

# LE CORBUSIER *Theory &* *Example*

Subject: Theory of Architecture

NAINIKA RAI



BORN : SIX OCTOBER 1887, In Switzerland

DIED : 27 August 1965 (aged 77)

NATIONALITY: SWISS, FRENCH

OCCUPATION: ARCHITECT

AWARDS : AIA Gold Medal (1961), Grand Officers of the  
Légion d'honneur (1964)

BUILDINGS: Villa Savoye, Poissy Villa La Roche, Paris Unité  
d'habitation, Marseille Notre Dame du Haut,  
Ronchamp, Buildings in Chandigarh, India

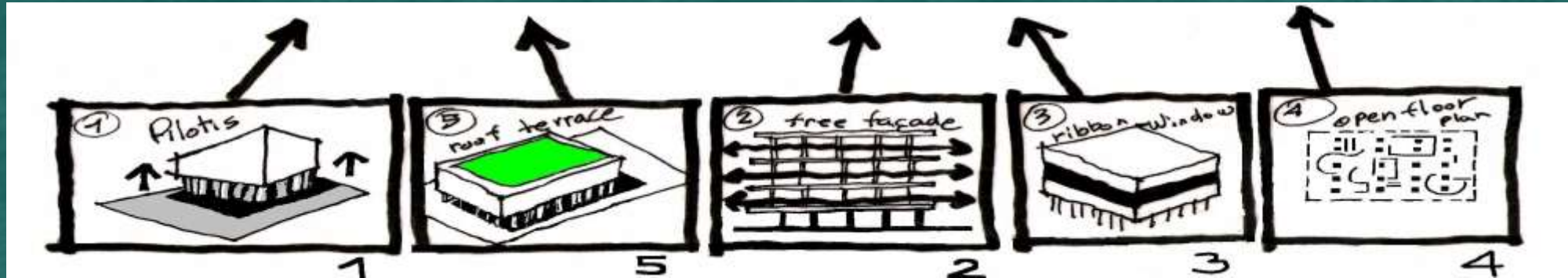


# INTRODUCTION:

- ⌘ Le Corbusier, was a Swiss-French Architect, Designer, Painter, Urban Planner, Writer, and one of the pioneers of what is now called modern architecture.
- ⌘ In 1920, Charles-Edouard Jeanneret (His original name) adopted **Le Corbusier** (an altered form of his maternal grandfather's name, Lecorbésier) as a pseudonym (the name used by an author), reflecting his belief that anyone could reinvent (change (something) so much that it appears to be entirely new) themselves.
- ⌘ In 1928, Le Corbusier took a major step toward establishing modernist architecture as the dominant European style.



# Le Corbusier's Philosophy:

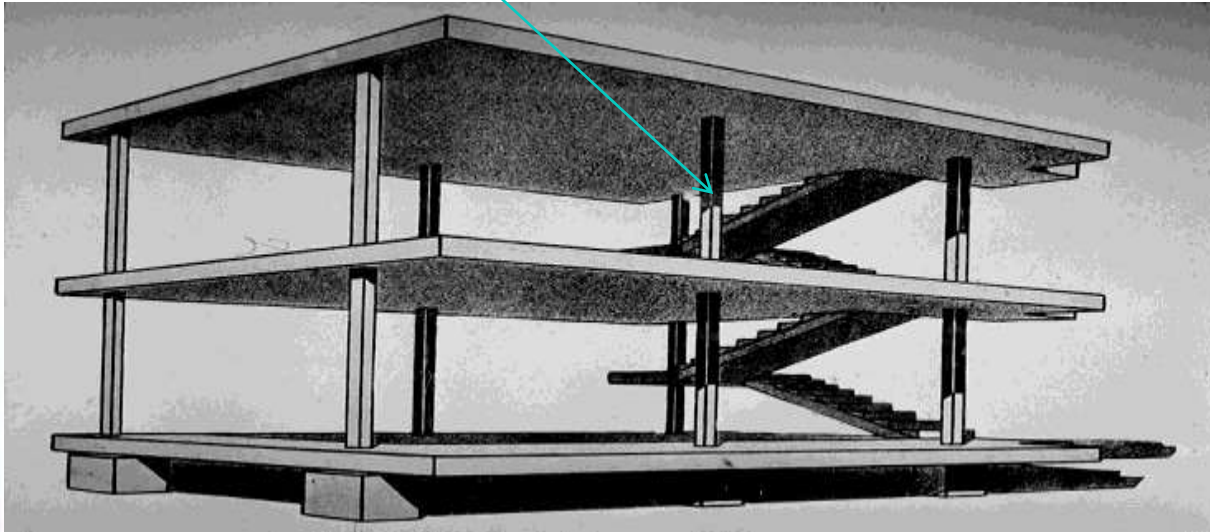


He gave his famous Five Points. The points are:

