Educational guide



Staircase leading to the roof garden. Photo Olivier Martin-Gambier

Le Corbusier's Studio-Apartment

Le Corbusier's studio-apartment occupies the last two floors of the Molitor apartment block, located at 24, rue Nungesser et Coli. Designed between 1931 and 1934 by Le Corbusier and Pierre Jeanneret, his cousin and associate, the building called "24 N.C." is situated in the 16th arrondissement at the border between Paris and Boulogne. Due to its East-west orientation and its exceptional surroundings, it fits what Le Corbusier termed "the conditions of the radiant city". As a project for a rental building, it offered the architect the opportunity to test the validity of his urban proposals. Given that no structures were placed opposite, he could raise facades entirely filled with windows, thereby constructing the first residential apartment made of glass in architectural history. Bathed in light, Le Corbusier's personal apartment spans the length of the last floor and, furthermore, houses his painting studio. The architect would inhabit this apartment-terrace from 1934 until his death in 1965. The apartment was classified as a Historical Monument in 1972, and the facades facing the streets, the courtyard, the roof, and the entrance hall were also inscribed as such in 1990.



The architect and property developer

THEMES

- The role of the architect (to build and to manage the space)
- ➤ The architectural commission, the patron
- > The architect, his patron
- A communal residence

BEFORE THE VISIT

- Le Corbusier
- The Bauhaus, Walter Gropius
- The Modern Movement:
 - Alvar Aalto
 - Mallet-Stevens
 - Mies van der Rohe
 - Piet Mondrian
 - Théo Van Doesburg
- Docomomo France (documents on the architecture of the Modern Movement)

AFTER THE VISIT

- Modern housing
- Architecture inscribed or classified as a Historical Monument
- The communal apartment block

HISTORICAL PERIODS

The 20th century and our age

ART HISTORY

Spatial arts

Daily arts

Visual arts

NOTE: Le Corbusier is cited as an example in the reference list for the communal habitat (Cité radieuse/radiant city) and for sacred architecture (the chapel at Ronchamp)

The architect:



Portrait of Le Corbusier

Born Charles-Edouard Jeanneret, **Le Corbusier** (1887-1965), left his birthplace, La Chaux-de-Fonds in Switzerland, in 1917 and settled definitively in Paris. His teacher, Charles L'Eplattenier, played a critical role in his creative education. Le Corbusier explained: "One of my teachers (a very remarkable man) gently dissuaded me from the choice of a mediocre career. He wanted to turn me into an architect. I loathed architecture and architects... As I was only sixteen, I accepted his verdict and obeyed his edict: I took up architecture." ¹

Between 1907 and 1911, Le Corbusier made a certain number of tours in Italy, Germany, and the Orient to study art and architecture.

As an architect, urban planner, painter, and writer, he conducted various studies on artistic creation and

the modern habitat. In 1923, he published *Towards an Architecture*, which remains today one of the iconic references of Modern Movement*.

By 1931, Le Corbusier enjoyed a certain notoriety, having already constructed a number of buildings in Paris and its provinces: the Cité Frugès in Pessac, the Esprit Nouveau pavilion, the Salvation Army Cité de Refuge, and Swiss pavilion in Paris; the Villa Savoye in Poissy...

The property developers:

In 1931, the Société Immobilière de Paris Parc des Princes (the Parc des Princes Real-Estate Society of Paris), represented by Marc Kouznetzoff and Guy Noble, had recently acquired a plot of land in the West of Paris, just next to Boulogne. The terrain was part of a new neighborhood under development at the time. In June of that year, Le Corbusier and his cousin, Pierre Jeanneret, received a commission to construct an apartment building on this parcel of land. Given that they were unable to gather the entirety of the funds necessary for the project, the property developers teamed with the architects to find "within a fortnight... guaranteed purchasers for at least two and half floors". ² of the future building. Le Corbusier immediately looked to his circle of relations for potential buyers. Moreover, he intended to prove to the developers that the avant-garde nature of the project could draw an interest superior to that the neighboring, more traditional buildings.

The commission and construction site

THEMES

- > The building and its terrain
- Construction procedures
- Principles of the "Radiant City"

BEFORE THE VISIT

- The architectural project
- The construction
- The structure
- The Radiant City

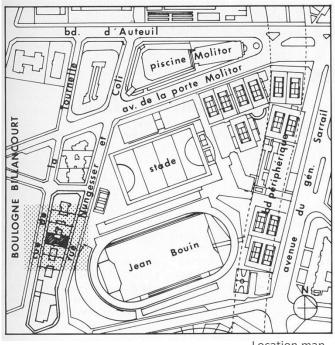
AFTER THE VISIT

- Architectural art
- The site today, the site in 1931
- Urbanism

The Radiant City

From 1931 to 1933. Corbusier drafted The Radiant City. In the text, basic summarized its principles as follows: "The basic materials of city planning are: sun, sky, trees, steel, cement - in that strict order of importance." ³ The residents of such a city benefit from what he therein termed "the essential joys" of modern living. The apartment block at 24 N.C. was constructed according to these principles exemplifies the application of this doctrine on an urban scale.

