, with Lia Baglia, nephew of Senator Ettore Conti, Portaluppi is committed until 1925 in the building of power stations on behalf of the Società Imprese Elettriche Conti in Val d’Ossola. In the meanwhile the family ties with the Conti, opened the doors of the Milanese high society allowing him to entertain a number of relationships with members of important Lombard business families (as Crespi⁷, Fossati, Girola and Pirelli) that will become the elite of its customers. Without neglecting

5 It is interesting also compared to the rest of Europe and the United States where the decorative languages are rooted thanks to an organized and efficient mass production.

6 Rossana Bossaglia, *Portaluppi déco*, in *Portaluppi, Linea errante nell’architettura del Novecento* cit., p. 180.

7 The Crespi were a dynasty of entrepreneurs, co-owners of the “*Corriere della Sera*” with activities also in the textile and electrical sector.

the prestige derived from his academic activity and his long presidency of the Faculty of Architecture, it may be said that his commissions, especially for residential buildings, derived mainly from Portaluppi's social relationship. Portaluppi will study for these families a number of private houses, expression of privacy and decorum, of a living society established in Milan since the XVIII Century, with attention to the renewal but always in the path of the tradition. In parallel Portaluppi will address his activities in the construction of multi-storey blocks that real estate companies began to build in the meshes of the 1934 masterplan with great frenzy and in large quantities: two areas of works concerning on one hand the private dwellings of a group of families, and on the other hand multi-family buildings, which will be leased or divided according to the formula of the *condominio*, which is a type affirmed and consolidated in those years, also at a regulatory level⁸.

The second phase of his works begins with two important orders: the Palazzo Buonarroti-Carpaccio-Giotto, built between 1926 and 1930 in Corso Venezia 62-64 at the corner of Via Tommaso Salvini, followed in 1928 - 1932 by another important Palazzo in Piazza Meda, the one for the Crespi family.

The Palazzo Buonarroti-Carpaccio-Giotto is located in front of the Porta Venezia public gardens and is well recognized for its strong architectural character arising from the large arched passage leading to via Salvini. The project is the result of a major urban operation in the early Twenties leading to the construction of the new Excelsior district around Piazza Duse on the green areas of the abolished Capuchin Monastery. The initiative is promoted by three entrepreneurs: Enzo Bonzi, Carlo Civita and Leone Sonnino, which conclude in 1923 with the City of Milan an agreement that provides for the partial construction of the area. Based on these agreements, the soil was divided into eighteen lots that are split between the three co-owners. Sonnino, owner of the real estate companies Buonarroti-Carpaccio-Giotto, was assigned with the six lots adjacent to Corso Venezia, on which the namesake building was built. A fundamental requirement of the new building, expressed in the Convention, it was to ensure an adequate connection between Corso Venezia and the new district being formed by a covered vaulted walkway under the inhabited plans. The task of designing the building was initially entrusted to Giovanni Battista Milani, author of the detailed plan of the new district, but his plan will not be approved by the Superintendent for the excessive height of the front on Corso Venezia and for some stylistic issues. He then takes over Portaluppi, author of the definitive plan, whose task

8 Lando Bertolotti, *Storia della politica edilizia in Italia*, Editori Riuniti, Rome, 1978.

will be to redesign the building to meet the supervision willingness, but without changing the volume already defined. The critics emphasizes this by detecting “how a talented artist can do good, even though it has had, as they say, their hands tied”⁹.

The complex consisted of a U-shaped plan, with the head along Corso Venezia and two symmetrical parallel volumes on via Salvini. The main facade, opened by the arch, has a classical setting detectable in the tripartition punctuated by the cornices and by the symmetry on the Via Salvini axis. The first Portaluppi’s project expected, instead of the great arch, a triple crossing *serliana* with two pedestrian entrances on the two sides and one driveway on the center, but, due to a dispute with the owners of the neighboring buildings along via Salvini about the views that would be determined in the Corso, the idea was abandoned in favor of a single opening.



First perspective of Palazzo Buonarroti-Carpaccio-Giotto.

9 Renzo Gerla, *Architetture attuali*, Maestri dell'architettura, Milan, 1931, pp. 294.

The tripartition of the facade, the presence of the columns and the *attico*, together with the great arch are a clear reference to a Roman triumphal arch. As in the ancient Rome the arch became the monumental landmark of the main urban axes used by emperors for a celebrative statement, in modern Milan the arch celebrates the new ruling class adopting a language's continuity with the past. The new urban axis that has been created to enter in the Excelsior district from Corso Venezia became strongly marked by the presence of the arch, whose utilization can also be explained considering the proximity with the Neoclassical Piermarini's intervention as Palazzo Serbelloni (1775-1793). In this sense it is interesting to recall how also the opening of Corso Venezia itself went back to the Neoclassical Milanese planning wanted by the Austrian Empress Maria Theresa in the years of the enlightenment reformism at the end of the XVIII Century. Finally the arch's symbolic value of a power demonstration is used by Portaluppi in a literally way: from the emperors to the new industrial bourgeoisie.

The plans are related to XIX Century schemes, with a central distribution of the rooms through long corridors and small cloisters to illuminate the stairs and the hidden rooms.

Defining elements of the building are the many decorative features that characterize the facades. Frames and full height pilasters of the main façade emphasize its classical composition; the secessionist and *déco* taste, as the squares enrolled in the bigger square of the basement, the broken lines in the façades of via Salvini, the lozenges relief in the vault, can be identified throughout the whole building and can be referred to contemporary Portaluppi's architectures. It is thus clear his sensitivity that has been defined *calligraphic*¹⁰, for the predilection of linear and graphics treatments. It is significant the design of the barrel vault intrados that reinterprets the old coffered system, that passionated Portaluppi also thanks to his historical studies, according to geometric graphic lines. Intended to host mainly luxury residence, in the building's basement are present also shops and offices.

Belonging to this new bourgeois elite, an important client has been the Crespi family, who will entrust Portaluppi with the Palazzo Crespi, a project with a high citizen impact. The building shows the almost total abandonment of the decorative *déco* elements in favor of a more classical language, yet remaining present in the ironic Portaluppi's deformations. A "recall to order"¹¹, expressed in the use of classical elements, is present in all the artists belonging to *Novecento*, a movement founded in Milan in 1922 by Mario Sironi, Achille Funi, Leonardo Dudreville, Anselmo Bucci, Emilio Malerba, Pietro Marussig and Ubaldo Oppi. They claimed for an art

10 Gianni Contessi, *Architetti-pittori e pittori-architetti*, Dedalo, Bari, 1981, pp. 28-32.

11 Eleonora Bairati, Anna Finocchi, *Arte in Italia*, vol. III, Loescher Editore, Turin, 1985, p. 582.

that after the excessive experimentations of the avant-garde (above all the Futurism) had to go back to the purity of the forms and to the harmony in composition with a particular reference to the Milanese Neoclassicism¹². The movement touched the entire Milanese artistic debate influencing the architectural one as in Giovanni Muzio, Emilio Lancia, Giò Ponti and Portaluppi¹³. Muzio clarified the position taken by the movement, stating in 1931: “It was spontaneous the sharp detachment from various currents that continued to operate safely in the older professionals’ work. To the exasperated and arbitrary individualism, which found its consist in the singularity of the skills and in the reputation of a designer, it seemed necessary to override a rule; only from a discipline and from a community of feeling it would be soon formed a new architecture.¹⁴”

As he already did with the “decò”, Portaluppi interpreted the classical language in a graphic way: the pilasters of the side facades become vertical lines that run continuously on the surfaces (it is significant in this sense the reduction of the capitals in an overlap of horizontal bands); in the towers, the game of the materials produces jagged profiles that evoke the *bugnato* of the Renaissance and Neoclassical palazzi, once again reduced to a graphic line exercise. Moreover the scale enlargement of some elements, as the *serliana* used in the main facade, have as a result an alienating effect that can recall the metaphysical architecture in the drawings of Giorgio De Chirico and Carlo Carrà.

Palazzo Crespi strongly configures the entire image of a new block located on the corner of the new square on the road linking Piazza della Scala and Piazza San Babila. The intervention, which led to the demolition of the existing district, was part of the new road system planned for the area already present in the Masterplan of 1912, but realized only between 1928 and 1936. Portaluppi set the building on two emerging elements, almost two towers, located at the end of the volume, including an arcade with columns and arches and a giant order of pilasters in the three upper floors. The factory is constituted by two double volumes, about 12 meters wide, converging according to an angle of 35 degrees and consisting of a ground floor with arcade, five floors over the mezzanine and two underground: the first occupied by wineries and the second with services. The ground floor is divided into large rooms with commercial use and is connected to the upper floors by a series of vertical paths: three semicircular stairs equipped with lift, a service staircase and a great hexagonal staircase whose symmetry’s axis coincides with that of the building.

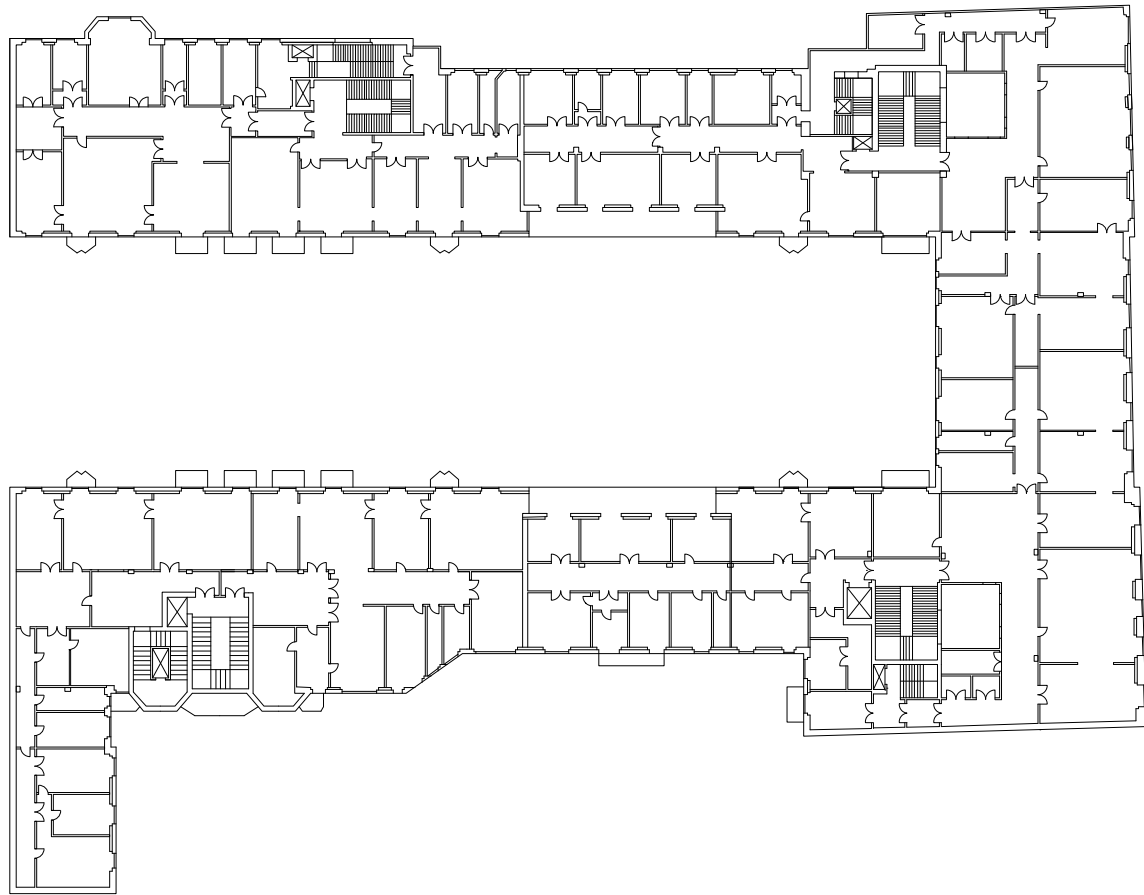
12 G. Muzio, *op. cit.*

13 Leonardo Benevolo, *Storia dell’architettura moderna*, Editori Laterza, Bari, 1960, p. 570.

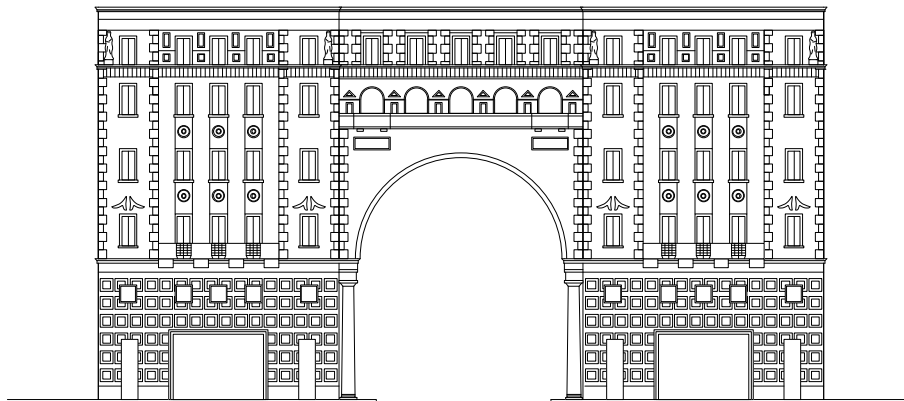
14 Giovanni Muzio, *Alcuni architetti d’oggi in Lombardia*, in *Dedalo*, n.11, 1931, p. 1086.