- Pilotis
- Roof Garden
- Free Facade
- Free Plan
- Horizontal Windows

PILOTIS

# PILOTIS



Pilotis are the construction method of erecting buildings. The invention of reinforced concrete frame enabled building in a simple method of supports and slabs.

Le Corbusier had penchant for organizing pilotis in a grid, what added order to the buildings. The architect was under a deep impression of classic architecture, especially Parthenon and villa Rotonda. The grid was a mean to bring this classic qualities to his modern designs.



# ROOF GARDEN



Roof Gardens were a mean of bringing nature to houses. Le Corbusier was inspired by steamliners, which superstructure lifted high above the ground level provided clear views over the site. In the same way Le Corbusier opened roof of his building on these views, simultaneously arranging an Arcadian atmosphere on them

# FREE FACADE



Free facade was a consequence of concrete frame construction. Because walls were then deprived of their constructional role, their design became free as well.



# HORIZONTAL WINDOWS



➤Horizontal windows or ribbon windows are the effect of free facade. It's an important element of Le Corbusier's crusade toward liberating people from the evil historicism.

➤They give access to a big amount of light, which can evenly light the interior & it also effectively frames the view outside, bringing outside inside.



LE CORBUSIER'S  
**FIVE POINTS OF ARCHITECTURE**  
AS SEEN IN THE VILLA SAVOYE



**THE ROOF**

The roof of the Villa Savoye is a recreational area, shelter, and garden in one. A wall provides privacy and shadow, and its open layout lets in light to the second floor - adding to the open design of the entire building.



**THE FACADE**

What applies to the floor plan also applies to the facade itself - with no outer walls for support, the walls that are can be designed freely. Because of this, the facade of the Villa Savoye is both characteristic and functional.



**THE WINDOWS**

The horizontal windows of the villa makes it easy for air and light to enter the interior of the building, making the second floor feel very open. It also grants a great view of the surrounding yard, from wherever one stands inside the villa.



**THE PILOTIS**

The Villa Savoye is supported not by traditional walls, but by reinforced concrete columns, or pilotis. This allows the rest of the building to be designed far more freely, with no need to support it through other means.



**THE FLOOR PLAN**

Being supported by pilotis alone, it is possible to have a very open floor plan - walls can be placed with no need to consider support. This gives the villa a room layout unlike most buildings - built for appearance and comfort alone.

## Examples of LE CORBUSIER's Work:

- Villa Savoye, Poissy
- Notre Dame du Haut, Romchamp
- Palace of Justice, Chandigarh
- Saint-Pierre, Firminy



## VILLA SAVOYE, POISSY

- Villa Savoye is arguably Le Corbusier's most renowned work, and a prime example of Modernist architecture.
- The sleek geometry of the white living space, with its elongated ribbon windows,
- is supported by a series of narrow columns around a curved glazed entrance
- and topped with a solarium.
- Completed in 1931, this building was revolutionary.
- The use of reinforced concrete required for fewer load-bearing internal walls, allowing for an open-plan design



