

◎Le Corbusier (1887 - 1965)

Originally born in Switzerland Le Corbusier had become one of the greatest twentieth-century architects. Much of his work was in Paris where he moved his office. His creations are not limited to architecture, but also include painting, sculpture and furniture design, with a wide range of buildings from small houses to the proposal for the United Nations headquarters. Le Corbusier pursued his polemics in design ideas and concepts with rational and functional clarity delineated though his works which include paintings, architecture, urbanism and so forth. Consequently Le Corbusier's accumulated works as a whole attest to his compelling influence and profound contribution to the development of the twentieth century modern architecture and urbanism. He advocated the "Five Points of a New Architecture" (pilotis, roof gardens, open floor plans, horizontal windows, and free façade design), and he is considered one of the pioneers of modern architecture.

◎Main Building

After World War II, the French government returned the Matsukata collection, seized as enemy property, to the Japanese people. Le Corbusier's Main Building was completed in 1959 as the home for the new NMWA to house the Matsukata Collection and to commemorate the resumption of diplomatic and friendly relations between Japan and France. In December 2007, the Japanese government designated this historical structure as an Important Cultural Property (Architecture).

The 40th meeting of the UNESCO World Heritage Site Committee held in July 2016 decided to add "The Architectural Work of Le Corbusier, an Outstanding Contribution to the Modern Movement", including the NMWA Main Building, to the World Heritage Sites Register.

Number of Stories: 3 floors above ground, 1 basement floor
Building Structure: Reinforced concrete (RC) construction

Design By: Le Corbusier

Assisted and Supervised By:

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Ministry of Education (now the Ministry of Education, Culture, Sports, Science and Technology):
Operations Division, Education Facilities Section,
Department of Finance and Equipment

Ground Breaking: March 1958

Completion: March 1959



Keywords for Understanding the Architecture of Le Corbusier

■ Le Modulor

Le Corbusier created this architectural measurement and proportions system by combining the traditional golden section and various human body measurements. Hence Le Modulor became the rules with which Le Corbusier determined architectural dimensions. For example, he set the ideal height for roofs based on a person (183 cm tall European man) stretching their hand upwards (226 cm). Using this method, the Modulor, he set dimensions for buildings, rooms and even furniture.

■ The Museum of Unlimited Growth

Le Corbusier envisioned a "museum of unlimited growth" — a building that could be expanded with the addition of external exhibition rooms as museum's collection grew, like a snail shell that spirals out from the center. The principles behind the museum with unlimited expandability (in green text) and the particulars regarding how they have been applied to the National Museum of Western Art are described below.

1. Pilotis

The main building features a space supported by pilotis, or columns. See No. 12 on the map.

2. Central Halls

The Nineteenth Century Hall in the center of the main building serves as its the starting point. See Nos. 1, 2 and 3 on the map.

3. Quadrangular Spiral Spaces

Starting from the Nineteenth Century Hall, visitors can walk through the exhibition rooms following a route that spirals around the periphery of the square hall. See No. 5 on the map.

4. Mezzanines

From the exhibition room on the second floor, one can see a mezzanine and clerestory galleries spiraling outward. See No. 4 on the map.

5. Standardized Column Spacing and Height

Le Corbusier proposed 7 m and 4.5 m for column spacing and height respectively. Using the Modulor principle, the main building uses values of 6.35 m and 2.96 m.