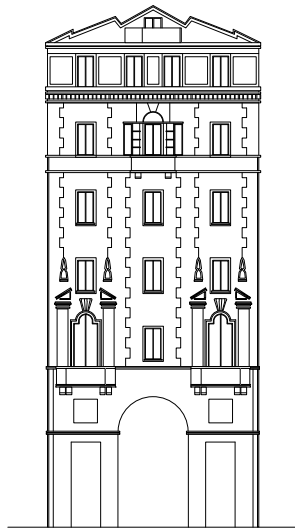
The recession of the last two floors accentuate the prominence of the towers, crowned at the top by broken tympanums and ended at the base of a sturdy *serliana* structure. The external image is established by the use of materials, dark granite tones to strengthen the pedestal tectonic, with clear marbles at the top of the building to juggle the volumetric play. The monumental facade on Piazza Meda rises then on a *serliana* basement and presents at the top a broken tympanum in which is inserted a large window; the same solution is revived at the ends of each of the two lateral side that are treated according to the same modular scheme: an arcade basement, three-story with lesenes, a crowning characterized by setbacks and terraces. This latter has a number of traditional references as cornices, string courses, broken tympanum, niches, lesens - and is lightened by solutions proper of Portaluppi's poetic as the greek near the balcony windows on the first floor or in the intrados of the arcade in the basement.

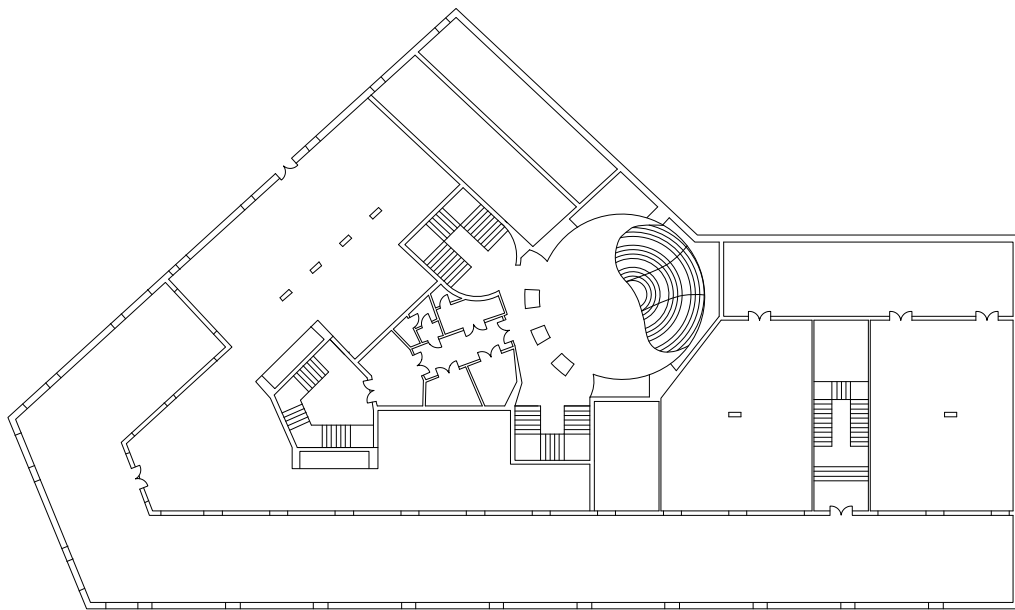
A modernist element is represented by the portico in which it is developed a continuous frame to convey to the maximum the light in the mezzanine, while large glazed windows are nested within the broken tympanums. The design of the building was done in collaboration with the engineer Cesare Chiodi, who was entrusted with the technical aspects and the drafting of the executive project, while Portaluppi, also in this case, dealt with the urban impact and the image of the building.

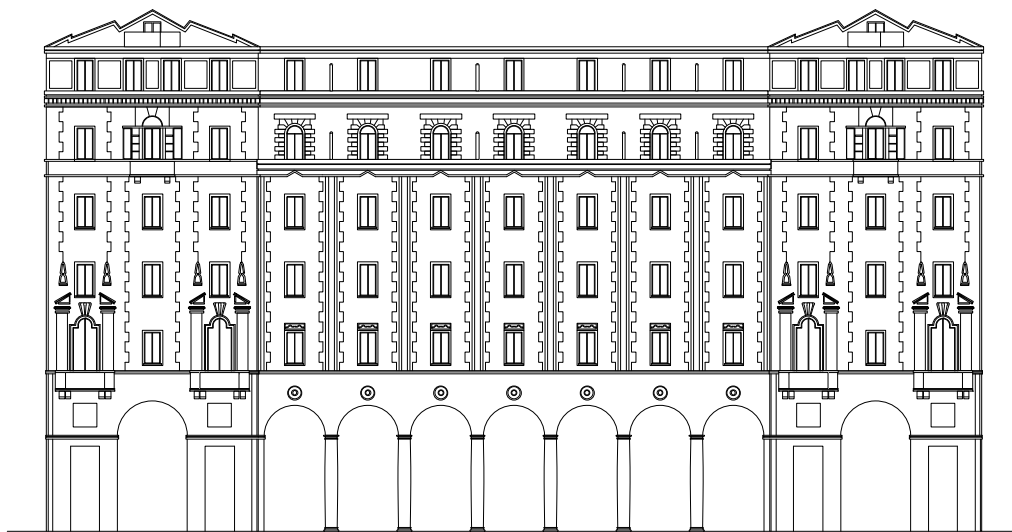




































03 Sauvage

“*L'immeuble à gradins*”: the patented hygienism and the imagination behind the set-back buildings

26, Rue Vavin and 13, Rue des Amiraux

In Europe the structural expression is traditionally based on a mixture of masonry and frame techniques: a superposition of floors with a masonry envelope¹. This vertical tradition has been subjected to street norms, but has hardly been opposed and its technical development has been helped by the use of elevators and the first Chicago's skyscrapers. The use of stepped terraces block marked a different direction with the consequent abandon of the verticality; this has been brought about by the development of reinforced concrete's use and by a different vision of urbanity.

Before arriving to the conception of the first set-back buildings, Sauvage and Sarazin had to work on different level. The first one was concerning the hygienic aspect of the dwelling, an interest connected to the life condition of the early XX Century society whose reflection was touching different issues from the social and economical to the medical and finally architectural aspect. Secondly there was the stylistic and typological matter.

Moved by an interest for the hygienic, medical and economical life's condition of contemporary society, Sauvage took contact to Doctor Camille Savoie's theories about the fight against tuberculosis and the sanatoria type being experimented in Germany in the form of stepped terraced buildings². Doctor Savoie supported the idea of a social issue connected to the tuberculosis' spread, idea that has always been denied by the medical research.

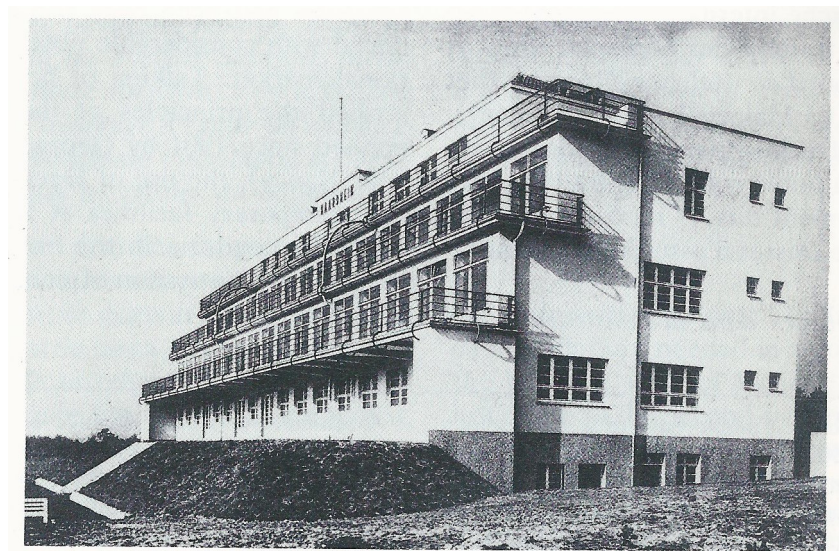
To promote this theory, he pointed out how in Germany some industrial technical discoveries had been adopted and a series of standardized sanatoria had been built with medical pre-

1 F. Loyer, H. Guéné, *Henri Sauvage, Les immeubles à gradins* cit.

2 In 1902 the magazine *L'Architecture* published the lecture given by Doctor Camille Savoie at the *Ecole des Beaux-Arts* in Paris. We don't know if Sauvage participated to the lecture or just read the article, but in any case he knew his theories (Marie-Jeanne Dumont, *La fondation Rothschild et les premières habitations à bon marché de Paris 1900-1925*, Ministère de l'Urbanisme, du Logement et des Transports, Direction de l'Architecture, Sous-Direction à la Recherche architecturale, Paris, 1984, p. 87).

cautions having a considerable potential on the international market. Finally he explained the three phases through which the sanatoria have been proposed and built. The first phase was more political, to draw population's attention on the tuberculosis matter and to make them feel their health was being cared by the Socialist party. As a result the site chosen to be built have been selected with great care, without considering the costs but in order to obtain a symbolic building. Secondly the promoters tried to build closer to patient's family to spread the idea of the possibility to be cured in every environment but with the particular hygienic issues and qualities given by the building. Finally the third step has been the one retrieving the approach of his colleague Doctor Sarason, who theorized a terraced system needing relatively little space, easily achieving good insolation and ventilation conditions and, in that way, permitting the fresh air cure. In summary the central interest of his plea became the possibility to prevent disease through good living conditions.

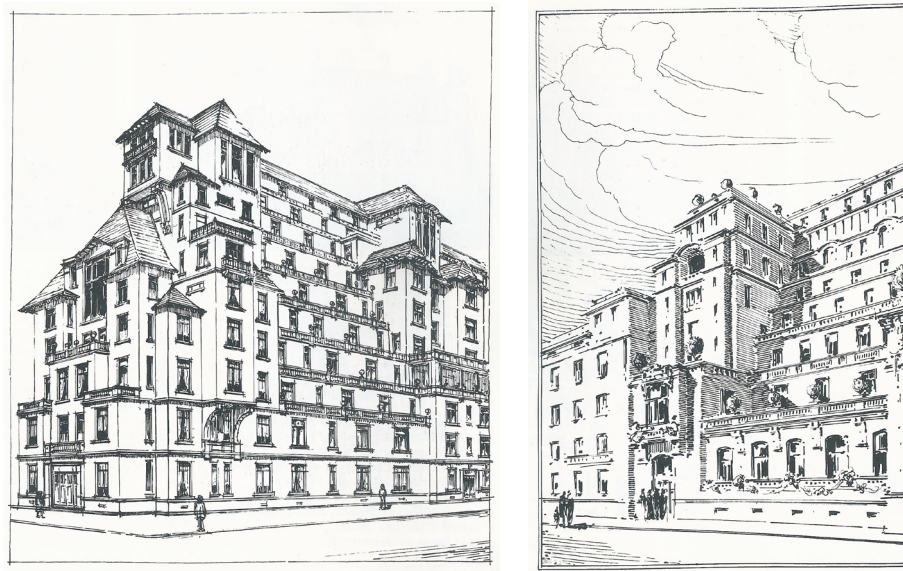
In 1907 Doctor Sarason delivered a paper at the 14th International Congress on hygiene and demography held in Berlin³ explaining his aim to overpass the medical field to cover housing. Sauvage probably found in his theory the step he was looking for to finally move from housing block to hygienic housing, radically questioning the issues of the habitat and of the haussmanian tradition.