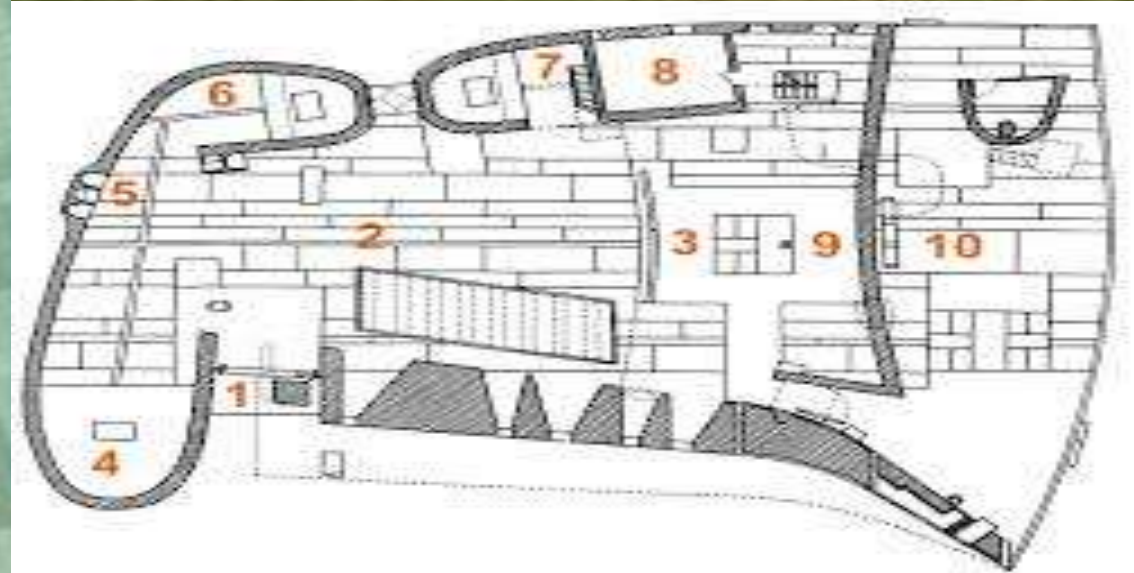




## Notre Dame du Haut, Romchamp

- Iconic Notre Dame du Haut is one of the earliest Modernist churches.
- It is not a total departure from traditional church architecture, with its stained glass, tower and high ceilings, symbolically drawing the eye – and the mind – towards heaven.
- Each window is cut through the wall in different sizes and angles, scattering ethereal colored light across the room.







## Palace of Justice, Chandigarh

- The colorful structure of the Palace of Justice is a prime example of Le Corbusier's work in India.
- The geometric apertures of the windows resemble traditional Indian fretwork, creating a texture that contrasts with the smooth faces and tactile curves of the roof.
- Red, yellow, and blue, combined with the colors of the Indian flag, complete this balanced and harmonious building.







# Saint-Pierre, Firminy

- The last major work of Le Corbusier, the building was completed posthumously in 2006 – 41 years after his death – by his student José Oubrière.
- The great cone rises from the land like the surrounding mountains
- Le Corbusier's innovative use of windows is epitomized in Saint-Pierre, with strips of windows in primary colors and a projection of circles akin to constellations in the night sky.
- The space is a cave that embraces the visitor like a womb – a sanctuary in the turbulent world.





# LE MODULOR MAN

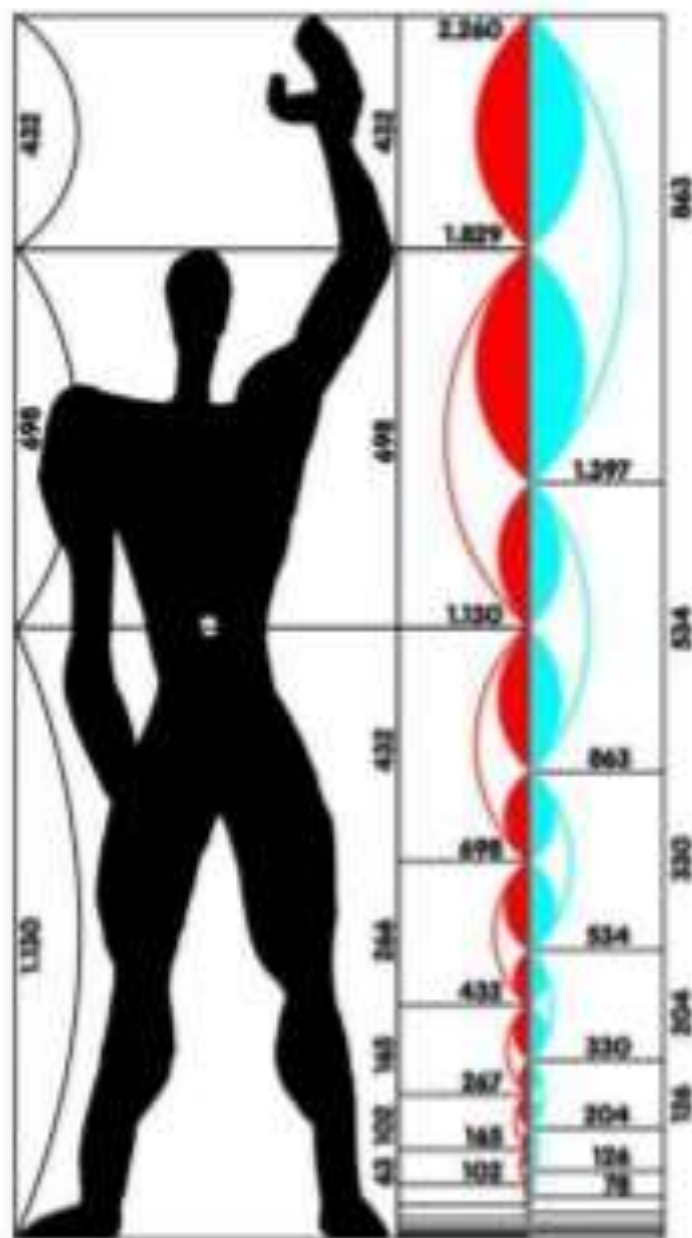
- ❖ The Modulor was a standard model of the human form which Le Corbusier devised to determine the correct amount of living space needed for residents in his buildings.
- ❖ Le Corbusier explicitly used the golden ratio in his Modulor system for the scale of architectural proportion.
- ❖ He saw this system as a continuation of the long tradition of Vitruvius, Leonardo da Vinci's "Vitruvian Man", the work of Leon Battista Alberti, and others who used the proportions of the human body to improve the appearance and function of architecture.
- ❖ In addition to the golden ratio, Le Corbusier based the system on human measurements, Fibonacci numbers, and the double unit.
- ❖ Standards of Furniture were established 1<sup>st</sup> time after Le Modulor Man.