Location:

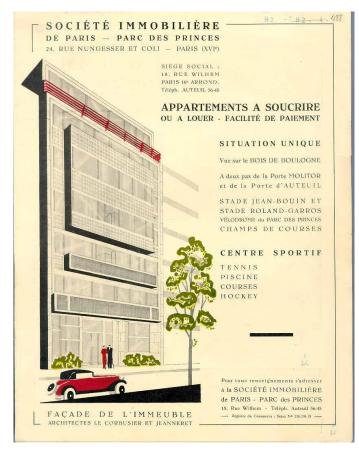


Location map

The apartment block at 24, rue Nungesser et Coli is located at the periphery of Paris, between the 16th arrondissement and the commune of Boulogne. The terrain allotted to its construction follows an East-west orientation, allowing for an ideal exposure to the sun. Le Corbusier went so far as to name it "one of the finest sites in Paris," ⁴ since no building faces or obstructs it and, at the upper levels, it offers a unique view of the woods of Boulogne. On the side facing Paris, the apartment looks onto the Jean Bouin stadium, the lease of which registered with the State for a duration of ninety-nine years. It's likely that Le Corbusier accepted to build this edifice precisely because the site possessed so many of the qualities he deemed key to the "Radiant City".

The project:

The Société Immobilière de Paris Parc des Princes solicited from Le Corbusier and Pierre Jeanneret a building plan that would house roughly fifteen apartments to be sold or rented. Following this program*, the architects designed a structure comprising two or three apartments per level. The final plan read as follows: three housing units on each of the first two floors as well as the fourth and fifth, and two on the third and sixth floors. Le Corbusier negotiated with the property developers so as to obtain the last two levels of the building and use them for his own apartment. Having secured the seventh and eighth floors, the architect set himself to the construction, at his own expense, of these two levels and the roof of the building.



Promotional brochure of the Société Immobilière de Paris

As the promotional brochure of the Société Immobilière de Paris Parc des Princes emphasizes, several sport complexes would surround the future Molitor building: the Jean Bouin and Rolland Garros stadiums, the Parc des Princes velodrome, tennis courts, a pool... This athletic environment, in close proximity to the building, would ultimately determine its clientele. In fact, tennis was in fashion in the 1930s, and the strong presence of sports and leisure constituted a real asset that could convince potential buyers. For Le Corbusier, this context echoed his theory of the "Radiant City", formalized in 1931.

The architect's firm, located at 35, rue de Sèvres in the 7th arrondissement of Paris, drafted the floor plans for the edifice between July and October of 1931. Each apartment of the building has a unique and flexible spatial distribution. By putting into practice the "open plan"* and diffusing the partitions between different spaces, Le Corbusier enabled each resident to arrange his/her apartment as he/she pleased. The partitions themselves constituted a focal point of discussion, first as the architects formulated such a principle, then as they adapted it to the needs of each resident as construction progressed. The promotional brochure of the Société Immobilière de Paris Parc des Princes even mentioned that "the size of the apartment and the number of room scan be adapted according to the needs of the buyer." ⁵ An

indisputable virtue, the capacity to adapt architecture to the residents' demands represented a truly innovative proposition.

The leaflet of the Société Immobilière de Paris Parc des Princes also detailed the technical aspects of the building: "first-class construction materials, sound-proofing, central heating, running hot water, fitted bathrooms, lifts, laundries, drying rooms, and garages with private parking spaces."

Construction, trial, and ulterior work:

The construction of the apartment block at 24 N.C. began in February of 1932 after Le Corbusier obtained the building permit from the city of Paris and Boulogne. It met with several delays, since some apartments still had not yet been bought and two of the principal clients suffered serious financial difficulties. Le Corbusier struggled to restart the construction in October of 1933, particularly given that his own residence depended upon its completion. Though construction was completed in the beginning of 1934, the architect's trials had only just begun. In 1935, the Société Immobilière Paris Parc des Princes went bankrupt, and the bank that had funded the project subsequently retracted its investment. To do so, it planned to sell the building as a whole. Le Corbusier was obliged to vacate his residence, since his own apartment was contested in the debate. He then entered into a trial that would last ten years, waiting until 1949 for his status as coproprietor to be officially recognized. In the meantime, the building's upkeep was neglected despite the architect's numerous efforts. It was only at the beginning of the year 1950 that renovation work commenced. At this time, the damaged glass curtains were replaced and the facade renewed. Rust, too, would remain a recurrent problem in the following years.

The apartment block at 24 N.C.

THEMES

 A reading of the facade (balance/imbalance – empty/filled)

BEFORE THE VISIT

- How a building secures itself in the ground: the foundations
- Five Points towards a New Architecture

AFTER THE VISIT

- The pilotis
- Buildings by Le Corbusier with glass facades:
 - Villa Schwob, 1916, (La Chaux-de-Fonds, Switzerland)
 - Centrosoyus, 1928, (Moscow)
 - Salvation Army Cité de Refuge, 1929, original state (Paris, 13th arrondissement)
 - Clarté Building, 1930,
 Genève
 - Swiss pavilion, 1930
 Cité internationale universitaire, (Paris, 14th arrondissement)
- Light, hygiene
- The Museum of the Thirties and the course of the 1930s: www.boulognebillancourt.com

