

Hum-201

Philosophy

Modernism

Modernist architecture, or modernism, is a style that emerged in the **early-20th century** in response to **large-scale changes in both technology and society**. It is associated with the function of buildings, approached from an analytical viewpoint, a rational use of materials, the elimination of ornament and decoration, and openness to structural innovation.

Modernism developed across all artistic fields, not just architecture, as a means of accommodating and **responding to the new technologies of machines, automation and urban design**. The **industrial revolution** played a major role in the development of architecture that was driven by **functional priority**. Materials such as **concrete, glass and steel** were **industrially manufactured** prevailed in this era.

Architects adopted ideologies bringing out the **truth of the structure** rather than **covering** them up with **ornamented façades**.

Modernism encompasses many different variations, including Futurism, Constructivism, brutalism, De Stijl, and Bauhaus.

Modernist Ideology sources

There are many early sources for modernism's ideology. The English artist and writer **William Morris**, helped inspire the **Arts and Crafts movement**, by advocating that **utility was as important as aesthetics**, and that well-made **handcrafted products** were **preferable** to **production line, machine-made** ones.

Another early source was **the American architect Louis Sullivan**, most famous for the phrase **'Form follows function'**. In principle, this meant that buildings should be designed so that the essential structure dictated the form, i.e. from the inside outwards.

The **Viennese architect Adolf Loos** believed that the **decoration** of functional objects was **inefficient and wasteful**. His manifesto, **'Ornament and Crime'** became a key modernist text, in which he argued that avoiding ornament was **'a sign of spiritual strength'**.

Two European architects emerged who, above all others, would be most widely associated with the new modernist style. One of these was **Walter Gropius**, the leader of the **Bauhaus in Germany**. Gropius taught architects to **reject historical orthodoxies** and **adopt** the innovative **new ideologies** of **modern industry**.

The other **was Le Corbusier**, who took inspiration for his buildings and urban designs from modern engineering developments such as passenger jets, cruise liners, automobiles, grain silos, and so on. In his most famous book, **'Towards a New Architecture'**, he argued that **'a house is a machine for living in'**.

The United States attracted many **progressive modernists** away from Europe during the **1930s**, and **Modernism became synonymous with the rise of America as the world's new super-power, with highways, skyscrapers and vast urban landscapes**.

Modernist architecture continued in various guises around the world, eventually being replaced as the dominant style by Postmodernism in the 1970s and 80s.

Principles & Characteristics

- One of the overarching principles of modernism was that **'form follows function'**, meaning that **design should derive directly from purpose**. Another was that **building form** should have a **simplicity and clarity**, with the **elimination of unnecessary detail**.
- **'Truth to materials'**- which held that rather than **concealing or altering the natural appearance** of a **material**, it ought to be **visible and celebrated**.
- **Components positioned at 90-degrees** to each other and an **emphasis on horizontal and vertical lines**.
- The use of **reinforced concrete and steel**.
- **Visual expression** of the **structure** rather than hiding structural elements.
- Following the **'machine aesthetic'** in the use of materials produced by industrial processes.
- **Rectangular, cylindrical and cubic shapes**
- **Asymmetrical compositions**.
- A **lack of ornament** or moldings.
- **Large windows set in horizontal bands**.
- **Open plan floors**.
- **White facades**.

Le Corbusier

Le Corbusier- A pioneer of modern architecture

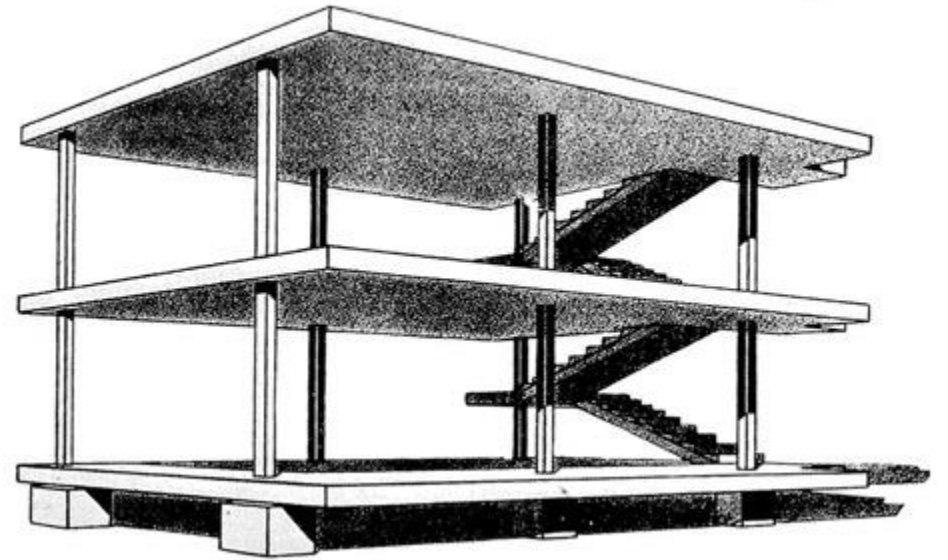
Ideas which influenced him:

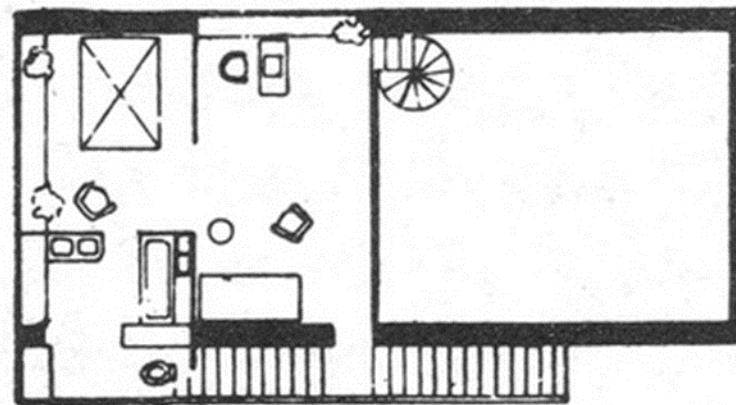
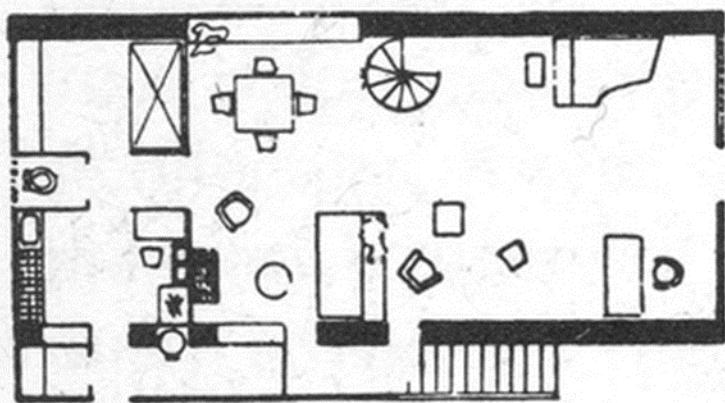
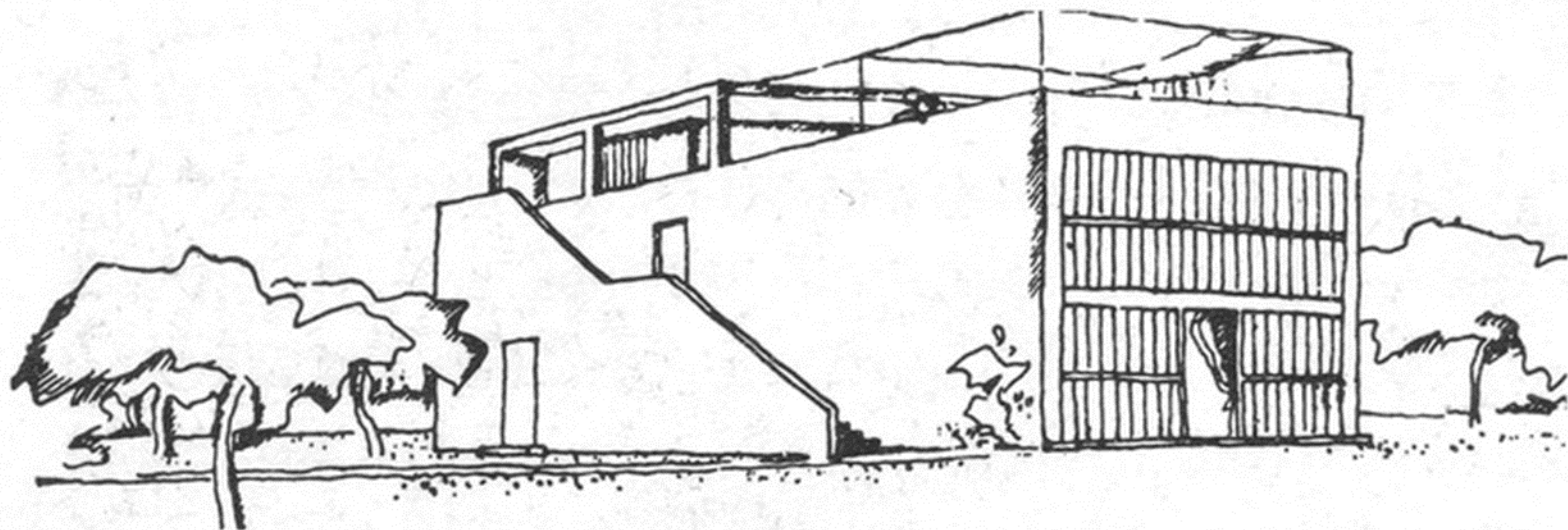
- Purism
- Arts and Crafts Movement
- Chicago School