# FIVE POINTS OF ARCHITECTURE

- RAISED STRUCTURE
- A FREE FACADE
- OPEN FLOOR PLAN
- RIBBON WINDOWS
- ROOFTOP GARDEN

## THE MODULOR

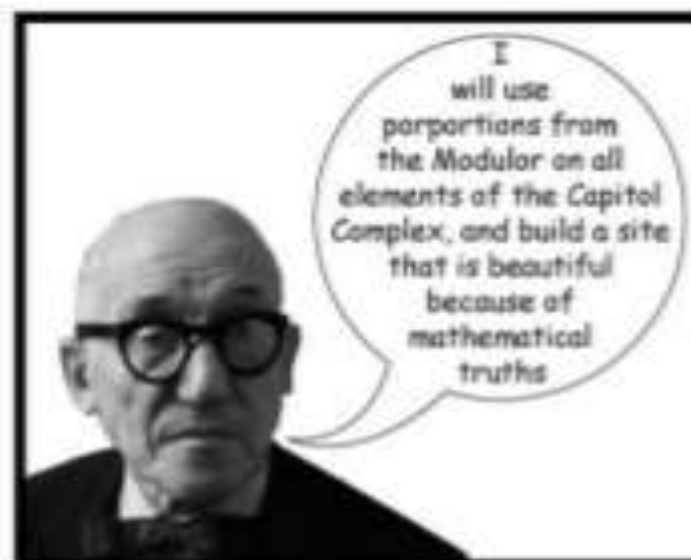
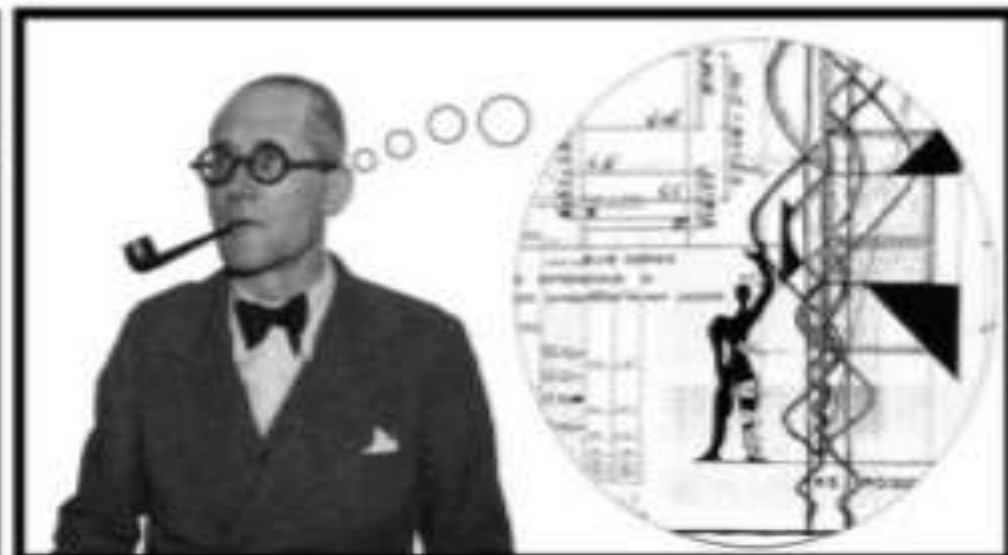
- It is an anthropometric scale based on a English man with his arm raised.
- Le Corbusier explicitly used the golden ratio in his modular system for the scale of architectural proportion