Hardheim sanatorium for tuberculosis.

3 Francois Loyer, Hélène Guéné, *Henri Sauvage, Les immeubles à gradins* cit.

The first studies on set-back buildings by Sauvage and Sarazin date back to 1907-1908. In these sketches, anticipating the issues touched in Rue Vavin - the first built building with this type - we can observe different stages, characterized by the presence of different stylistic elements. Sauvage developed his idea of set-back building borrowing some elements from the Art Nouveau vocabulary, as bow-windows and loggias, and from the vernacular lexicon, as the volumes and roof accumulation and superposition. In the project's evolution, these roofs became terraces balancing and directing the volumes, and the ornaments disappeared making room for some elements of the classical tradition.



Sketches, 1907-1908.

Sauvage and Sarazin hadn't been the first to experiment the potential of the set-back building type, they were in fact part of an important tradition that enclose projects as the *Aeredomes* by Jules Borie in 1867 and the City of the Future designed by Sant'Elia in 1915⁴.

In the same years in which Sauvage and Sarazin were studying the terraced type, Adolf Loos was also experimenting it in the project for the Scheu House (1912). This type has been chosen as a practical demonstration of Loos' technique for intervention in the city⁵. Loos stated:

“Years ago I built the house of Dr. Gustav Sheu in Hietzing, Vienna. It aroused general di-

4 Francois Loyer, Hélène Guéné, *La passion du jardin*, in *Henri Sauvage, Les immeubles à gradins* cit.

5 Benedetto Gravagnuolo, *Adolf Loos*, Art Data, London, 1995, p. 146.

sapproval. It was thought that this type of building would have been fine in Algiers, but not in Wien. I had not even thought of the East when I built this house. I just thought that it would be pleasant to be able to step out onto a large common terrace from the bedrooms located on the first floor. In Vienna just as much as in Algiers.⁶

With this project Loos on one hand confirms, in the bareness of its walls, the argument already expressed in the Steiner House that the exterior of the architectural work belongs to the city-Nihilismus, to the universe of objects without qualities, and on the other hand it interprets and expresses in modern language the critical link with tradition. The study of the history and of the local architecture is seen as an active memory from which to select from the past and link with the present with a long and hard evolutionary process deriving from a deep and critical awareness of the new construction processes. The ultimate form became the final outcome of a linked series of reasoned choices considering both historical and technological development. In this sense Loos interprets the flat roof as an architectural trend already present in history, whose expression could have been finally profited by the technological invention of the roof made out of *Holzement* (cement-bonded wood). The “foreign” aspect provokes so an initial break, but at the same time it is of help in a critical reconsideration of a process founded on the logic of the building⁷. In this way the use of the terraces can be permitted in every floors and since “it is pleasant to be able to step out onto a large terrace⁸”, and this is technically possible, then there is no reason to deny this pleasure for an attachment to the image of a national art. The use of elements belonging to the tradition or to vernacular architectures can be associated to the investigative method adopted by Sauvage in his first sketches concerning the terraced type: architectural details and solutions already adopted were proposed and analyzed in order to answer to the set-back buildings problematics.

Once decided the type and the issues concerning it, Sauvage and Sarazin had to face some strictly architectonical and technical problems that still needed to be solved and considered before arriving at the construction of their first set-back building.

First of all there was the problem of the vertical circulation: to guarantee the shortest access to apartment and avoid unused and wasted space the conventional circulation should have been displaced from the traditional core. Secondly the angle of the stepped terraces didn't permit anymore the traditional haussmannian treatment of the corner return. Lastly the question of

6 Adolf Loos, *Das Grand-Hotel Babylon*, in *Die Neue Wirtschaft*, Jahrg. I, Wien, 20th December 1923.

7 Gravagnuolo, *op. cit.*, p. 148.

8 *Ibid.*

the elevation whose traditional tripartition in base, *piano nobile* and crowning has been also saved in the 1902 regulation.

To understand how they tried to solve these problems we can observe once again Sauvage and Sarazin's sketches. The circulation was encased in a base following the line of the street, creating a new articulation for the facades and a hybrid between the stepped terraces and the staircase towers. The corner return has been treated as in an Italian villa, with tower, overhanging eaves and terraces with pergolas. Finally the tripartition has been treated as in Boulevard de l'Hopital, with a variation on a unique covering material.

In that period Sauvage wasn't the only one looking for a new language for the new society to overcome the floral mannerism of the by then outdated period of Art Nouveau.

In 1908 Loos wrote "*Ornament und Verbrechen*", while Tony Garnier started his research for the *Cité industrielle* and in 1909 Eugène Henard published his *Etudes sur les transformations de Paris*.

In 1908 Picasso and Braque painted their first cubist works influencing the entire artistic and architectural debate, as Sauvage said:

*"le cubisme ne fut pas une forme d'art mais bien une opération chirurgicale... nous lui devons de nous avoir fait réfléchir et de nous avoir ramenés violemment aux vérités premières"*⁹.

It is interesting to note how this influence touched in many aspect the entire artistic and architectural European debate, but in France this has been exploited with the permanence of a technological tradition, that Benevolo¹⁰ underlines also as a core topic in the works of Perret, Hennebique and Garnier, and that we can clearly find also in Sauvage.

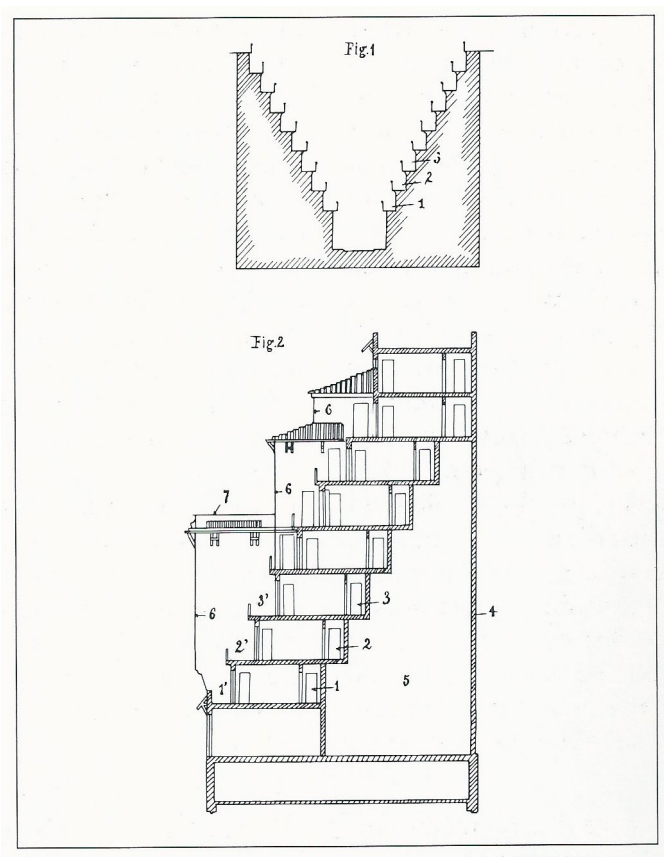
The first occasion to build a set-back building arrived with the Rue Vavin project, a block of middle-class housing in which finally Sauvage's researches have been experimented with moreover a new relationship with the client.

Before starting the project Sauvage and Sarazin decided to patent their invention, defining the issues concerning this new type and the solutions found for the designing problems. This decision can also be explained considering the advices and the friendship with Jourdain, strongly committed in the defense of artists' right. Despite the publicity that consequently arrived from

9 Henri Sauvage, *Les tendances de l'Architecture Moderne*, in *L'amour de l'Art*, n. 10, October 1922, p. 334.

10 Benevolo, *op. cit.*, pp. 443-446.

the patent, the limit laid in the lack of motivation for other architects to develop this type. In the official description Sauvage and Sarazin emphasized the possibility to increase light, the air angles in the street and the ventilation in relatively tall housing blocks producing at the same time very hygienic dwellings. Secondly the stepped section could produced a series of terraces that can become gardens and the space under the set-back floors “*pourra etre utilisé très avantageusement par exemple comme lieu de réunions publiques, salle de concerts, etc*”¹¹. Finally they explained the possibility to increase the building height, point that has been probably touched in order to answer the economic pressure towards increasing building density in the city centre. This emphasis on the profit’s possibilities turned out to be a weak point, used against them the first time they asked the permission to built at Rue Vavin.



Patent’s illustration, 1912.

11 Henri Sauvage, Charles Sarazin, *Brevet d’Invention. VII. Construction, travaux publics et privés. 3. Travaux d’architecture, aménagements intérieurs, secours contre l’incendie.* n. 439.292. Système de construction, 23th January 1912, Paris, Imprimerie Nationale.

The well-off people to which the building has been designed were part of the *Société Anonyme des Maisons à Gradins*, whose administrator was Sauvage (not by chance he will spend the rest of his life inhabiting this building). This cooperative association, the first of this kind ever experienced¹², offered some economical advantages to the purchaser - lodger and more freedom to the architect to improve the habitat condition. The same terraced system has been accepted for the advantages explained to the future lodgers in terms of lighting, privacy guaranteed by the private gardens and the flexibility in the interior distribution. Moreover Sauvage underlined the importance of the use of new technology, more economical and better answering to comfort issues as radiators in every apartment with the consequent abolition of chimneys, the abolition of interior decoration (defined by Sauvage “*le faux luxe qui revenait fort cher*”¹³) and the use of ceramic tiles for the exterior casing to simplify the maintenance and to guarantee, as we have already seen, the hygiene.

The first project presented for Rue Vavin was designated by Sauvage and Sarazin *Maison à gradins sportives*, as they tried in fact to insert in the building some sport facilities. This definition can be interpreted considering the contemporary interest of the cubists for box matches. The first cars competition too and the interest in sport activity for a better life style condition had surely played a role in the designing of this sport program. In the first project the apartments were provided with big ateliers and big gymnasiums whose surfaces surpassed sometimes 200 squares meters.

The architects had some problems to get the building permit and they had to change the design two times to get the final approval the 11th September 1912. The presence of more floors than the normal street regulation had to be revised and from the first nine floors proposed in the first version they had to decrease to the number of six, exactly as a vertical facade having the same height. Moreover the deepness of the first floor made the space difficult to be used for commerce activities and the lighting and ventilation of some spaces resulted to be insufficient. In the final project, the deepness had therefore been reduced to 20 meters. The volume's reduction obliged the architects to change the plans giving them a T shape with a complete revision of the internal distribution. Every floors had three apartments (before they were just two with a dimension of sometimes 600 square meters!), the gymnasiums had to be eliminated with the exception of a little room designated for sport activities and the ateliers dimension had been reduced.

12 Luciana Miotto-Muret, *Les Oeuvres de la Maturité: 1912-1932*, in *Henri Sauvage 1873-1932*, Société des Architectes Diplômés par le Gouvernement, Paris, 1976, pp. 80-81.

13 Henri Sauvage, *Travaux d'Architecture 1907-1930*, EDARI, Strasbourg, 1931.

As far as the facade is concerned, Sauvage and Sarazin opted for a continuing structure of the *gradins*, a simplification of the bow-windows used just in the central block and a complete recover with the ceramic white tiles used from 1899 in all the Parisian metro stations and generally adopted more in sanitarian places than as a housing facade covering. This choice had a lot of advantages: it satisfied the hygienist taste for a washable facade, it created a remedy for the concrete's weak answer to bad weather and affirmed the disdain to the academic decoration, embracing Loos' positions about ornaments. The metro tiles used as facade covering became a symbol of a serial and anti-artistic aesthetic choice adopted to represent the new modern life standards. The construction works were completed in 1913.