The facades, or glass architecture:

The two facades* overlooking the street are made completely of glass. Le Corbusier employed this construction material in three different forms at 24 N.C.: reinforced glass, glass bricks, and clear glass. "This building serves as a witness. In order to put to effective use advantages offered exceptional site, the facades composed of two glass walls which join on to concrete decks. Hence in each apartment there is one full-length glazed wall, which runs from the ceiling right down to the floor". 6 Such a facade system permits a great deal of evenly diffused light to enter into apartments. Le Corbusier, however, was not the first to put into form the idea of a glass architecture; previous architects such as Mies van der Rohe had explored



Facade on rue Nungesser et Coli. Photo Olivier Martin-Gambier

the idea in projects for exhibition pavilions, industrial buildings, and office buildings. Le Corbusier's originality lies in his use of the material for a residential building. The same year, 1931, the architect Pierre Chareau completed the Glass House on rue Saint Guillaume in Paris's 7th arrondissement, the glass of which also came from the Saint-Gobain society.

The principal facade, looking onto the rue Nungesser et Coli, consists of a glass wall to wich are attached several projecting elements. To start with, the second and sixth floors have a balcony. At the third and fourth floors, a bow window extends the apartments to the exterior and serves additionally as a balcony for the fifth floor. Finally, the seventh floor, filled with windows, comprises Le Corbusier's painting studio, and we perceive at the eighth and final floor one of the two vaults, the guest room and, beyond that, the roof garden.

The long, horizontal window:

An architectural tool integral to Le Corbusier's purist villas in the 1920s, the long, horizontal window entered at this moment into a project for a residential building. The glass walls are parallel on the facade and bow window. The bow window itself is composed of five horizontal bands that alternate glass bricks, set in the space beneath the windows, with clear glass for the openings. The originality of this disposition consists in the illusion that each level carries a supportive wall beneath the bands of windows. Actually, these sections are mere balcony motifs that create this impression simply by hiding the window frames behind them. In addition, the architect's choice of sliding window frames allowed him to gain a considerable amount of space inside the apartments.

The pilotis and entrance hall:

The visitor accesses the Molitor apartment block by the rue Nungesser et Coli, whereas the entrance on the rue des Tournelles (Boulogne) lets onto the garages and "servants' quarters". After crossing the threshold, he/she steps into the entrance hall, a form that, narrow at first, opens out as the wall curves to the right. The ceiling reaches a height of 3.50 meters. The guardian's lodge is situated on the left and, opposite, a studio



Principal facade on rue Nungesser et Coli.

apartment Le Corbusier called "the bachelor's pad". At the end of the entrance hall on the wall to the right, a mural of the "Poem of the Right Angle" was hung upon the architect's death. Finally, the visitor gains access to the six floors of the building by means of an elevator, and one last staircase climbs to Le Corbusier's studio-apartment.

The open plan:

The implementation of the open plan granted Le Corbusier the flexibility to set a variable quantity of rooms on each floor and arrange them in any chosen sequence. He first developed the concept of the open plan in 1914 in the Dom-Ino House (see column at left). The load-bearing walls that had conventionally determined the spatial distribution on each level were at this moment replaced by a flexible reinforced concrete* system. It was this construction process that made possible the open plan: "Floors are no longer stacked on top of one another by compartmentalization." ⁷ The architect could henceforth divide the space by arranging the walls and rooms in function of the needs of the residents. On this topic, Le Corbusier wrote: "Each floor is constructed to suit its inhabitant, with open floor space, an open facade and five columns running from one facade to another." ⁸

"Five Points towards a New Architecture"

Le Corbusier gradually elaborated a new architectural language, the "Five Points towards a New Architecture." He applied them for the first time in 1923 at the La Roche House and later formalized them in 1927. His research formally culminated in the construction of the Villa Savoye in 1928. We also find the Five Points in the apartment block at 24 N.C. The pilotis,* first of all, allow the architect to implement the open plan: "Reinforced concrete has given us pilotis. The house is in the air, far above the ground." ⁹

<u>Next, the long, horizontal window</u> enters without interruption into the facade, an envelope that no longer bears weight. "The window is one of the essential elements of the house. Progress brings liberation. Concrete is revolutionizing the history of the window." ¹⁰

<u>Thirdly, the roof garden</u> redefines the traditional roof as a suspended garden at the top of the house.

<u>The open plan</u>, for its part, liberates the interior organization and renders the spatial distribution on each floor entirely independent.

<u>Finally, the open facade</u> becomes an envelope, independent of the structure. "The windows can run uninterrupted from one end of the facade to the other." ¹¹

The Dom-ino System

Since 1914, Le Corbusier had elaborated a new industrial construction process based on modular elements.

Its title, the Dom-ino system, references the contraction of the Latin term, domus (house), and the word innovation. Composed of three walls, six posts, and a staircase, each module can be combined with others so as to construct houses or even monumental edifices.