"The house is a machine for living in"



# THE INITIAL THOUGHT BEHIND THE MODULAR



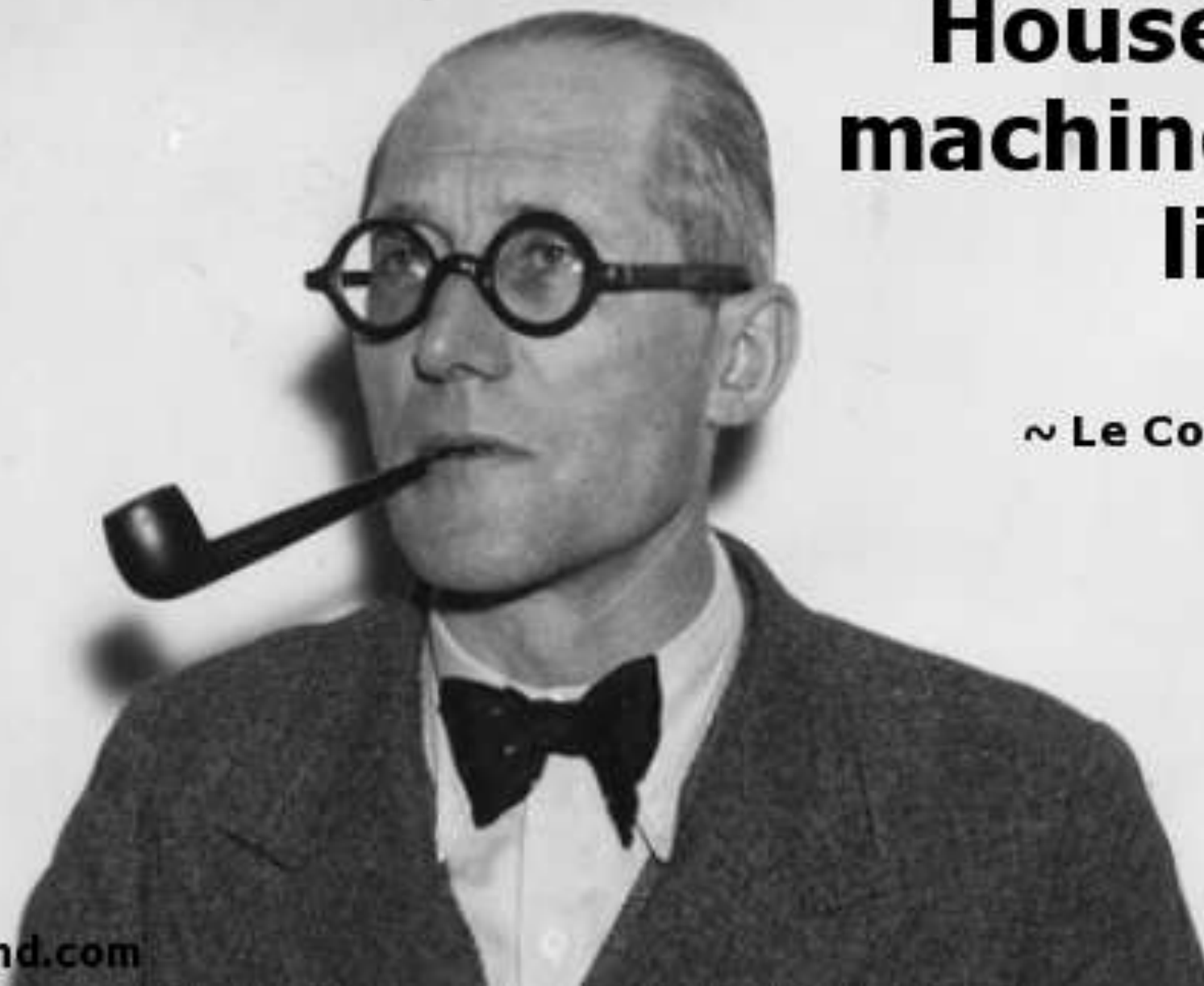
# Some other works:

