



# Theories of Architecture

ENAR 329

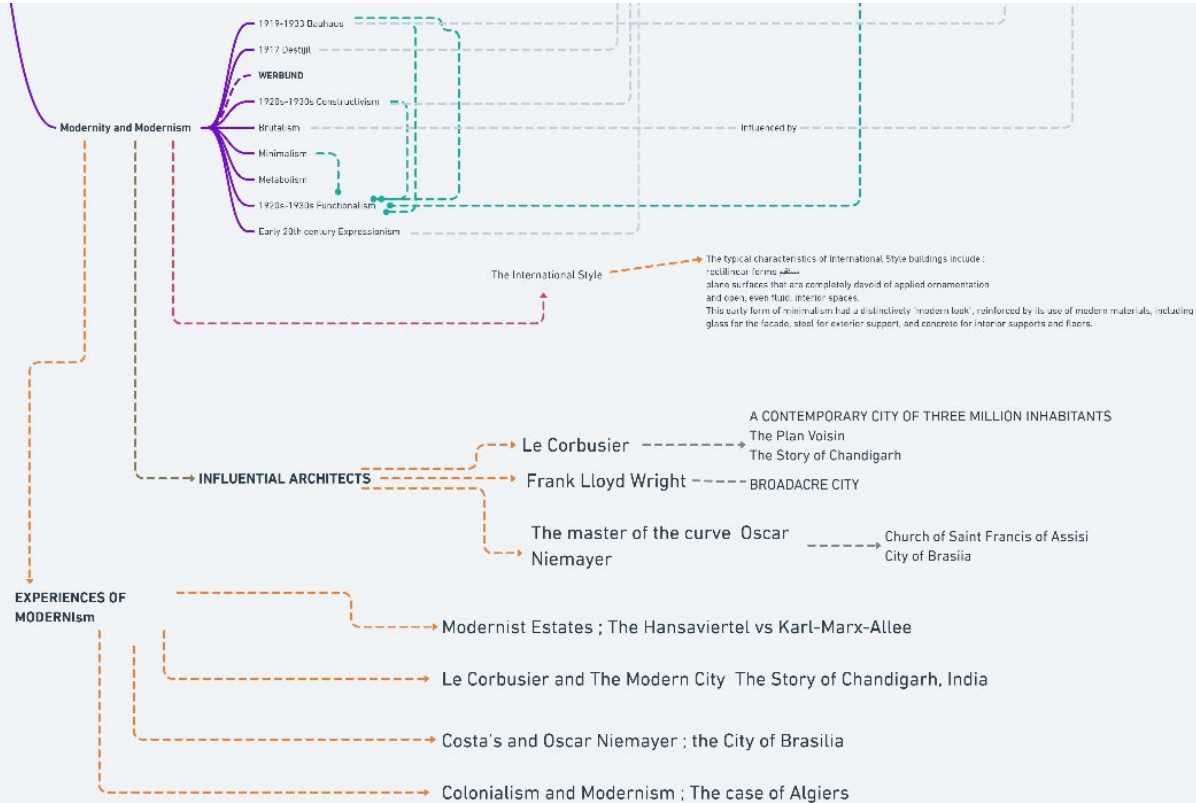
Arch. Nadia Asali

# Lecture 8

Modernism and Postmodernism

18th December 2021

# RECAP



# WERKBUND



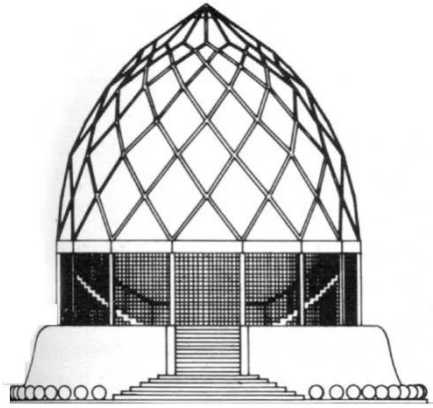
Founded by Hermann Muthesius in 1907, the aim of the Deutscher Werkbund was to foster links between **artists and German industrialists to develop a German identity through design and architecture.** By 1914 there were 1,870 members in 6 countries.