Structure of Dom-ino House

The roof garden:

Le Corbusier had already employed the roof garden in some of his previous projects (the La Roche and Jeanneret Houses in 1923, the Villa Savoye in 1928...). As early as 1915, the architect sought a new type of roof to replace the traditional inclined model. The techniques introduced by reinforced concrete permitted "the construction of roof terraces* equipped with internal water drainage systems." ¹² Redefining the traditional notion of the roof, he claimed that "the space on the roof is that the



Kiosk on the roof garden

most distant from the noise of the street, fully exposed to the light of the sun and to the air the most pure." ¹³ From this moment on, the suspended roof garden constituted a veritable space of relaxation.

The servants' apartments:

Throughout the 19th century, it was custom to situate the "maids' chambers" directly under the roof. Normally accessible by a service stair, they were occupied by servants hired by the residents of the building. Because these cramped spaces caused so many hygienic problems, Le Corbusier undertook to reconsider their placement in the house. As part of his research on the modern habitat, he put an end to the traditional layout in his plan for the Molitor building. "The rooms for domestic staff are located on the ground floor, so that they do not have to suffer the often terrible conditions of the attics. In addition, the roofing has been reserved, as should always be the case, for the best apartment in the building, in the midst of slates, flowers, grass areas and shrubs." ¹⁴ On one hand, the service activities were henceforth concentrated on the ground floor (the laundry room, dryers, the guardian's lodge and servants' apartments) and, on the other, the last level of the building was designated to house the roof garden, one of the "Five Points towards a New Architecture."

"The architectural promenade"

The idea of the "architectural promenade" first crystallized in 1923 in the La Roche House, though the term did not appear until 1929 in the first volume of Œuvre complète. The interior circulation became a preoccupation Le Corbusier would pursue throughout the rest of his career: "Everything, especially in architecture, is a question of circulation" ¹⁵.

"Arabic architecture teaches us a valuable lesson. It is best appreciated on foot: it is by walking, by moving that one discerns the underlying architectural arrangement. This principle is exactly the opposite of baroque architecture" ¹⁶

Le Corbusier defined the principle of the "architectural promenade" by three essential elements: first, the use of various architectural means to build an entrance that would spark the visitor's curiosity and invite him to follow the determined path; secondly, the creation of multiple, successive points of view; and finally, the unfailing protection of the relation between the diverse components and the architectural whole.

Plan of Le Corbusier's studio-apartment

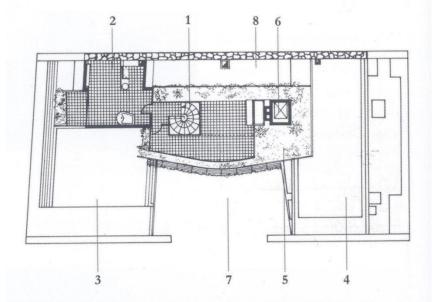
THEMES

A reading of the plan

BEFORE THE VISIT

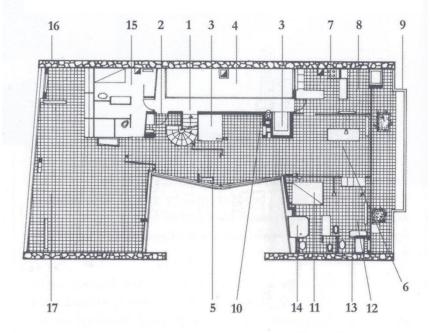
Distribution of the various rooms

8th floor apartment/studio Roof garden



- 1) Interior staircase | 2) Guest room | 3) Extrados of the studio arch
- 14) Extrados of the arch for the dining room, bedroom, kitchen area
- 15) Garden 16) Service lift 17-8) Interior courtyards.

7th floor apartment/studio



1) Main staircase of the building | 2) Entrance | 3) Lift - service lift | 4) Covered exterior footbridge | 5) Passage | 6) Living room | 7) Kitchen | 8) Pantry | 9) Balcony - loggia | 10) Fireplace | 11) Bedroom | 12) Dressing room/boudoir | 13) Bathroom | 14) Shower room | 15) Bedroom domestic | 16) Study | 17) Studio.

The interior

THEMES

- Notions of space and line
- Polychromy

BEFORE THE VISIT

- The distribution of light
- The industrial era and modern construction techniques (reinforced concrete, glass, the architectural framework, metal furnishings, etc.)

AFTER THE VISIT

 Light, color, circulation (stairs, ramp) Upon his arrival in Paris in 1917, Le Corbusier settled at 20, rue Jacob in the Saint-Germain-des-Prés district. After having first lived in an old "maid's chamber" in the attic, he moved some floors further down in the building to rent an apartment. Le Corbusier lived with his wife, Yvonne, at this address for nearly 17 years.

In 1931, as the project for the Molitor apartment block was under way, Le Corbusier decided to purchase the 7th and 8th floors of the building. He moved to rue Nungesser et Coli in 1934. For roughly a quarter of a century, he resided there with his wife until their respective deaths. From 1934 and on, the everyday life of the architect was split between his office on rue de Sèvres, directly accessible by the metro, and his residence and studio, merged in one and the same space.

To enter the studio-apartment, the visitor takes a service stair from the 6th floor, the last floor accessible by the elevator. Its dimensions are roughly 240 m², divided among two levels linked by an interior staircase. The large, pivoting wooden doors permit to open and close the various spaces of the apartment. When Le Corbusier received guests, then, he could direct his visitors either toward the painting studio or the reception spaces simply by closing one of the doors.