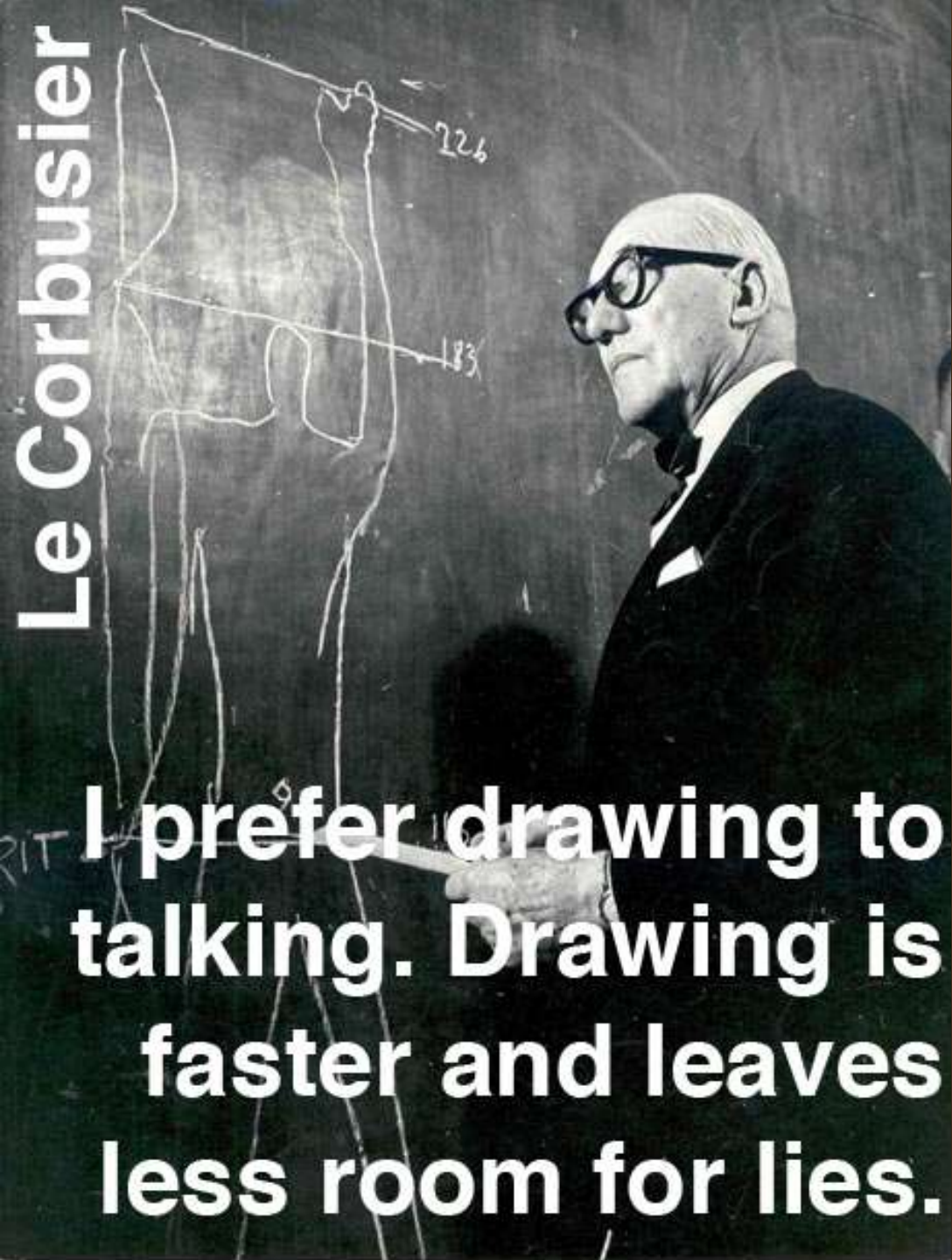
- Starts Purism Movement against Cubism, 1918.
- In the first issue of his the journal, in 1920, Charles-Edouard Jeanneret adopted **Le Corbusier**
- Works as a Politician for the rights of Algerian Muslims under French occupied Algeria.
- Founder of *modulor design*.