Ideas of Le Corbusier

Dom-ino System:

- Structural system developed by Le Corbusier in 1914 with the help of Engineer Max du Bois.
- **Structure** made of **standard elements** that could be **combined** freely, allowing diversity in housing design
- System would be perfected as housing could be built in series like machinery





134 Le Corbusier, Maison Citrohan, 1920. Perspective, ground and floor plans.

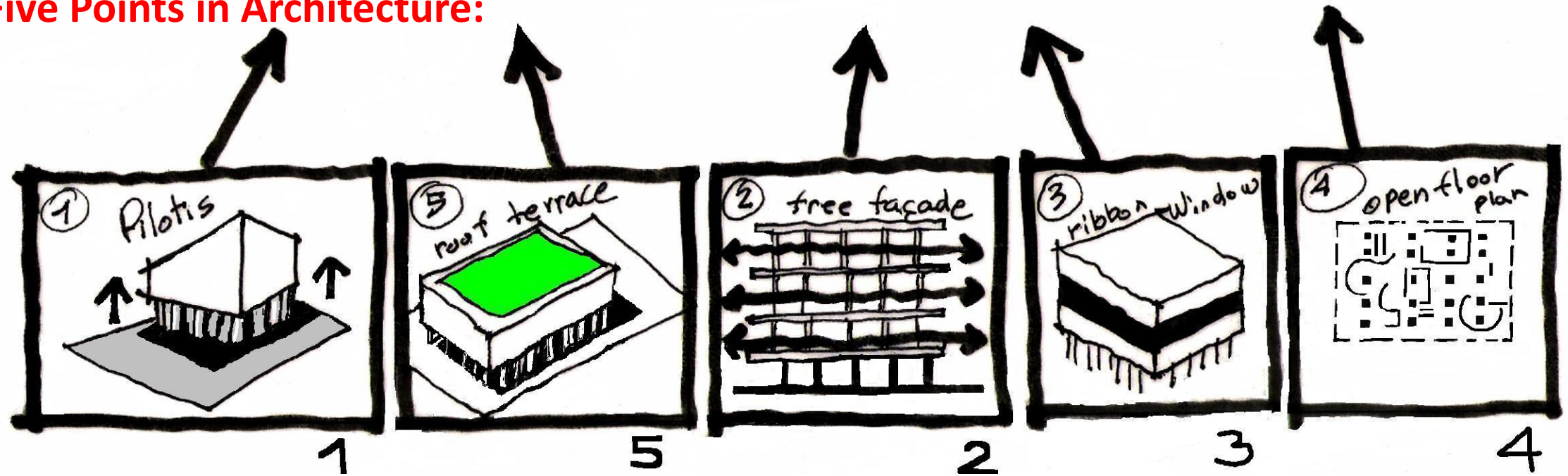


Model of Citrohan Mansion, Le Corbusier



Citrohan Mansion, Le Corbusier

Five Points in Architecture:



Pilotis : The supports are precisely calculated, spaced regularly and used to elevate the first floor off the damp ground