Corner with chimney / Living room. Photo Olivier Martin-Gambier

Familial spaces:

The visitor enters into the apartment through a large door that pivots on the left. The living room, equipped with a chimney in the corner, extends into the dining room, itself adjacent to the kitchen and pantry on the left. On the right, he/she stumbles upon the common bedroom, hidden behind a door-cabinet.

These three rooms open onto a balcony that runs the length of the facade, from the pantry to the bedroom. The windows are mounted on a sliding frame, which helps to strengthen the impression of permeability between the inside and outside. The rooms are well lit and overlook the expanse of Boulogne. When the pivoting doors are open, the whole of the apartment is bathed in light from both ends. Only two fixed partitions separate the dining room from the kitchen and bedroom.

The furniture:

Le Corbusier confided the conception of the furniture to the interior designer, Charlotte Perriand, who worked in his and Pierre Jeanneret's studio at the time and designed many of the interior pieces.

The two furnishings she conceived for the kitchen serve simultaneously as work spaces and storage spaces for the dishes and linens. Perpendicular to the wall, they are arranged in two components: а low cabinet, posed on the floor, and an cupboard connected to the bottom by slender steel tubes. The resulting configuration functioned hatch serving between the kitchen and dining room. These cabinets are covered by sliding doors. The sink, as well as the work surface, are made of pewter.

The master bedroom houses multiple sanitary elements in a relatively minimal space: a washbasin, a small bath tub, and a bidet on the women's side, and a washbasin, shower and toilet on the men's side. By



Kitchen. Photo Olivier Martin-Gambier



Sanitary elements in the bedroom. Photo Olivier Martin-Gambier



Dining room. Photo Olivier Martin-Gambier

virtue of its abnormal height, the bed is another unique element in the master bedroom. It is lofted on tubular posts 83 cm in lenght so that, once Le Corbusier had lay down, he could fully enjoy the view stretching beyond the parapet of the terrace. The shower, the volume of wich extends laterally into the room, is surprisingly short in height. Finally, the architects incorporated a wardrobe into the pivoting door that opens into the bedroom.

Le Corbusier himself designed the table in the dining room. Topped by a rectangular slab of marble, it rests on two table legs shaped to resemble trumpets. Yvonne, his wife, recounted his source of inspiration: "Corbu's inspiration for the marble table, with its narrow draining channel cut around the edges, sprang from a mortuary table he saw in a dissection room" ¹⁷

The painting studio:

Three elements characterize the studio space:

- The large, white vault nearly 6 m wide, 12 m long and 3.50 m high;
- Two glass curtains (opening, to the East, onto the Jean Bouin stadium, and to the West, onto the courtyard)
- The large cinder block and brick wall

In reference to this last element, Le Corbusier wrote: "Stone can speak to us; it speaks to us through the wall. Its covering is rough yet smooth to the touch. This wall has become my lifelong companion." ¹⁸ The contrast between the cinder block wall and the glass facade is striking. The effect it procures cannot be simply described as stylistic; it seems Le Corbusier juxtaposed these two components so as to imply a correspondence between traditional construction techniques and the implementation of new, modern materials (i.e., the glass curtain). This means of passage from one to the other, both in medium and in history, characterized his study of a new architecture.

The studio space is divided into three sub-spaces: the first and largest was reserved for

painting, the second delimits the corner office used for telephone calls and writing, and the third held the servant's apartments and a storage space. The library stored classic titles, technical manuals, and Le Corbusier's own writings. He would write roughly forty works, texts and articles in all over the course of his career.



Le Corbusier in his studio on rue Nungesser et Coli (FLC)

Light:

As he planned his studio, Le Corbusier was confronted with a critical question: how to orchestrate the lighting? Traditionally, artists' studios were oriented toward the North in order to receive a constant light and thereby prevent that shadows be cast on the paintings. Restricted by studio's East-west the orientation, Le Corbusier chose clear glass and glass



Painting studio, rue Nungesser et Coli Photo O Martin-Gambier

bricks to diffuse the light evenly throughout the space. Later, he installed two wooden panels on the facade to better control the light filtering into the studio.

Le Corbusier: architect and artist

THEMES

- Purism*
- > The synthesis of the arts
- Acoustic sculptures
- The "muralnomad"

BEFORE THE VISIT

- Cubism
- The review, L'Esprit
 Nouveau (The New Spirit)
- Marie Cuttoli, patron

AFTER THE VISIT

- Objects with "poetic reaction"
- Courts of Justice's tapestries, Chandigarh
- Architect/Artist

Although Le Corbusier is mainly known for his extensive activity as an architect, he spent much of his time painting in his studio on rue Nungesser et Coli. "After everything is said and done, I am a painter, and fervently so, since I paint everyday. It's true that I began late in life, suddenly at the age of thirty-three... I would spend the morning painting and, in the afternoon, on the other side of Paris, devote my efforts to architecture and urbanism. Can we measure to what extent this patient and obstinate gardening, plowing, hoeing of forms and colors, rhythms and proportions, nourished the architecture and urban plans born each day at 35, rue de Sèvres? I think that if some value is to be accorded to my work as an architect, it is on this secret labor that the underlying quality depends." ¹⁹