The Werkbund expanded on the English **Arts and Crafts** movement, adopting concerns *that craft and design influenced people's lives and propagating a rejection of historicism in favour of vernacular architecture* suited to the modern age. **The major difference between the Arts and Crafts movement and the Deutscher Werkbund was that the Werkbund sought to combine promotion of craft with industry, as opposed to a rejection of machine production. The Werkbund embraced technology to design objects and buildings that fulfilled the changing needs of society.**

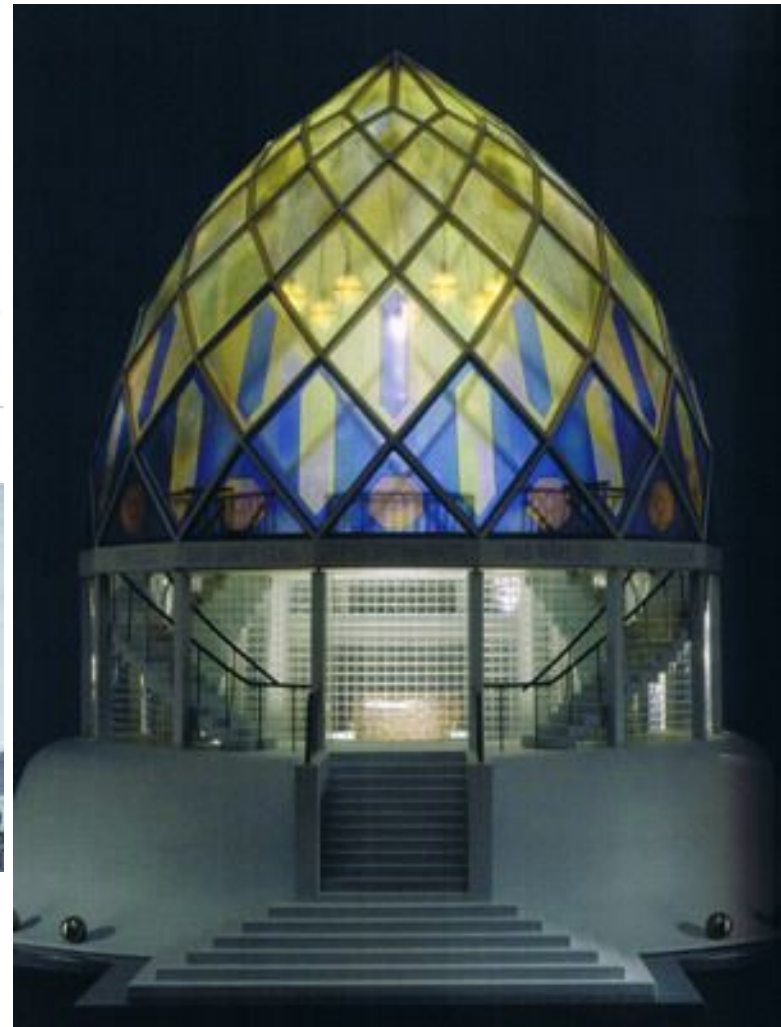


The Glass Pavilion, designed by Bruno Taut and built in 1914, was a **prismatic glass dome structure at the Cologne Deutscher Werkbund Exhibition**. ... They financed the structure that was considered a house of art. The purpose of the building was to demonstrate the potential of different types of glass for architecture.



The structure was a brightly colored landmark at the exhibition, and was constructed using concrete and glass.

Taut described his little temple of beauty as "...reflections of light whose colors began at the base with a dark blue and rose up through moss green and golden yellow to culminate at the top in a luminous pale yellow."



# **Modernism and PostModernism**



# Modernism and Post-Modernism

Modernism could be described as one of the most optimistic styles in architectural history, drawing from notions of utopia, innovation, and the reimagination of how humans would live, work, and interact. The philosophy of Modernism still dominates much of architectural discourse today, even if the world that gave rise to Modernism has changed utterly.

يمكن وصف الحداثة بأنها واحدة من أكثر الأساليب  
تفاؤ

شر ويعملون ويتفاعلون. لا تزال فلسفة الحداثة تهيمن على الكثير من الخطاب المعماري اليوم ، حتى إذا كان العالم الذي أدى إلى الحداثة قد تغير تمامًا.  
Postmodernism first emerged in the 1960s as a departure from modernism. **As a reaction against the austerity, formality, and lack of variety of modern architecture, particularly in the international style advocated by Le Corbusier and Mies van der Rohe.**

ظهرت ما بعد الحداثة لأول مرة في الستينيات كخروج عن الحداثة. كرد فعل ضد التقشف ، والشكليات ، ونقص تنوع العمارة الحديثة ، لا سيما في النمط الدولي الذي دعا إليه لو كوربوزييه وميس فان دير روه

postmodernism defends an architecture full of signs and symbols that can communicate cultural values. Postmodernism is a reaction to homogeneity and tediousness by praising difference and striving to produce buildings that are sensitive to the context within which they are built.