**House is a  
machine for  
living**

~ Le Corbusier ~





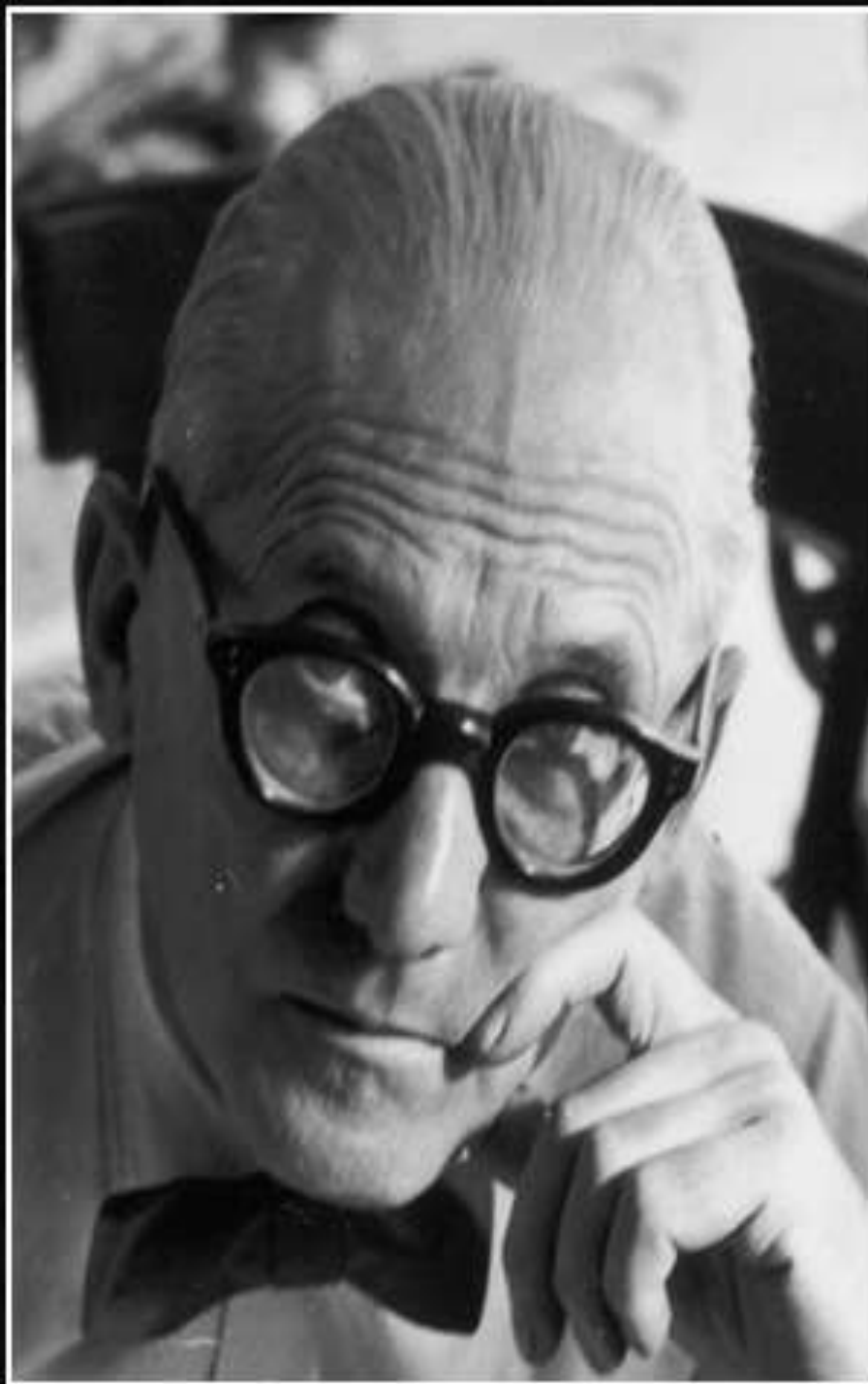
Le Corbusier

I prefer drawing to talking. Drawing is faster and leaves less room for lies.

“Designing the city is like playing with the objects on your breakfast table”.

LE CORBUSIER





To be modern is not a fashion, it is a state. It is necessary to understand history, and he who understands history knows how to find continuity between that which was, that which is, and that which will be.

— *Le Corbusier* —

**AZ** QUOTES



thank you!