Le Corbusier's visual work is immense, nearly protean; he produced a multitude of sculptures, enamels, engravings, tapestries, murals, and photographs. Through these diverse forms of expression, he pursued one and the same end: "No one is just a sculptor, or just a painter, or just an architect. Artistic creation is carried out in the service of poetry." ²⁰ Following his purist period in the 1920s and his collaboration with the painter Amédée Ozenfant, Le Corbusier introduced new themes into his painting: women, bulls, and icons, to name a few. At this time, the simple, geometric forms that populated his paintings grew more complex, the colors more raw, and the subjects renewed. In 1930, as a testimony to the dialogue he encouraged among architecture and the arts, he introduced the notion of the "synthesis of the arts" to his creative repertoire, just before joining the Association for the synthesis of the arts presided over by Henri Matisse. As early as the 1940s, Le Corbusier began the Ozon, Ubu and Taureaux (Bulls) series that signaled a new direction in his pictorial activity. He then abandoned the use of smooth forms, replacing them with a more complex vocabulary. Le Corbusier painted murals as well; in 1938, he decorated the Villa E-1027, built by Eileen Gray and Jean Badovici at Roquebrune-Cap-Martin between 1926 and 1929, with an entire program of frescoes. Out of eight, four of them have recently been restored. The year 1946, on the other hand, marks the beginning of a twenty-year-long collaboration with the Breton cabinetmaker and sculptor, Joseph Savina. Together, the two associates cosigned roughly forty sculptures. Made of diverse kinds of wood, these works realize Le Corbusier's sketches in three dimensions. In its relation to space, sculpture represented for him a field of experience similar to that of architecture, though much less constricted. From 1948 and on, Le Corbusier experimented upon yet another form of expression, tapestry (one work of which dates as early as 1936). He produced nearly thirty tapestries after sketches, some of which are of considerable size. The "muralnomad", as Le Corbusier termed it, then redressed the raw, concrete walls of his earlier career.



Le Corbusier, Still life, 1957. FLC 19



Le Corbusier, Bull XVI, 1958. FLC 168



Le Corbusier, Orange and blue bull, 1964, Enameled plaque. FLC 4

The architectural context

THEMES

- Architecture in the 19th century
- Architecture at the beginning of the 20th century

BEFORE THE VISIT

- Art nouveau
- Decorative art

AFTER THE VISIT

- The International style
- Others architects of the 1930s

In Paris, the 19th century lasted until World War I in the world of architecture; the building model fostered under the Second Empire survived, given some modifications. Stone-cut, often ornamental edifices endured until the coming of the Art Nouveau movement, which covered the facades in a vegetal decor.

At the beginning of the 1920s, everything changed. For one, Art Deco was on the rise. In comparison with the styles that preceded it, its buildings were more sober and geometric, their decoration restrained to precise points on the facade.

Art Deco architecture would become the predominant style of the 1920s.

In 1925, the Exhibition of Decorative Arts was held in Paris. For this event, Le Corbusier constructed the Esprit Nouveau (New Spirit) pavilion - the birthplace of the new style that would dominate the 1930s.

The key terms of "l'esprit nouveau" - in other words, the "new spirit" - are as follows: rationalism, functionalism (as associated with new construction techniques), reinforced concrete, large glass surfaces, and metal finishings, among others.

Le Corbusier's pavilion can be read as a precursor to the International style.

Among the artists that we find surrounding Le Corbusier in these years:

Fernand Léger, Amédée Ozenfant, Chaïm Jacob Lipchitz, Oscar Miestchaninoff, Juan Gris, Maurice Denis, Chano Orloff, Julio Gonzalez, Pablo Gargallo, the brothers Jean and Joël Martel, Henri Laurens, Ossip Zadkine, Piet Mondrian, etc.

A few key names of the architectural world in the 1930s (in chronological order):

- Frank Lloyd Wright (1867-1959)
- Henri Sauvage (1873-1932)
- Auguste Perret (1874-1954), source of inspiration for Le Corbusier in terms of his conception of architecture. Le Corbusier worked in his studio upon his arrival in Paris. Notably, the Perret brothers designed the plans for the first concrete apartment building on rue Franklin in the 16th arrondissement of Paris.
- Pierre Patout (1879-1965)
- Pierre Chareau (1883-1950), architect of the Glass House built between 1928 and 1931; rue Saint-Guillaume in the 7th arrondissement of Paris.
- Robert Mallet-Stevens (1886-1945), architect of a development project that took a step in an entirely new direction: the rue Mallet-Stevens (1926-1934) in the 16^{th} arrondissement of Paris (at the end of rue du Docteur Blanche).
- Mies van der Rohe (1886-1969)
- André Lurçat (1894-1970)
- Lucien Pollet, architect of the Molitor swimming pool, 1929.

Chronology

Biography

1887 October 6th, born **Charles-Edouard Jeanneret (Le Corbusier)** at La Chaux-de-Fonds in Switzerland; son of Georges Edouard Jeanneret, watch engraver and enameller, and of Marie Charlotte Amélie Jeanneret-Perret, musician.