تدافع ما بعد الحداثة عن بنية مليئة بالعلامات والرموز التي يمكنها توصيل القيم الثقافية ، أما ما بعد الحداثة فهي رد فعل على التجانس والإرهاق من خلال مدح الاختلاف والسعي لإنتاج مبان حساسة للسياق الذي يتم بناؤها فيه

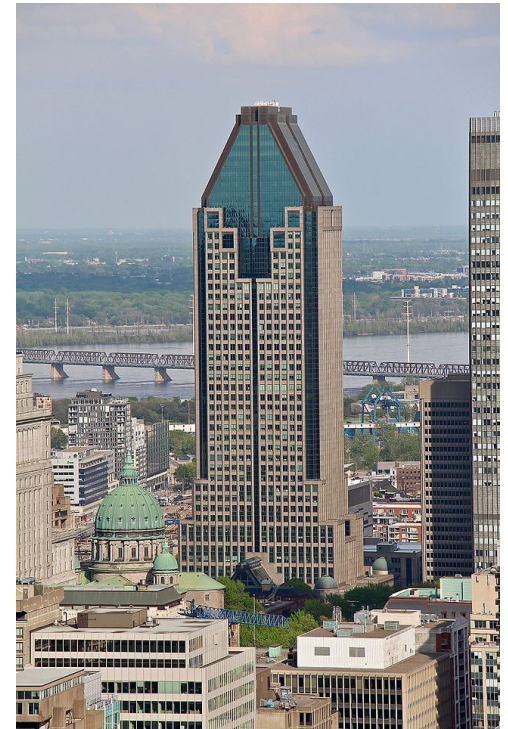
# Breaking the Box of Modernism

## The Reaction to Modernism

Postmodern architecture began as an international style whose first examples are generally cited as being from the 1950s, but did not become a movement until the late 1970s and continues to influence present-day architecture.



The Seagram Building Mies Van Der Rohe, 1958



1000 de La Gauchetière, Montréal, Lemay & Associates architects, 1992

## The Emergence of Post-Modernism

- 1960s - the emergence of Post-Modernism, a **way of thinking of architecture that is quite different from the approach of International Style designers.**

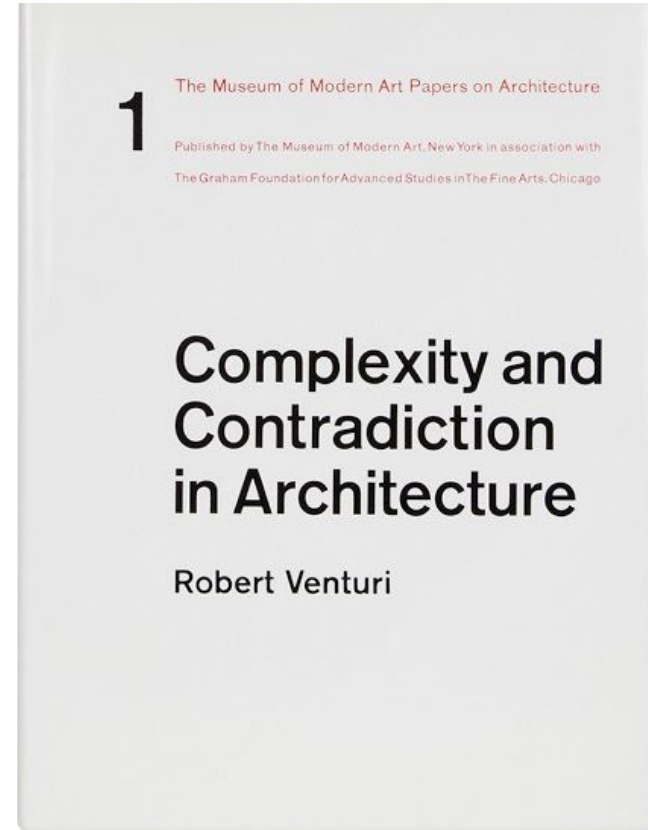
- “Complexity and Contradiction in Architecture”, Robert Venturi, **1966** Venturi's *Complexity and Contradiction in Architecture* expresses in the most compelling and original terms the postmodern rebellion against the purism of Modernism."

التعقيد والتناقض في العمارة" ، روبرت فننتوري ، 1966 يعبر التعقيد والتناقض في فننتوري في الهندسة المعمارية في أكثر المصطلحات إقناعاً وأصالة عن تمرد ما بعد الحداثة ضد نقاء الحداثة.

Mies Van de Rohe “Less is more



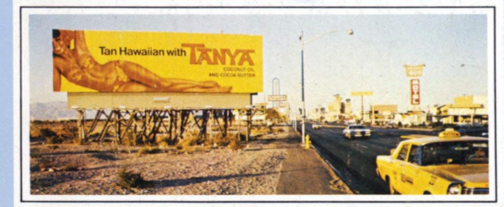
“ Robert Venturi “Less is a bore”



## The duck and The decorated shed

The Duck and the Decorated Shed The terms “duck” and “decorated shed” were codified in the 1972 book Learning from Las Vegas by Robert Venturi, his wife Denise Scott Brown, and their friend Steven Izenour.