The *Groupe d'Habitations à Bon Marché* in Rue des Amiraux represent the final outcome of Sauvage's research on the worker's housing topic. The complex has been built between 1923 and 1926, but had already been commissioned in 1913 by the city of Paris¹⁴; the construction has been slowed down by the war but the early commission shows the interest of the administration in Sauvage's constructive method.

In Rue des Amiraux we can find a large number of precedent solutions as the reinforced concrete structure, the terraced system and the white ceramic covering, but the challenge lied actually in the users of the building, as Sauvage said:

*“il s'agissait de recevoir de nombreuses familles d'ouvriers et de leur donner, pour un loyer très modique, la sorte de confort que peut désirer une famille de simples travailleurs où la ménagère n'est pas aidée [...]”*¹⁵.

The set-back building type permitted to Sauvage to bring new solutions in the worker's housing: terraces for every family, cellars with elevators in the centre of every apartment, automatic ways to empty the trash, central heating and some incorporated furniture as pantries and linen chests.

In addition to the better conditions guaranteed in a social housing complex, one of the main innovation introduced in this building has been due to the big scale of the terraced system: the big void resulting from the recession of the floors gave space to a volume that could house collective equipment. At the beginning Sauvage thought to allocate the space to a big public

14 Marcel Zahar, in *L'art Vivant*, 15th August 1928, pp. 628-631.

15 Sauvage, *Travaux d'Architecture 1907-1930* cit.

room or a cinema, but finally it turned out to be more rentable to have a swimming-pool, considering that the entire neighborhood was at that time bereaved. A big swimming-pool was then inserted inside the housing hosting a communal equipment as in the HBM prescriptions and, at the same time, proposing an unsurpassed model of exploitation of the set-back building type.

With the Rue des Amiraux's building, Sauvage worked out the way to perform in an urban context with a new type, embracing the issues of the *immeubles à bon marché* through hygienic and typological issues.

Sauvage's adhesion to workers' housing problems should moreover be considered specifically in the context of the city of Paris and not in a garden-city or another new city¹⁶. The limits of the urban existing context are fundamentals in the comprehension of the conception of a new dwelling model with medium height (7-8 floors) and set-back form. In that years Hénard was presenting his drawings for Paris transformation on the magazine *Architecture* and we have to remember how in that period slogans as *Air pour tous* and *Vers le Soleil* had a big impact on architects that were trying to introduce them also in the built city context¹⁷.

In any case Sauvage's research still didn't reach full accomplishment and the experimental field lead to a challenge in a bigger scale involving the whole building and its impact in the context.

Without a lot of precursors, the stepped terraces became a fascination whose form can be considered a symbol of Modernity. Undeniable echoes of Sauvage's contribution are to be found in the work of the Italian avant-garde, whether in Portaluppi's project for the Monte Amarillo district in *Allabanuel* (1920) or Giovanni Muzio's project for artists' housing and studios (1922, with Gio Ponti and Emilio Lancia). The terraced type has been investigated also by Loos in other projects: a group of twenty houses with terraces (1923) and the Grand Hotel Babylon¹⁸ (1923). About this last-mentioned project, Loos stated: "dark rooms giving onto the courtyard have to be cheap even in luxury hotels. But a hotel arranged around terraces has none of these rooms: it only has front rooms. Moreover, with girder construction, that is, with the use of steel structures, it is possible to extend the sides exposed to the sun, to the east and to the west. The main thing is that each room should have its own terrace."¹⁹

This belief expressed for the Grand Hotel Babylon clarifies some issues laying behind the who-

16 Brian Brace Taylor, *Sauvage et l'habitat hygiénique ou la révolution de la propriété à Paris*, in *Henri Sauvage 1873-1932* cit., p. 77.

17 *Ibid.*

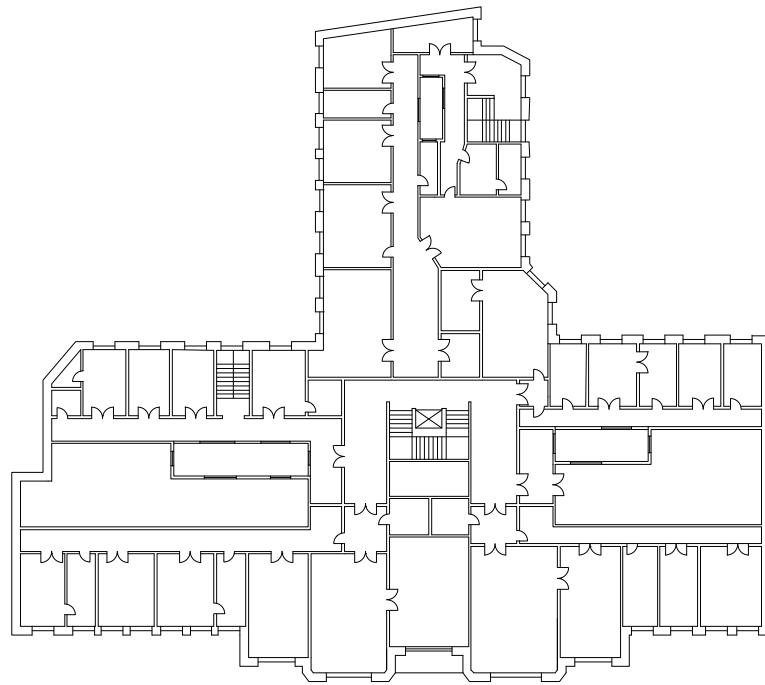
18 See chapter 5.

19 Cravagnuolo, *op. cit.*, p. 178.

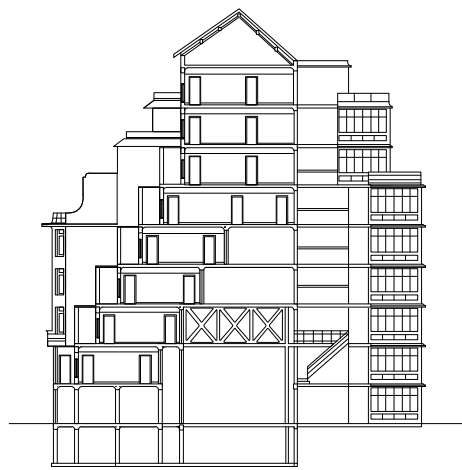
le conception of the terraced type. The possibility to have a private and green exterior space without giving up on the research of high-density buildings growing in height (clear trend in those years for both the profits and the technological developments that lead to the vertical challenges of skyscrapers) together with the lighting guaranteed by this type, became of great interest and demonstrates the experimentations and the fascination for set-back buildings. The hygienic meaning proposed by Sauvage is a connotation probably absent in Loos and on the others contemporary architects investigating this type, but the potentiality in aeration and lighting are in any case seen as central issues for the new sought comfort of the modern habitat. The passion for stepped terraces didn't stop in Italy; we can find some other examples in the Geneva Mundaneum scheme by Le Corbusier in 1929 and in the already mentioned Grand Hotel Babylon²⁰ by Adolf Loos.

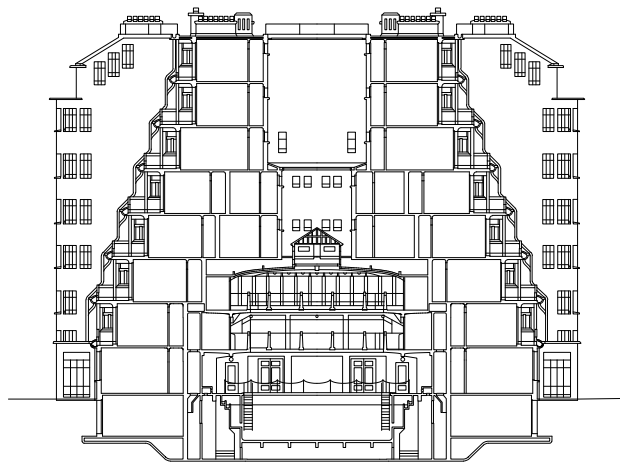
The fascination for the stepped terraces, which in a way fell off in the Forties, was taken up again after twenty years. From Kenzo Tange to Atelier 5, from Ricardo Bofill to Martin van Treeck the stepped terraces possibilities have been questioned and tested to investigate the theme of the metropolis and of the urban planning.

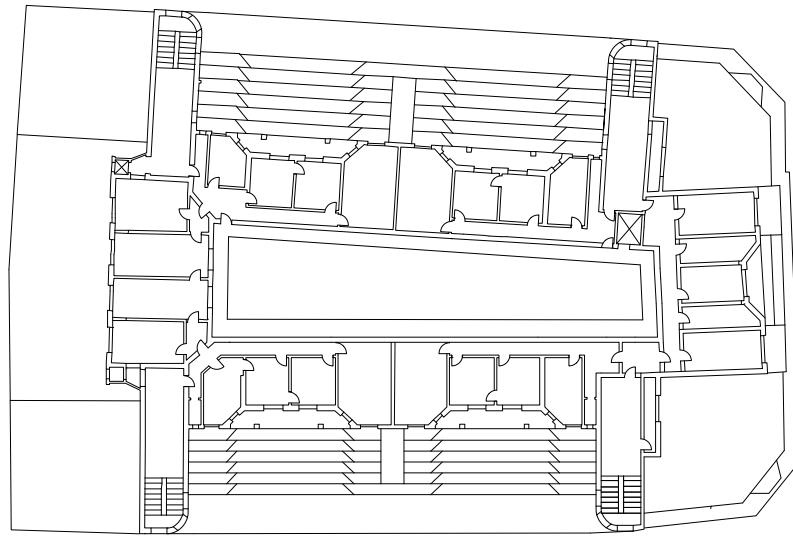
20 See chapter 5.





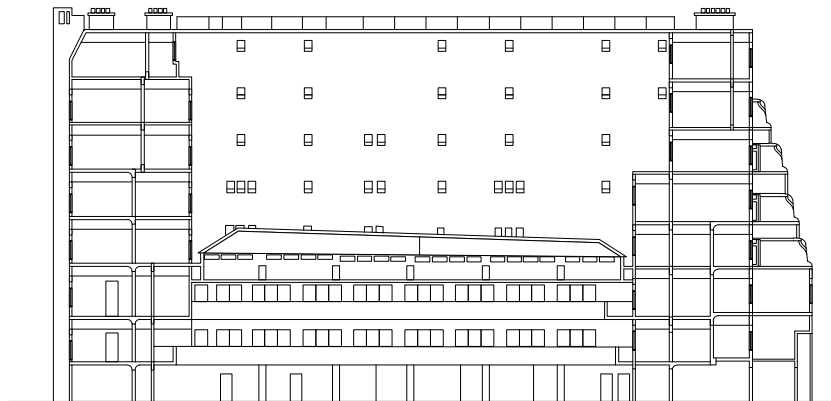




































04 Portaluppi

Bourgeois housing and relations with the city

Casa Studio and Casa Lentati

The activity of Portaluppi must always be contextualized within a debate on Modernity for a certain extent strictly Milanese. Milan is in the Twenties and Thirties the crucible and the focus of a debate on the functions of the decorative arts, on the relationship between artistic invention and the industrial reproduction, between craftsmanship and mass production, debate that begins with the exhibition dedicated to the opening of the Simplon Tunnel, in 1906, and which can be considered finished with the first edition of the *Triennale di Milano*, organized in 1930 in the Villa Reale in Monza.