1917 Settles in Paris.

1918 Meets Amédée Ozenfant and co-founds the Purist pictorial movement.

1919-1920 Creation of the avant-garde review, *L'Esprit Nouveau*. Adopts the pen name, Le Corbusier.

1922 Establishes an architectural firm with his cousin, Pierre Jeanneret, with whom he collaborates until the 1950s.

1923-1925 Construction of the La Roche-Jeanneret Houses. Publishes three books: Towards an Architecture, Urbanism, and Decorative Art Today.

1925 Construction of the Esprit Nouveau pavilion (Paris) and the Cité Frugès Modern Quarters (Pessac). Begins studies for the Plan Voisin in Paris

1926 Construction of the Villa Cook in Boulogne (Hauts-de-Seine), the Guiette House (Anvers, Belgium) and the Salvation Army Palais du peuple (Paris, 13th arrondissement).

1928 Foundation of the International Congress of Modern Architecture (CIAM) in La Sarraz, Switzerland. Construction of the Villa Church in Ville d'Avray, Hautsde-Seine, (destroyed).

1929 Construction of the Villa Savoye in Poissy (Yvelines).

1930 French naturalization; marriage to Yvonne Gallis. Construction of the Swiss pavillon (Cité internationale universitaire, Paris, 14th arrondissement).

1931 Construction of the studio-apartment on rue Nungesser et Coli (Paris, 16th arrondissement)

Architectural context

1900 Guimard: metro entrances (Paris).

Gaudi: Güel park (Barcelona).

1904 Tony Garnier: the International City (Lyon).

1910 Construction of the Champs-Elysées Theater by Auguste Perret (Paris)

1919 Gropius founds the Bauhaus in Weimar Mies van der Rohe: projects for a glass skyscraper 1920 Piet Mondrian: neo-plasticism Naum Gabo and Antoine Pevsner: constructivist manifesto in Moscow

1924 First chairs made of steel tubes (Marcel Breuer, Mart Stam, Mies van der Rohe).

1925 Under pressure from right-wing parties in Germany, the Bauhaus relocates from Weimar to Dassau in new buildings designed by Gropius.

1926 Mallet-Stevens builds an ensemble of houses (rue Mallet-Stevens) in Paris and in Saint-Jean-de-Luz le Casino. André Lurçat : Guggenbühl House, Paris.

1928 Hannes Meyer succeeds Gropius as Bauhaus director. Fernand Léger gives a lecture on Le Corbusier.

1930 Mies van der Rohe becomes the new director of the Bauhaus.

1931 Pierre Chareau constructs the Glass House

1932 The Bauhaus relocates from Dassau to Berlin.

Chronology

Biography

1933 Drafts the Athens Charter, which codifies modern ideas about zoning and green spaces and inspires many of the large ensembles of the "Thirty Glorious Years" between 1945 and 1975 in France. Construction of the Salvation Army Cité de Refuge (Paris, 13th arrondissement)

1935 Lecture tour around the United States

1937 Publication of When the Cathedrals Were White.

1938-1945 Activity as a painter, writer, and urban planner; few architectural commissions.

1945 Formalization of the Modulor system, which establishes ideal architectural dimensions based on human proportions.

1947 Lays the foundation stone at the Unité d'habitation (housing unit) in Marseille.

1951-1962 Numerous projects and constructions in India, in Ahmedabad (Gujarat) and particularly in Chandigarh (Penjab)

1951 Construction of the Notre-Dame-du-Haut chapel in Ronchamp (Haute-Saône).

1952 Construction of the Unité d'habitation in Rezé (Loire-Atlantique) and the Cabanon in Roquebrune-Cap-Martin (Maritime Alps).

1954 Publication of A Small House.

1957 Death of Yvonne Le Corbusier. Construction of the Sainte Marie de la Tourette Convent (near Lyon).

1962 Retrospective at the National Museum of Modern Art in Paris. Construction of the Unité d'habitation in Firminy.

1965 August 27th, death of Le Corbusier in Roquebrune-Cap-Martin (Maritime Alps) while swimming in the Mediterranean. Classification of the Villa Savoye as a historical monument.

1968 Creation of the Fondation Le Corbusier, recognized as a public-interest organization (Paris, 16th arrondissement).

Architectural context

1933 The Bauhaus is shut down by the police.

1942 Mies van der Rohe : first buildings at the Illinois Institute of Technology, Chicago.

1948 Frank Lloyd Wright: first circular house.

1952 Breuer, Nervi, Zehrfuss: UNESCO, Paris

1956 Brasilia plan by Lucio Costa.

1959 Inauguration of the Guggenheim Museum, New-York, designed by Frank Lloyd Wright. Dissolution of the International Congress of Modern Architecture at the 11th congress.