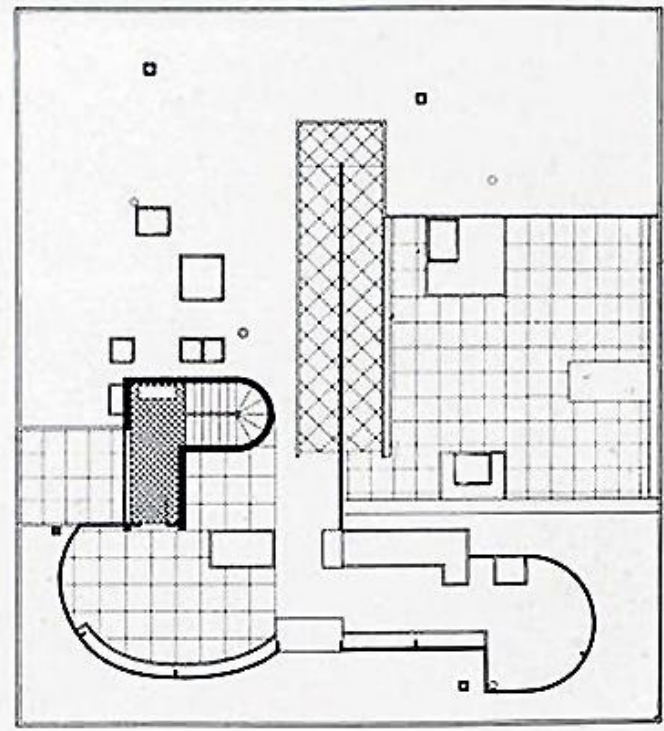
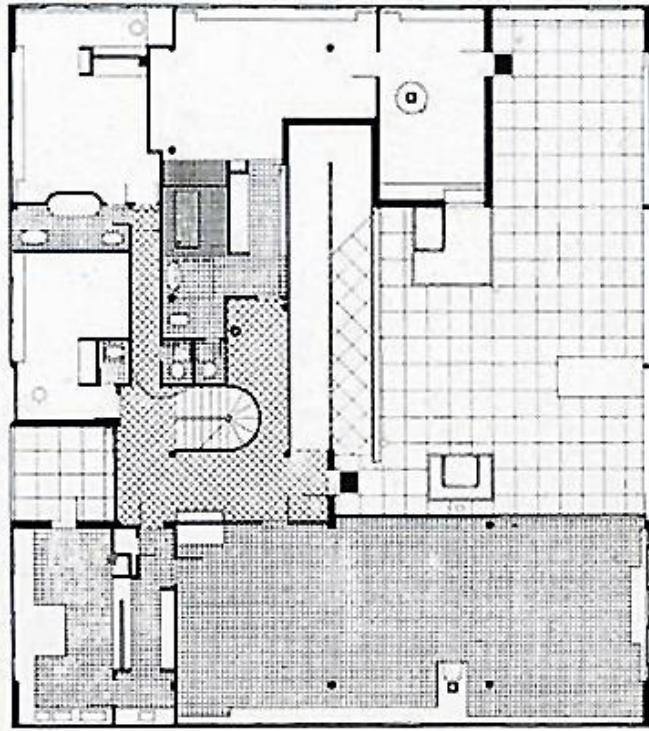
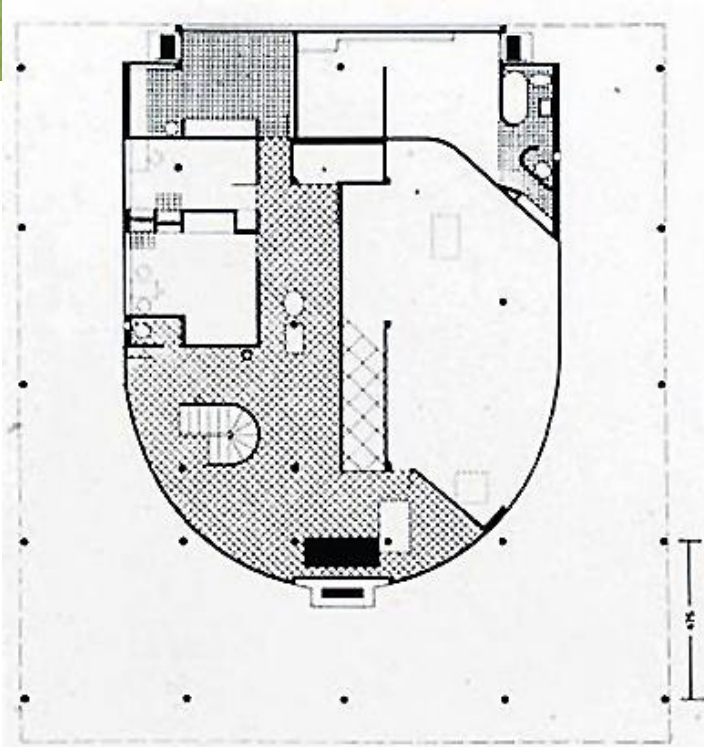
Free Plan : The interior walls, independent of the support system, can be arranged in a free plan.

Free Façade: The façade, also independent of the structural support can be freely designed.

Horizontal/Ribbon windows : the horizontal windows, made possible by the support system, assure even illumination from wall to wall and admit eight times as much light as vertically placed window of equal area

Roof garden : the roof garden is used for domestic purposes, such as gardening, play and relaxation, thereby covering all the build upon ground for outdoor activities.

Villa Savoye



Class lecture:

<https://drive.google.com/file/d/1jRkgv6Nc9Xa722ECjJ4zWiSSFhrtDeCj/view?usp=sharing>

Thank you.