Portaluppi's personality constantly eludes the restrictive definitions of schools, groups and professional or style models and this is clear from both the poor critical literature about him and for the refusal to draw in first person a theoretical route, to launch proclamations and therefore to define an ideal platform and rules of his work as an architect. His choice of words belong to a language that is personal and self-referential, but also closely linked with the times from which it takes the variations in taste, style and cultural orientations. The elusiveness of Portaluppi and the difficulty in defining its personality in the artistic and architectural culture of the Twenties and Thirties, while it has always been considered a negative value, can become today an interesting insight on the meaning of Modernity, for its path between reason and emotion, expressed by the cynical irony of Portaluppi¹. The freedom, experimented until the limit of provocation, and a fine culture with essential elegance, are developed in parallel with the role of the engaged architect looking for a renewal of the contemporary world, through a consolidated relationship with history and a concept of the overall designing of the living.

In the late Twenties the two strands in which the residential works of Portaluppi are articulated became evident. On one hand there are a number of commissions by real estate companies who entrust the decoration of the facades (as the houses Radici di Stefano in via Jan and in via

¹ Valerio Terraroli, *Gli anni Venti e Trenta e il décor come sinonimo di stile*, in *Portaluppi, Linea errante nell'architettura del Novecento* cit., p. 311.

Aldrovandi) and on the other hand a second strand is related to the design of the entire building of private dwellings such as Villa Campiglio, Casa Wasserman in Viale Lombardia, Casa Lentati in via Telesio and Casa Portaluppi in Via Morozzo della Rocca. These last two of interest because commissioned by the families with the idea to rent some part of it.

In the Thirties a strong economic crisis started to invest the constructive sector and a consequent research for incomes from the construction began to be in the priorities of the customers' family. This situation prompted Portaluppi to develop the type of the *condominio* with a purified language, characterized by simple volumes and a limited use of the decoration, but with a constant attention to the urban impact.

In particular the area close to Cadorna station all along the *Ferrovie Nord* (founded around the 1870 from a Belgian investment), it was strangely perceived as a possible garden-neighbourhood for the bourgeoisie as this tramway was considered independent from the normal rail traffic, since it linked Milan with the touristic areas of the Brianza and the lakes (Como and Maggiore). For this reason this neighbourhood, where Casa Portaluppi and Casa Lentati are located, became of interest for the industrial bourgeoisie, that commissioned their *condomini* in this area, that at that time was outside the traditional historic centre where the first Portaluppi's projects as Palazzo Buonarroti - Carpaccio - Giotto and Palazzo Crespi are located. Finally it is important to consider that in that period the coverage of the *Navigli* was just finished (1929-1930), creating a street ring that permitted an easier and immediate connection with the neighbourhood outside the *cerchia*, as this district close to Cadorna. This area, without considering the economic crisis, became of potential for possible farsighted investments as, in fact, the history confirmed.

The house in Via Morozzo della Rocca 5, built by the family Portaluppi itself, is of great interest for the freedom from the clients' constraints and so the opportunity to analyze the stylistic choices of Portaluppi regardless of issues related to the customer's willingness. Built between 1935 and 1939, the house sits on a block between via San Vittore, Via Morozzo della Rocca and via Bandello, traced from the 1934 version of the Cesare Albertini's Masterplan. The only street facade is divided into two parts, the lower one is covered by slabs of alloy white metal chromium fixed with protruding rivets, and the upper one is covered by rectangular slabs made of serpentine and crossed by all equal and square windows.

The plating square slabs of white metal chromium, fixed by four studs in relief that flaunt the

epidermal function, and the basement could appear as an original tribute to the thin coatings used by the architects of the Vienna Secession, but also as a possible allusion to the technical developments represented by the use of the same material with which planes, trains and cars were built. The metal band comprises the mezzanine and rests on a low plinth backlog of black granite of Anzola, where hopper windows are cut out to illuminate the basement.

The elegant spaces of the entrance and the ground floor, where it was located the study of Portaluppi, strike for their delicate attention to detail, whose articulation as a scenography is helped by a small backyard that complete the studio view as a theatrical scene on archaeological finds. The apartments on the upper floors follow an orderly, but quite traditional, distribution with a central corridor that connect the master bedrooms facing the street and those of service facing the court. The decoration of the access spaces is completely entrusted to the combination of sophisticated materials and the contrast of their textures such as green marble, Challant malachite, burl wood and translucent panels filtering the light. On one side of the passageway, at the street level, there is the entrance to Portaluppi's office - today head-quarters of the Foundation - which, carved into the wall of malachite and framed by monolithic slabs of white marble, includes a model of marble of the office logo, the archetypal house used as a cartouche in the drawings of the architect. The meticulous and geometrically complex preparation of the surface coatings - in wood and marble - delimits also the internal volume of the study, articulated with level changes in large spaces over 5 meters high. In particular, the meeting room shows a kaleidoscopic floor composed by many different pieces of marble and granite, arranged in an irregular pattern that the same Portaluppi ironically called "*concretismo*": a graphical composition that represent an effective sampling of the main stone materials used by Portaluppi.

As in Villa Campiglio in via Mozart, a secessionist aspiration for the total work of art and Loos' attention to the quality of materials seems to intertwine and merge².

Casa Lentati in via Telesio 2, built between 1934 and 1937, is instead of interest because it is considered a breakthrough, along with the two houses in via Foppa, in Portaluppi's expressive choices. Such a change would have lead to an adherence to a language not explicitly tied to rationalism. The accentuated horizontality of the facades may be determined in equal measure by a stylistic choice of manipulation of a language (as already experienced with its predilection for the "déco"), but also by a stripping due to economic factors. In Via Telesio the project, located on a corner block, recovers a horizontal composition with a division into three bands: the basement in Brembate strain, three intermediate floors and a terminal one whose horizontality is

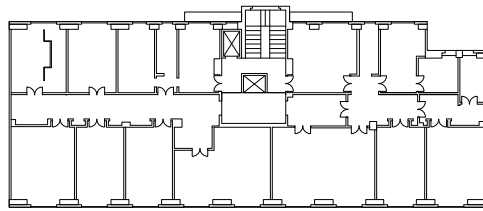
2 *Ibid.*, p. 290.

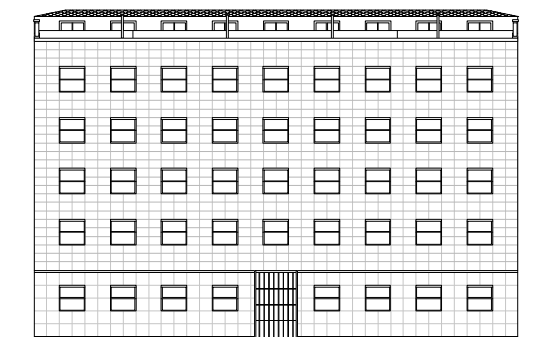
even more accentuated by the rising of the current stone balustrade at the level of the windows. A further element of rationality is the huge terrace on the third floor, embracing the corner and denouncing the presence of the main apartment that occupies the entire floor. Behind the corner's and the central's windows glimpse the presence of a panoramic living room, an irregular hexagon with two side rooms and entrance with semicircular niche, that is at the heart of the apartment, carefully designed to meet the representational needs. A complete documentation of technical drawings, preserved by the heirs, witnesses the care that Portaluppi devoted to the details' solution looking for the aesthetic perfection of the whole environment.

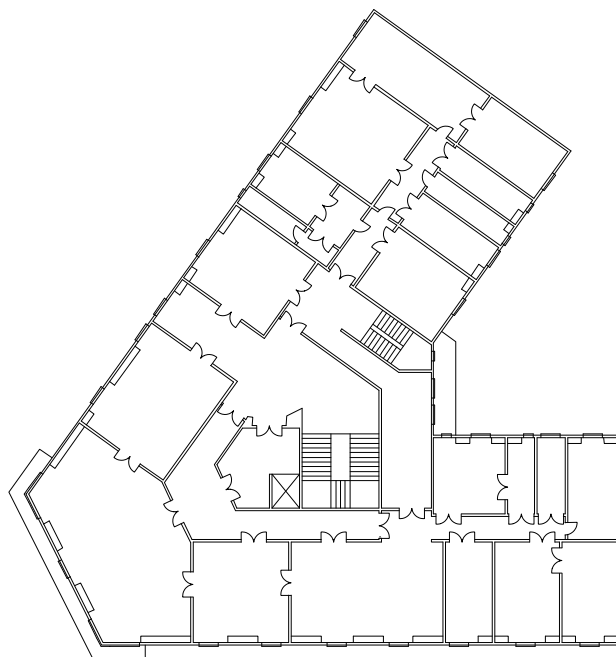
The social function of architecture plays a faded role in Portaluppi: he always seems to avoid confrontation with the most immediate contingencies, economic, social and political, to bring the reflection on a more abstract level. Referring to the city he will say that it is the theatre of the conflict between the "matter and the destiny", is the place of the "contradictions" between the "floating beings and the real estate stones"³. The civilization to be defended is not the Italian or the Lombard, the one of the Christian values or the fascists, but the secular one of the metropolis, measured by the "multitude"⁴. Facing this civilization challenges, the task of Architecture is to remove the anguish, to sublimate the conflicts in the shape, with a background of disillusionment that characterizes the intellectual dimension.

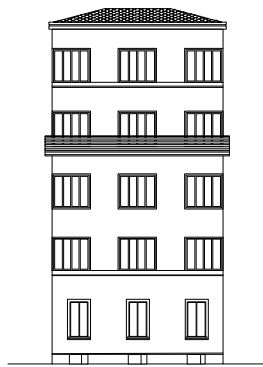
3 Piero Portaluppi, Marco Semenza, *Milano com'è ora e come sarà*, Bestetti e Tumminelli, Milan - Rome, 1927, pp. 17-19.