6. Spaces with Open Sightlines

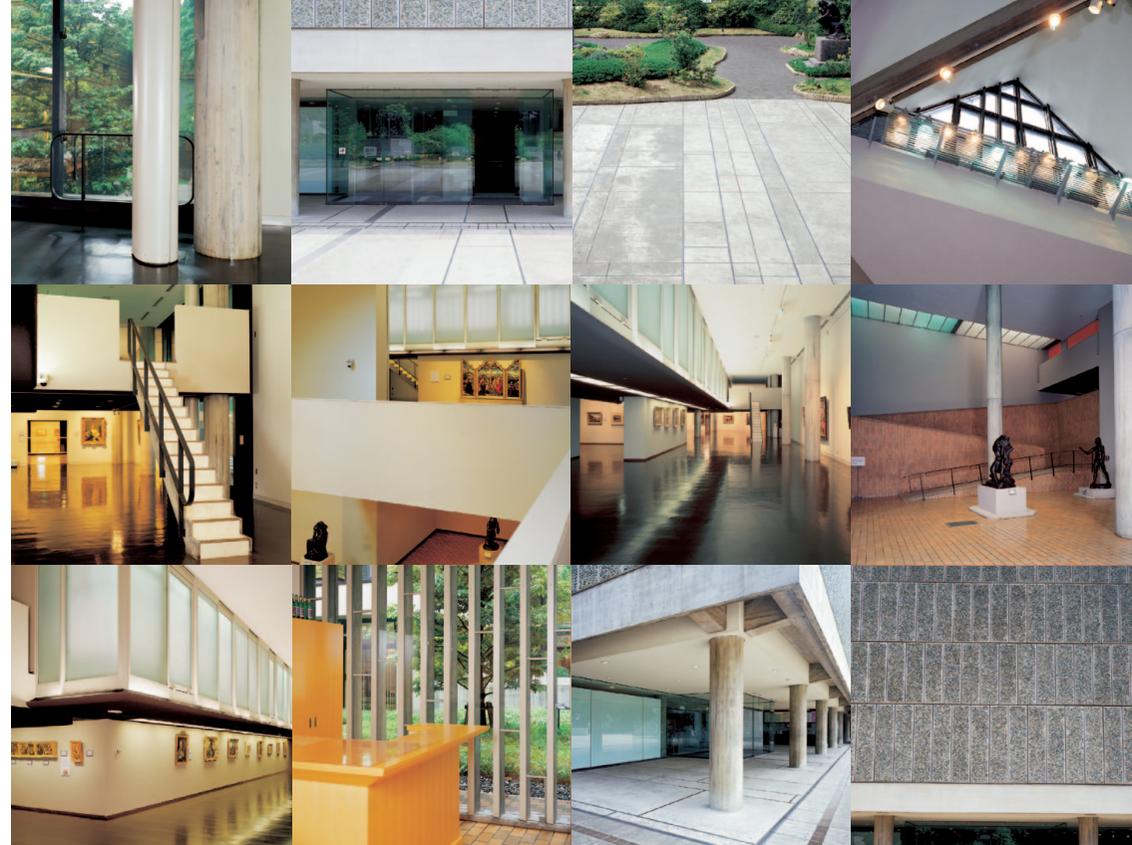
By creating spaces out of small exhibition rooms connected without obstructions, it is easy to give the entire space open sightlines. See No. 5 on the map.

7. Standardization

Buildings can be built more economically by standardizing the dimensions of building materials and structures.

8. Diverse Combinations for Accommodating Art Gallery Operations

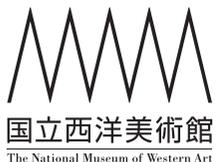
The art gallery was designed from the start to incorporate temporary walls of various sizes as well as mezzanines and other space configurations so that various kinds of exhibits could be offered.



Museums contain something just as important as paintings and sculpture: architecture.

The architect Le Corbusier, who was based in France, came up with the idea of a "Museum of Unlimited Growth" — a museum building that could be expanded as its collection grew. The main building was completed in 1959 and brings many of his ideas to life. To create the main building, Le Corbusier utilized the "Modulor" — a system of measurements based on the size of the human body — and various other concepts that were suited to the architecture of a new era.

This "Discover Architecture Map" describes 14 checkpoints where you can see these concepts in action. Use this map to explore every nook and cranny of Le Corbusier's museum.





1. Top Lighting

This north-facing triangular window is set into the ceiling of the Nineteenth Century Hall. On a clear day, sunlight fills the hall with natural light.

1

2. Floor Lighting

In the floor of the Nineteenth Century Hall, floor-mounted lights were installed to light the works from below. They are currently not in use.

2

3. Ramp

Ramps are often included in the designs of Le Corbusier, and this one joins the Nineteenth Century Hall to the second floor. Unlike stairs, the ramp becomes the device for his Promenade Architecture to allow visitors to enjoy a slower transition between spaces.

3

4. Mezzanine Floor Spaces

In three locations in the second-floor exhibition room there are three separate mezzanine floor spaces. Going up through each of the narrow staircases, one finds a space for the display of smaller exhibits. These mezzanine spaces are currently not in use.

4

5. Architectural Promenades with Open Sightlines

The second-floor exhibition room features an intriguing design in which the view one sees after turning a corner is similar to the previous view. The walls have openings to provide open sightlines, and visitors move from one exhibition space to another without interruption as they walk through the gallery.