Architectural vocabulary

- Facade: the exterior face of a building, or an ensemble of faces that are seen globally at the exterior.
- Modern Movement: Also known as Modern Architecture, the International style, and Modernism, this movement initially appeared in the first half of the 20th century. Many European architects contributed to the development of the architectural current, proposing a new aesthetic in reaction to the ubiquitous influence of the academies. Their research culminated in the resurgence of a minimal decor and of pure, geometrical lines, as opposed to the style promoted by Art Nouveau or the decorative tradition. In addition, the evolution of industrial techniques enabled them to capitalize on new materials such as concrete and steel. One of the principal concerns posed by this movement was that of the communal modern habitat.
- **Open plan:** The elimination of load-bearing walls, thanks to the use of reinforced concrete, permits an interior spatial distribution in which each floor is independent of the others.
- **Pilotis:** a group of "pilasters" designed to support a building above the ground, opening up the circulatory space beneath the structure.
- **Polychromy:** the use of multiple colors in architecture or statuary.
- **Program:** The client (the patron) commissions a work from an architect and details the whole of his/her needs and expectations. The objectives of the client determine the program.
- Purism: pictorial movement the painters, Le Corbusier and Amédée Ozenfant (1886-1966), put into theory in a manifesto published in 1918. As a post-cubist movement, it sought a purified aesthetic that tended toward the representation of quotidian objects, valorizing simple forms.
- Reinforced concrete: a highly resistant material made from a pairing of cement and steel bars.
- Roof-terrace: a flat surface that replaces an inclined roof and give access to the exterior, sometimes equipped with a garden.

Notes

- 1. Le Corbusier, in Jean Petit, *Le Corbusier lui-même*, Geneva, Rousseau, 1970, p. 25-26, quoted in Jean Jenger, *Le Corbusier: Architect, Painter, Poet*, trans. Caroline Beamish, New-York, Harry N. Abrams, 1996, p. 14-15
- 2. Letter by Messrs. Kouznetoff and Noble to Le Corbusier, 29 June 1931, Arch. FLC, quoted in Jacques Sbriglio, *Apartment Block 24 N.C. and Le Corbusier's Home*, Sarah Parsons, Basel, Birkhaüser, 1996, p.72
- 3. Le Corbusier, The Radiant City, trans. P. Knight, E. Levieux, and D. Coltman, New-York, The Orion Press, 1967, p.86
- 4. Letter from Le Corbusier to Edmond Waner, Arch.FLC-H2-2(513), quoted in Sbriglio, op. cit., p.12
- 5. Société Immobilière de Paris/ Parc des Princes, promotional brochure for the apartment building at 24, quoted in Sbriglio, op. cit., p.26
- 6. Le Corbusier, Œuvre Complète, 1929-1934, vol. 2, 7th ed., trad. Sarah Parsons, quoted in Sbriglio, op. cit., p.15
- 7. Le Corbusier, L'Architecture vivante, première série, Paris, 1927, p.17, quoted in Sbriglio, Le Corbusier: The Villas La Roche-Jeanneret, trans. Sarah Parsons, Basel, Birkhauser, 1997, p. 120-121
- 8. Le Corbusier, Œuvre Complète, op. cit., p.146, quoted in Sbriglio, Apartment, op. cit., p.88
- 9. Le Corbusier, Œuvre Complète, 1910-1929, vol.1, p.128, quoted in Sbriglio, The Villas, op. cit., p.116
- 10. Le Corbusier, L'Architecture vivante, op. cit., quotation translated by Deborah Lenahan, p.19
- 11.; 12.; 13.: Ibid, quotations translated by Deborah Lenahan, p.16-25
- 14. Le Corbusier, Oeuvre Complète, vol.2, op. cit., p.146, quoted in Sbriglio, Apartment, op. cit., p.89
- 15. Le Corbusier, Une maison un palais, quotation trenslated by Deborah Lenahan, G. Grès, Paris, p.78
- 16. Le Corbusier, Oeuvre Complète, vol.2, op. cit., p.24, quoted in Sbriglio, The Villas, op. cit., p.110
- 17.; 18.: Yvonne Le Corbusier, in Jacques Sbriglio, Apartment, p.44 and p.52
- 19. Le Corbusier, "Unité", L'Architecture d'aujourd'hui, quotation translated by Deborah Lenahan, special issue, April 1948
- 20. Le Corbusier, quoted in Jean Petit, Le Corbusier Dessins, Geneva, Forces vives, 1968, p.75, quoted in Jenger, op. cit., p.43

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The Fondation Le Corbusier was created in 1968 in keeping with the wishes of the architect. It currently occupies the La Roche and Jeanneret Houses on the square du Docteur Blanche in Paris. Le Corbusier's sole legatee, it functions also as the proprietor of his studio-apartment, located on rue Nungesser et Coli in the 16th arrondissement of Paris, as well as of the « Small House » overlooking Lac Léman, built for his parents.

As early as 1949, Le Corbusier devoted a certain amount of his activity to the project to establish the Fondation, fearful that the ensemble of his archives and work would not be dispersed.

Recognized as a public-interest organization, the Fondation looks to conserve and diffuse Le Corbusier's work. It is therefore responsible for the majority of the architect's archives: drawings, studies, plans, writings, and photographs, all available for consultation in its library. It owns the rights to much of his visual artwork as well: paintings, drawings, preliminary tapestry sketches, paper collages, engravings, and sculptures. The public may view these works at the exhibitions organized in the La Roche House, as well as at events held in France and across the world. Annually, the Fondation hosts themed conferences and offers research scholarships to students.

Le Corbusier's apartment is open to the public every Saturday. A visit to this cultural heritage site may interest those involved in various domains such as art history, architecture, the visual arts, the sciences, and technology.