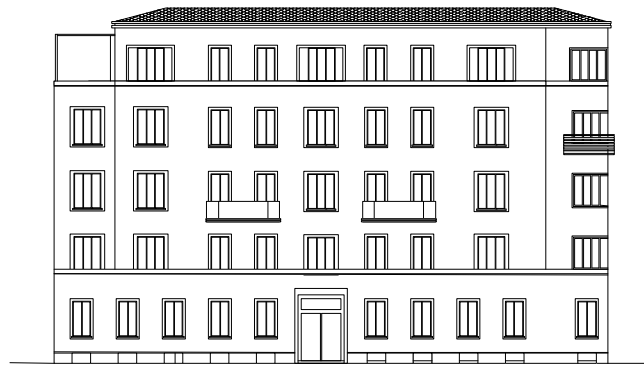
4 *Ibid.*

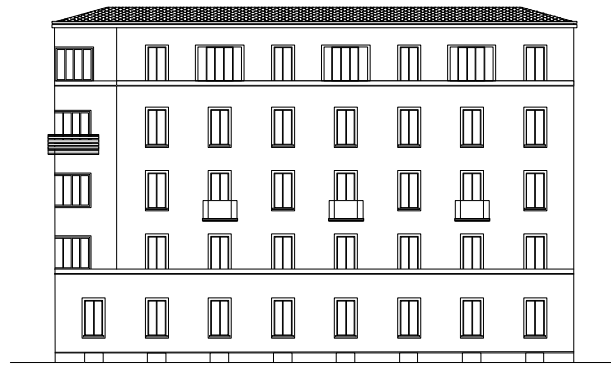








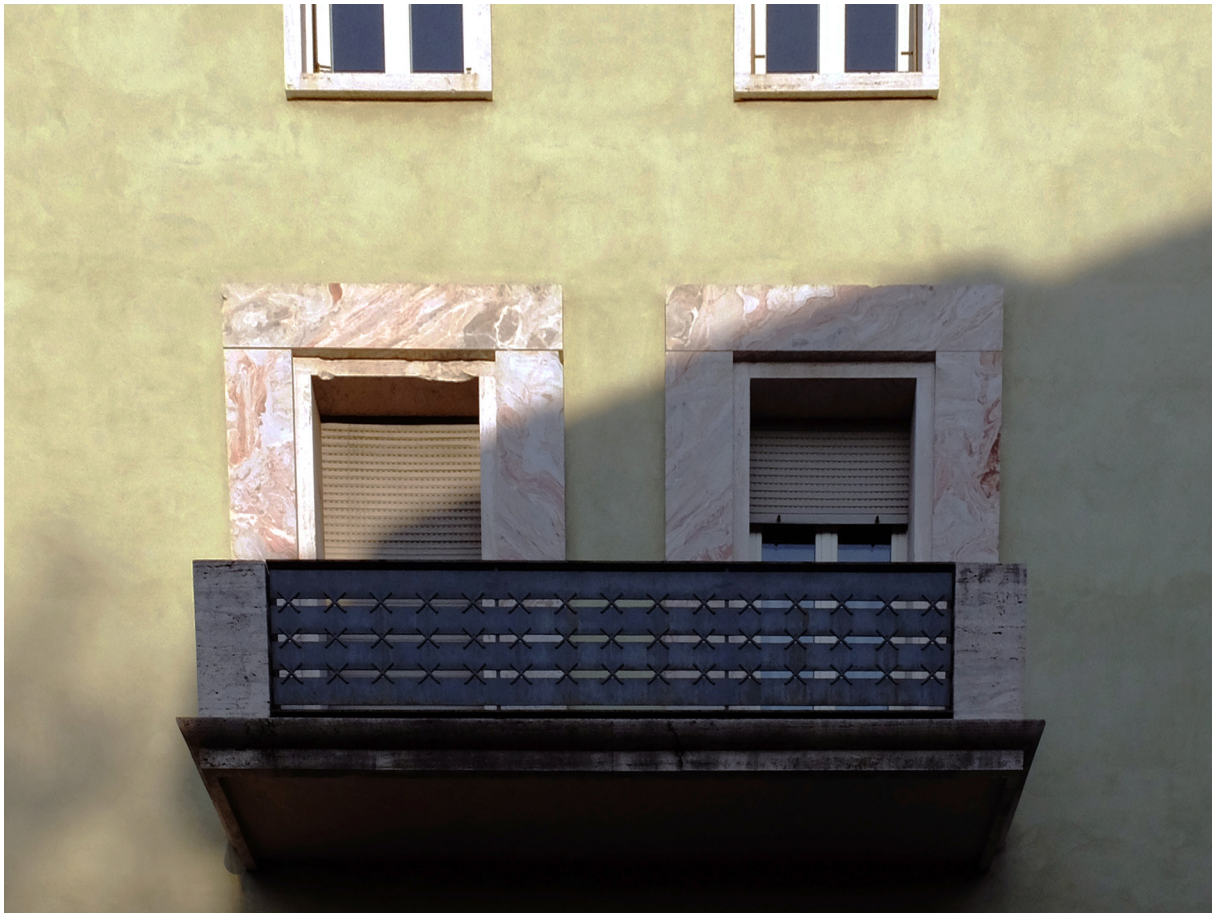


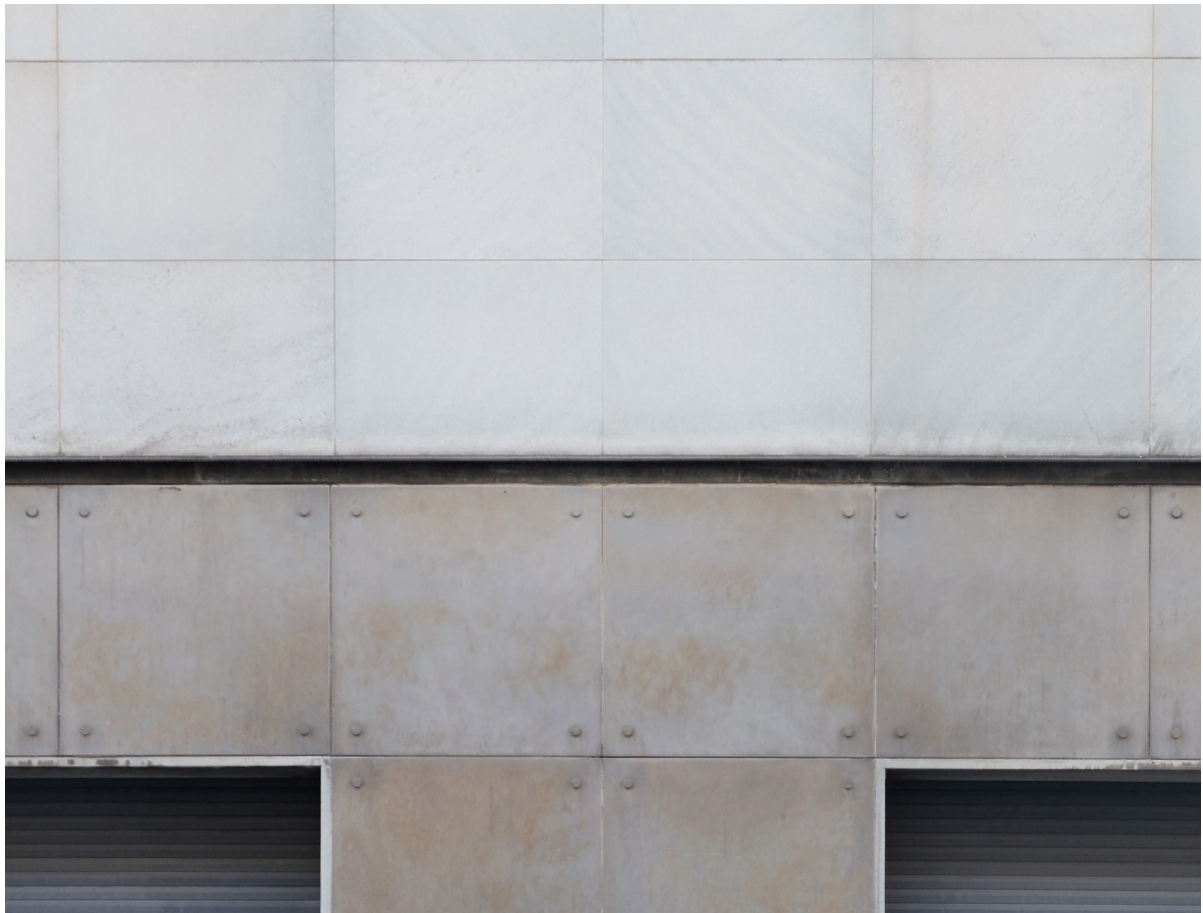


















05 Sauvage

Utopia: modern allegory

Le Giant Hotel and l'immeuble Metropolis

“Peut-etre, aurai-je servi de trait d’union entre la tradition et l’avant-garde [...]”

Henri Sauvage

In the Parisian urban context Sauvage’s type evolved from a relatively small building integrated in a street (Rue Vavin) to a bigger scale housing block occupying the entire edge of an urban parcel (Rue des Amiraux) to a gigantic utopian building.

In 1927 with the publication in *L’Illustration*¹ of an immense building called *Le Giant Hotel* the interest of the stepped terraces had a turning inside out: from the urban exterior impact strictly connected to the tectonic of the construction, the experimentation moved to the evolution of the skin’s role becoming the case of a great internal space hosting facilities as a giant swimming pool and a hanging garden.

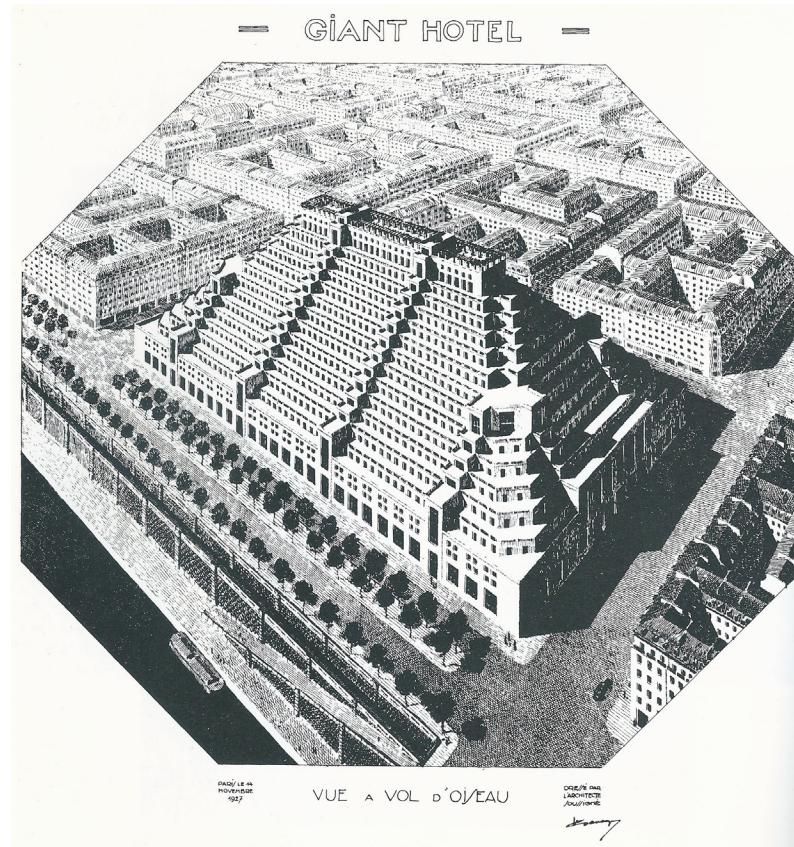
“Monsieur Sauvage avait conçu un projet hardi [...] sur un terrain isolé, de forme rectangulaire et présentant une surface d’environ 20 000 mètres carrés, il élevait un immeuble de 70 mètres, un peu plus haut par conséquent que les tours de Notre-Dame [...] cet immeuble, à usage d’Hotel, comprenait seize étages au-dessus du rez-de-chaussée. Construit à gradins sur ses quatre faces, il comptait environ 1200 chambres ayant toutes vue sur la rue et enveloppant un noyau central où seraient installés: halls divers, piscine, salle de théâtre, salle de cinéma et toutes les dépendances dont on peut orner un grand caravansérail moderne”².

With this project Sauvage explores once again the potentiality of the set-back buildings: if at the beginning he choose this configuration due to its hygienic issues, Sauvage seems to have found a type that can solve some architectural problematics at any scale. With his utopian projects Sauvage experiments the potential of the terraced system that can be worked out from

1 François Honoré, *Nouveaux modes de construction: la hauteur des immeubles à Paris*, in *L’Illustration*, n. 4478, 29th December 1928, pp. 790-792.

2 Robert Rey, *L’architecture et l’art décoratif au Salon d’Automne*, in *L’Architecture*, 1928, p. 387.

a single residential building to an entire city. With the perspective he used to represent the project he wanted to emphasize the contrast between the width of the building and the repetitive mediocrity of the urban context around. To stress this difference the parcels are represented in a perfect orthogonality that permitted also to avoid any problem that will present the implantation of a huge quadrangular pyramid in the irregular Parisian context.

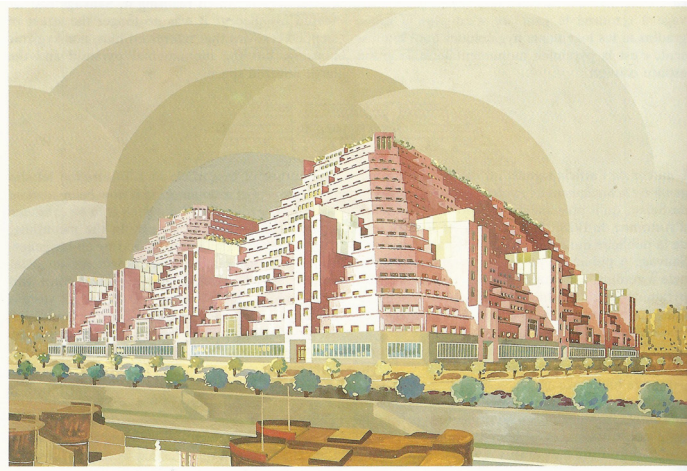


Le Giant Hotel, 1927.

Just one year after, probably profiting of the publicity given by the publication in many magazines of *Le Giant Hotel*, Sauvage published another project called *Metropolis*.