5

6. Balconies

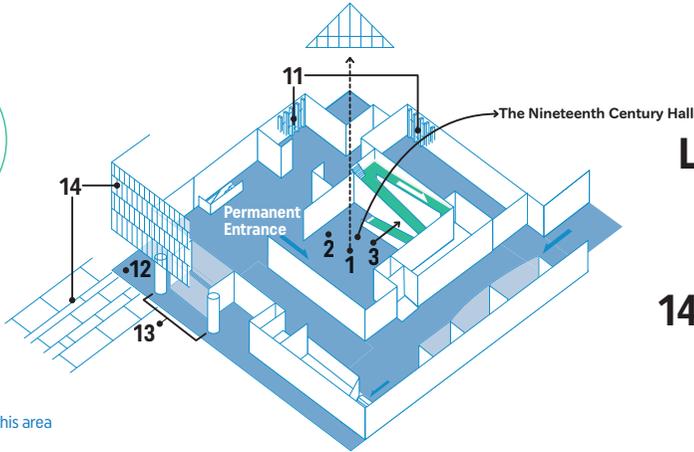
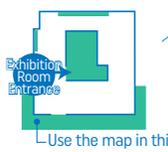
In the second-floor exhibition room there are two balconies overlooking the Nineteenth Century Hall. From the balcony one can look down on the hall below and see the exhibition room behind the other balcony allowing one to feel the complex spatial composition of this building at a glance.

6

7. Varied Ceiling Heights

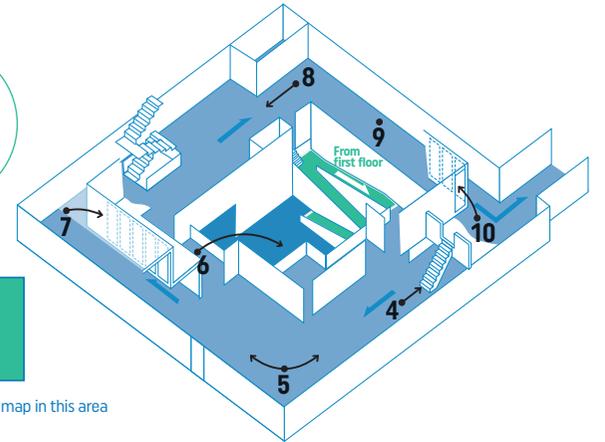
The second-floor exhibition room features both high and low ceilings allowing one to appreciate the transition between open and compressed spaces. The height of the lower ceiling is 226 cm as determined by the Modulor system, and the higher ceiling is twice that height plus the thickness of the balcony floor.

7



Le Corbusier's Museum of Unlimited Growth (Main Building)

14 Discovery Checkpoints



8. Free Standing Columns

This building is supported by many columns. The columns are 60 cm thick on the first floor and 55 cm on the second to meet the Japanese standards although they were originally 53 cm and 43 cm respectively. The first floor columns were made thicker to bear more structural loads. The beautiful woodgrain patterns were imprinted on the surfaces by using forms made from Japanese white pine into which the concrete was poured.

9. Downspouts

Most buildings have their vertical downspouts for rain water drainage on the outside. However, in this building they are placed inside. Le Corbusier thought of many designs and places to include downspouts that are visible on the inside of the building.

9

10. Clerestory Gallery As Lighting Device

The glass walled corridor or clerestory gallery above the low ceiling portion in the second-floor exhibition room was designed to allow natural light from the roof to pass through into the exhibition room. Although Le Corbusier had planned to light the paintings with natural light as well, only artificial lighting is currently used.

11. Rhythmic Louvers

Thin concrete mullion-like narrow vertical louvers or slats are found in such places like around the cashier area in the restaurant and outside the museum shop glass. The varying rhythmic arrangements transform the lighting conditions in the corresponding areas.

11

12. Pilotis

Found at the entrance to the Museum, the pilotis design allows the visitors to enjoy this space avoiding rain and strong sunlight. This space has been used to exhibit statues.

12

13. Column Spacing

Le Corbusier used his Modulor system to determine the distances between the columns that support the building.

13

14. Stone Pavement/ Exterior Walls

The forecourt pavement and exterior walls are underscored by the lengths and sizes based on the Modulor system.

14