This time the building has been conceived as an octagonal 25 storeys high stepped pyramid with a central court and cross-wing in the middle of Montparnasse cemetery. The Seine front design consisted of two 15 storeys pyramids covered by 100 000 square meters of housing and 8 parking storeys for 5000 cars. The upper part of the pyramids were housing two large halls,

at the same level as the hanging garden, containing a tennis stadium with three practice courts and a competition one, with a capacity of 3000 spectators³. Sauvage envisaged a steel structure of industrialized prefabricated components to sustain the whole building⁴. These forms hosted facilities that overpassed the neighborhood or the urban level to become the manifesto of a new futuristic city. The building is presented as a “city in the city”, whose functional autonomy and monumental isolation raise as a proposal against the post-haussmannian urbanist models. Although his ambition and his functional autonomy, the pyramids don’t break with the street’s notion and with the 1902 street regulation subscribing the traditional problematics of the haussmannian parcel with interior court: limiting the housing on the street facades and equipping the parcel centre with technical and comfort facilities.



Metropolis, 1928.

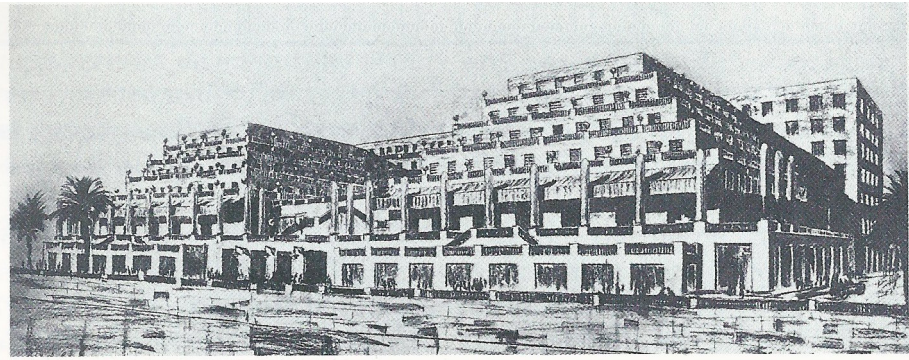
The project has been probably inspired by Adolf Loos’s Grand Hotel Babylone designed for the Promenade des Anglais in Nice, shown for the first time at the 1923 Salon d’Automne. Loos’ inspiration was indeed in Sauvage’s Rue des Amiraux, whose design had been doubled and whose double pyramids had been Sauvage’s inspiration. The scale of *Metropolis* must have been beyond the means and the imagination of the period, as it was never built.

The pyramid shape, with its gradual shrinking from base to vertex, offered the dual advantage of attenuating the mass of the building on an oblique triangular plane and of making its appearance in perspective the same in all sides. Despite its archaic, almost ancestral, symbolism, the pyramid represented the most advanced solution to the problem of blending an architectural

3 Loyer, Guéné, *Henri Sauvage, Les immeubles à gradins* cit.

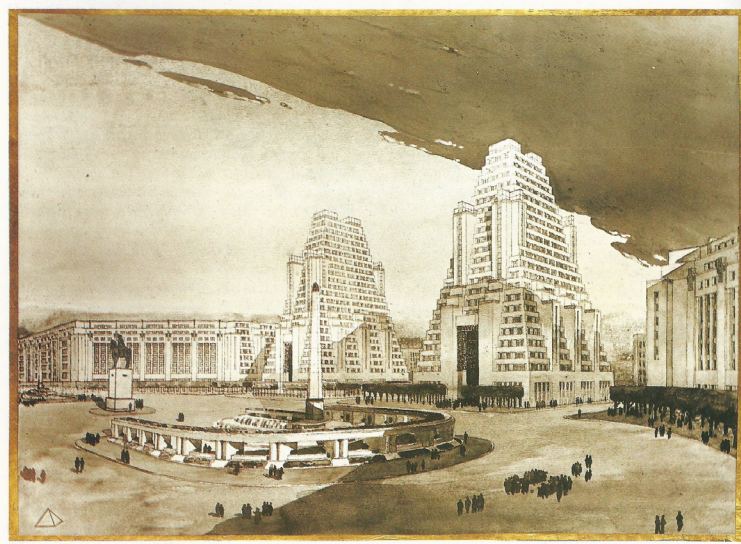
4 Luciana Miotto-Muret, *Les Oeuvres de la Mauriù: 1912-1932*, in *Henri Sauvage 1873-1932* cit., pp. 79-88.

object of huge dimensions into the landscape⁵.



Adolf Loos's Grand Hotel Babylone, 1923.

In any case the building possibilities didn't prevent Sauvage to continue experimenting the stepped terraces as a form representing official monumentalism. We can find confirmation of this in the design of the 1931 *Porte Maillot - Place de la Victoire* Competition. The project consisted in framing the entrance of the Avenue de la Grande Armée with two 23 storey pyramids, whose massive blocks created a big landmark in the square. The two vertical features framed a place in the form of an antique circus, ornamented with obelisks on either side with a colossal equestrian statue. The use of the stepped terraces became so of interest in the discourse concerning the city and the image of it.



Design for *Porte Maillot - Place de la Victoire* Competition, 1931.

5 Gravagnuolo, *op. cit.*, p. 178.

06 Portaluppi

Utopia: ironically on modern

SKNE and Allabanuel

Portaluppi produced between 1920 and 1930 a series of drawings of unrealized, utopian projects, with blurred boundaries between fantasy and criticism, that points out his reflection on the future of civilization. With a satiric and melancholic eye, Portaluppi demonstrates a disenchanted point of view on a modernization going towards a standardization of the tastes and on mass consume habits.

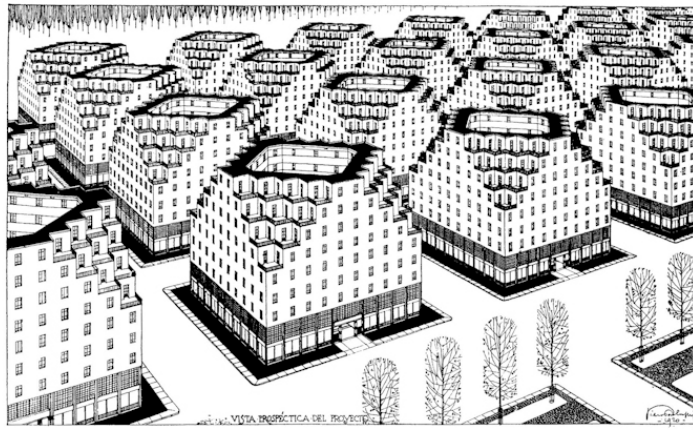
The collection includes the plan for the district Monte Amarillo in the imaginary town of *Allabanuel* and the design for the *Skne* skyscraper. These latest projects cannot be considered mere stylistic exercises or whims, since the numerous convergences with Portaluppi's serious architectural studies and the use of particular forms will carry the interest at a higher level: at the broader debate on the context in which Portaluppi operates and on the vision of the future that the changes taking place are leading to. Furthermore, the two projects *Skne* and *Allabanuel* were inserted and published in *Aedilia I*, demonstrating their importance being part of Portaluppi's personal catalog at the same level of the projects he actually realized. An ironic and provocative glance had always been proper of Portaluppi, who continued until 1926 a parallel career as a caricaturist mainly for the magazine "*Guerin Meschino*", but also for other satirical magazines.

The project for the urban plan of the Monte Amarillo district in *Allabanuel* dates back to 1920, year of the first Le Corbusier's publication on the *ville radieuse*. The title of the work should be read as a typical Portaluppi's joke: the word *Allabanuel* read backwards it is *l'è una balla*, in Milanese dialect *it's a joke*. The project is a critique to the horizontal city shaped with grids with its blocks repeated and repeatable *ad infinitum*. Each block is occupied by an identical nine-storey height cubic building which rear facades, symmetrically climbing, glimpse a square courtyard, dividing the equilateral profiles of each building. Located in a non-existing place, the district stands in a remote suburbs (a la banuel = *à la banlieu*?), where only a forest and a street with some trees invade the limits of a drawing, otherwise completely decontextualized.

The battle that Portaluppi will undertake seven years later during the drafting of the urban plan for Milan, *Milano com'è ora come sarà*, against the urban grid systems, sheds light on the meaning of the Monte Amarillo's district. Portaluppi's position can be cleared also considering his thoughts:

“Every room is a simple stark cube; something dry, mechanical, rigid, frigid recalls the hospital's clinics and the dental practice [...] The oblige of our home life, that so often needs space and breathing in a geometric syntheticism, in a concentration of all our movements, the decrease of our house to a minimum, as if we were always supposed to live in the small walls of a sleeping-car may seem sometimes a sacrifice, that for the sake of the only “new” or the only “rational” we do not feel to do”¹.

The bottom line of *Allabanuel* becomes then a criticism of standardization, incorrect reply to the modern city.



Allabanuel, 1920.

As *Allabanuel* exorcised the ghost of the horizontal city, *Skne* skyscraper it is the vertical counterpart set in the New York's metropolis.

In a time when the tallest skyscraper in New York, the Woolworth, rose to a height of sixty storeys, the skyscraper *Skne* would have reached eighty-seven floors with a total height of 307 meters thanks to the twenty floors'-podium supported by four twenty-five-storey towers. Perforated from inside by a tubular courtyard sectioned for the mechanical ventilation in the different seasons, the tower was suspended in the air above the city's streets. This ironic homage to the air architecture and to the principle of maximizing the use of the land in the zone

1 P. Portaluppi, M. Semenza, *Milano com'è ora e come sarà* cit., pp.20 - 22.

with the highest real estate cost - basic principle of the vertical city - is intertwined with an irony related to the race of American architecture's skyscrapers looking for new records. The defeated rivals were represented in the perspective realized by Portaluppi: the aforementioned Woolworth (1910), 241 meters high, is located on the left, the Metropolitan Life Insurance Tower (1907), 213 meters high, and the Flatiron Building (1902), 87 meters high, are represented in the lower right. The *Skne* tower is surrounded by clouds as imitation of the faked images of the Woolworth skyscraper found in postcards of the time. A monument to the immeasurable human ambition and the frenzied hunt for material wealth, the skyscraper *Skne* despite its 758,000 cubic meters, is based on an empty core. As with *Allabanuel*, the humorous and at the same time critical intentions of Portaluppi are indicated in the title of the project, *Skne* as *skyscrapers* as well as *scappane*.



Skne, 1920.

The architect's logo appears posted on a small hotel called "The reburning" and smoke's clouds are spreading along the bottom right of the image representing the American ideology of incessant work followed by exhaustion. A floral ornament, protruding from the facade of a building along the left border, is the only trace of nature in an artificial world. The final message of *Skne* it is in harmony with the point of view expressed by Piacentini during the Chicago Tribune's competition : "it can only hurt us a distant view of a skyscraper on the sky next to the Milan Cathedral's Tiburio or next to the Cathedral of Michelangelo"². The conclusion then becomes the same: "no skyscrapers, therefore, in Italy: neither the economic reasons suggest them, nor the aesthetic ones allow them."

The themes of the modern metropolis are then dealt with an utopian, visionary point of view: with an ironic style he expressed his position, contrary to repetition, to spatial dispersion and to the lack of identity that emerge from many contemporary avant-garde proposals. The projects bring into question some fundamental ideas of the modern metropolis: repetition and serial multiplication, the height development and the abuse of technology. In this sense it is possible to approach Portaluppi's sensitivity to the one of Berlage, Wagner and Sitte's generation which, although in its renewal, proposed a continuity with the historical city, interpreting their permanence rather than starting from a clean slate. An attention to the *forma urbis* and a vision of the urban future of the city of Milan are finally present in the plan for the city: in transformation towards metropolis, subject to the new international influences, and final chapter of this reflection on the role of Portaluppi in the real and imaginary construction of Milan.

2

Marcello Piacentini, *In tema di grattacieli*, in *Architettura e Arti Decorative*, 8th April 1923, p. 317.

07 Milan - Paris Metropolis

Rereading the post-haussmannian urban planning

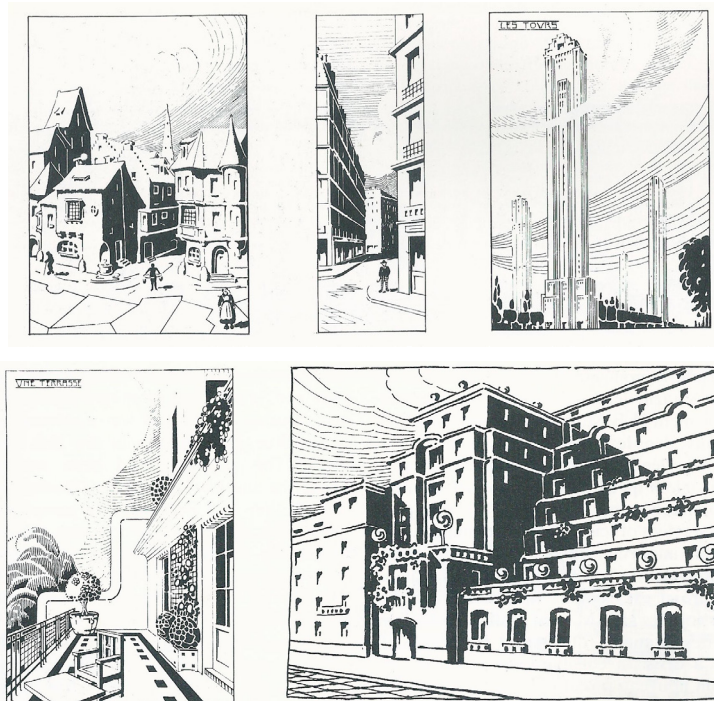
“Ciò per Amor”: a project for Milan

“L’habitude des grandes vitesses a modifié l’échelle des nos édifices: la rapidité avec laquelle nous nous déplaçons devant eux ne nous permet pas l’étude des détails auxquels un observateur du Moyen Age pouvait s’attarder avec joie [...] l’ornementation extérieure devient donc inutile pour des raisons de vitesse et d’économie. Les grandes lignes comptent seules, le détail importe peu.”¹

As it has been firstly presented by Sauvage in 1909 with the drawing “*Maison de rapport - Maison ouvrières*”, the set-back buildings seem to be proposed as an urban transposition of the garden - city, with terraces and greenery in every windows. The formal experimentation witnessed by the sketches Sauvage did, shows in any case an attempt to interpret and find the best solution to fit in the existing Parisian context. After the experiences of Rue Vavin and Rue des Amiraux, Sauvage went on with his research, drawing, probably for an annual *Salon* or for a publication, a five pictures series demonstrating the advantages of the set-back system. In this series he compared the Medieval street, picturesque but unhealthy, the Haussamanian road, represented as a vertical monotonous corridor, the towers, that rising on gardens break the scale of the traditional city, and the set-back building, whose insolation, lighting and greenery are well integrated in the urban existing scale. In the last drawing, called “*Une terrasse*”, Sauvage insisted instead on the human dimension and the individual comfort guaranteed by the set-back buildings, the smaller scale and the detail are an answer to the terraces proposed in the same period by Le Corbusier for the *immeuble-villas*.

Sauvage’s drawings repertoire demonstrates his engagement in proving the superiority of his patented system concerning both the ventilation and the lighting and, at the same time, in convincing both the specialistic and the general public.

1 Sauvage, *Les tendances de l’Architecture Moderne* cit., p. 334.



Sketches demonstrating the advantages of the set-back system.

Despite his attempts, if on one hand the set-back system permits a visual and formal spectacularization of the building creating a monumental presence in the city, on the other hand it doesn't subvert the traditional urban schemes. The system doesn't oppose the 1902 street regulation and his global vocation, clearly expressed in the utopian projects, asserts a monumental and coherent language difficult to achieve in the practical application of it. Firstly the system doesn't satisfy the productive logic of the HBM operations in Paris and secondly it has been applied in the smaller parcel scale and not in the block one as forethought. Certainly Sauvage's ambition was to integrate the system in the municipal urbanist operation concerning both the reconstruction and the extension of the city, but the patent together with the absence of the two owners - Sauvage and Sarazin - in the official committees compromised its diffusion.

With the set-back building system Sauvage realized a synthesis between his activity in the dwellings world and in the speculative architecture, designing everything taking in consideration all the strict city norms a young architect had to think about connected to sanitary, corporative, constructive and financial interests. The renewal of the concept of monumentality that Perret looked for in the use of reinforced concrete, it has been searched by Sauvage in a program linked to the form of the building, investigated with a rich iconography that erect it to the status

of allegory².

*“C’est la masse la silhouette simple et facilement compréhensible qui produira l’émotion et fera la beauté. La Maison n’apparaît plus que comme un élément très petit, dans la rue qui s’élargit, s’allonge et se redresse, et la rue n’est elle-même qu’un détail dans l’organisme d’une cité...”*³.

Also Portaluppi has been continuously interested in the urban development of the city of Milan through ideas and projects that allow us to understand what were his ideas of the modern city and how to organize it. In his experience we can find out at least two parallel views of urban design⁴: at first the drawing of an ideal city, symbolic and foreshadowing the city as it should be, and secondly a continuous negotiation between numerous and diverse interests (local and global, political and disciplinary, economic and symbolic) with the creation of a strong consensus that can allow to withstand the transformations.

In 1927 Portaluppi together with the engineer Marco Semenza⁵ participated and won, with the project “*ciò per amor*”, the competition for the new Milanese Masterplan.

The main issue raised by the project was the adaptation between persistent forms and new influences, among a population that grows and moves and an inert urban form. A game of “contrast between matter and destiny” - the matter is the city and the destiny the change that overwhelms - because of the “grown empires of the property and the luxury, of the hygiene and the comfort”⁶. The dilatation of the space is defined by Portaluppi a tyranny of modernity that runs parallel with the contraction of the time. The city becomes a theatre of the movement, the image of masses that move frantically on the new transport’s system and that leads to the “anti-romantic and anti-traditionalist”⁷ transformation from porous city to block city, because more functional to mobility and to the new economy.

The architect’s role in the debate about modernity becomes to reposition the economic and symbolic values⁸, the composition of the space is so interpreted by Portaluppi with a late XIX Century taste of arrangement of the whole new bourgeoisie’s values. Thinking the city as a

2 Jean-Baptiste Minnaert, *Henri Sauvage*, Edition Norma, Paris, 2002, p. 221.

3 Sauvage, *Les tendances de l’Architecture Moderne* cit., p. 334.

4 Cristina Bianchetti, *Portaluppi e Milano*, in *Portaluppi, Linea errante nell’architettura del Novecento* cit., p. 251.

5 The contribution of Semenza seems to be mainly related to the technical aspects of transport planning, as he himself seems to acknowledge in a letter to the municipal administration in 1945.

6 Portaluppi, Semenza, *op. cit.*

7 *Ibid.*

8 Bianchetti, *op. cit.*, p. 255.

theatre scene it is then reflected in the allocation of a virtuous character in the architectures that give prestige demonstrating a civic responsibility in a time when everything was changing.

The project presented by Portaluppi and Semenza for the Milanese competition is a scenario for the future of a city of two million inhabitants, adequately equipped and infrastructured with a monumental centre, a business district and redesigned exterior neighbourhood as small icons of the industrial city or as small wealthy garden cities surrounded by greenery. A simplified conception of space and modernization makes the plan almost an utopia, an image with the aim to influence and persuade through its ambitions an audience that is not only technical, capturing and expressing the new dimensions of social life. With his plan Portaluppi on one hand reduced the modernity to the notion of movement and mass and on the other kept an almost amused ability to build an audience, attitude undeniably modern.

The plan provides for the presence of 10 subway lines (today the fifth is still under construction), for the extension of the tramway tracks and for motorway services to handle small amounts of people at relatively big distances. The buildings' average height was raised to 28 meters (the current one was 15 meters and the maximum height was limited to 40 m) and new equipment as three city cemeteries, an airfield, two markets, a courthouse, new hospitals, an opera house, a modern art gallery and the *idroscolo* were designed. Moreover two new parks were thought to be built between Crescenzago and Lambrate and between Vigentina and St. Cristoforo and the area designated to parkways, gardens belts with tree-lined street, was raised from 0.83 square kilometers to 23.3 square km.

Successive executive committees changed and tried to implement part of the transformation introduced by the plan, but it doesn't want to be my task here to study their developments.

The interest of this plan lies in the imaginary of the modern city: the central role of transports for a new moving middle class in search of global opportunity and local hygiene and decorum, witnessed both by the growing importance of infrastructure and green spaces and by the new research for urban - monumental - architectures.

08 Conclusion

Giving more - a swimming pool and a triumphal arch

Portaluppi and Sauvage have been without doubt important protagonists in the architectural debate of the early XX Century in Milan and Paris. The study of their work has been in this thesis an opportunity to talk about their cities, their “modern” construction and the imaginary lying behind them.

The architectural expression of Portaluppi and Sauvage came out from a reinterpretation of some already existing forms, without trying to create an inedited and extra-ordinary appearance in the city.

The problematics behind their works surpass the merely architectural debate: their discourse is about the city and the changes it was experiencing.

“The ways in which history is used by Muzio and by contemporaries such as Giò Ponti (1891 - 1967), Emilio Lancia (1890 - 1973) and Piero Portaluppi (1888 - 1967) are complex and strange. They do not adopt historical forms as symbols or signs in order to achieve a kind of authority through association, their work is not pompous and does not stand aloof from its social or physical situation [...] it responds precisely to the change from an aristocratic population inhabiting its villas and palazzi to a city of homes for the modern bourgeois Milanese. This architecture [...] was emphatically modern and concerned with the here and now. Its view of history, of Roman architecture, was instrumental; it asked how the universal and necessary elements of this architecture could underlie a contemporary architecture built for the modern state and for modern commercial clients”¹.

Despite the location and the ambition of Portaluppi’s projects, such as the Palazzo della Società Buonarroti - Carpaccio - Giotto, suggested a big palazzo, Portaluppi designed a house, a *condominio*, new expression of collective dwellings. In doing so, Portaluppi showed how this new typology, necessary for the development of the modern industrial city, could be reconciled with the history and the monumental scale of Milan. His work development lead from “monumental” dwellings to “ordinary” *condomini*, whose dignity is given exactly by being the result of the

¹ Adam Caruso, *Constructing the Historic Present*, in *Asnago Vender and the Construction of Modern Milan*, gta Verlag, Zurich, 2015, p.177.

search for a language talking about universality and everybody's common history.

At the same time Sauvage was trying to raise working class social housing to a level of decorum. Sauvage was trying to answer to the collective housing problem in a period of rethinking the haussmannian limitation, while other socio-economical problems were rising. The experimentation in the field of set-back type and hygienic issues was, once again, strictly connected to his time and to the newly developed technologies. The scenario for his visions, Paris, became the canvas of experimentation where he searched for a language to express the "common", the architecture for everyone from the bourgeoisie in Rue Vavin to the working class in Rue des Amiraux.

The urgencies today are different, our current and fundamental desires are to build without waste, "to embrace a veritable equilibrium between living, working and the world"².

These new ambitions call for new answers and we can learn from Modernity how to adopt and to adapt our history.

Both Portaluppi and Sauvage have not been acclaimed by the modern history's critics, but sometimes eluding the classical labels just means having proposed different solutions than the expected ones.

It has been my aim here to show their actual importance in the construction of the city and their contemporaneity. What I saw in their work is a hidden ambition to give more, a swimming-pool for the new lifestyle and a triumphal arch for an awareness of ourselves. A plus that, even if it doesn't represent a necessity, it is actually what we were looking for: hidden agenda in the main one of the human architectural programs, the dwellings.

The modern city, subjected to extreme temporal and economic pressure, became our contemporary scenario with our new ambitions and challenges. The complexity together with the realism of their work can lay the basis of the rethinking of the modern city, adopting a method, whose validity has been confirmed by the history, and pushing some solutions in order to satisfy our contemporary needs.

2 Form, *Roman Architecture*, Enac-Epfl, Lausanne, 2014.

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I would like to thank my *groupe de suivi*, for their precious advices and inspiration.

Beatrice Lampariello for her patience, meticulous readings and source of motivation and Andrea Zanderigo for his valuable points of views and suggestions.

Chris for the Roman solidarity,

Thomas for his lovely support, interest and help,

My parents and Raffa for their trust and infinite encouragement.

*Il y a des jours où l'on a l'impression
d'être une pierre.
On fait un effort, on devient un arbre.
Un effort encore: on pourrait être un
homme.*

Henri Sauvage