The book argues that there are two distinctly different types of buildings **and that all buildings can be classified as one or the other.**



# LEARNING FROM LAS VEGAS

Revised Edition

Robert Venturi Denise Scott Brown Steven Izenour

## The duck and The decorated shed

The duck typology takes its name from an actual duck-shaped building: the **Big Duck** located on Long Island in New York. The structure was built to

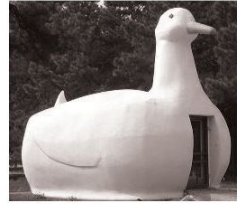
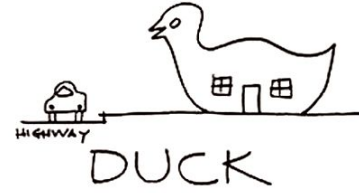
house a shop selling ducks and duck eggs. The form of the building itself explicitly tells passers by what they will find inside . **Ducks:** “Where the

architectural systems of space, structure, and program are submerged and distorted by an overall symbolic form. حيث يتم غمر الأنظمة المعمارية للفضاء والهيكل.

”والبرنامج وتشويهها بشكل رمزي شامل

**Decorated Sheds:** “Where systems of space and structure are directly at the service of program, and ornament is applied independently.” حيث تكون أنظمة

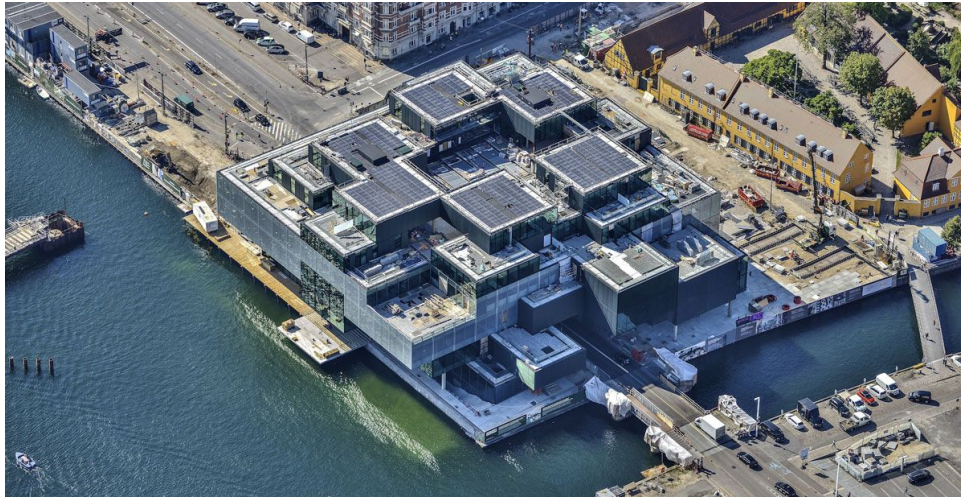
” .المساحة والهيكل في خدمة البرنامج مباشرة ، ويتم تطبيق الزخرفة بشكل مستقل



VS



## The duck and The decorated shed



### **Blox-Hub**

contains exhibition spaces, offices and co-working spaces, a café, a bookstore, a fitness centre, a restaurant, twenty-two apartments and an underground automated public carpark



### **Lego House**

# CHARACTERISTICS POSTMODERNISM

1. **Postmodern Architecture rejects the notion of "pure" or "perfect" form, instead it draws from: all methods, materials, forms, & colours available to architects.** ترفض الهندسة المعمارية ما بعد الحداثة فكرة الشكل "النقي" أو "المثالي" ، وبدلاً من ذلك تستمد من: جميع الأساليب والمواد والأشكال والألوان المتاحة للمهندسين المعماريين.

The functional and formalized shapes and spaces of the modernist movement are replaced by unapologetically diverse aesthetics: •styles collide •form is adopted for its own sake •new ways of viewing familiar styles and space abound.

يتم استبدال الأشكال والمساحات الوظيفية والشكلية للحركة الحداثية بجماليات متنوعة غير مبررة: • تتعارض الأنماط • تم اعتماد الشكل لذاته • طرق جديدة لمشاهدة الأنماط المألوفة والفضاء تكثر.



City Hall, Mississauga, Canada , 1987

# CHARACTERISTICS POSTMODERNISM

## 2.Moves away from the neutral white colours seen in modernism



Team Disney building , opened on June 3, 1991. It functions as the administrative headquarters of Walt Disney World, housing the Finance, Accounting, Business Insight & Improvement, and Legal departments.

The architect is Arata Isozaki.



# CHARACTERISTICS POSTMODERNISM

3. Took past components of different styles and melded them together to create new means of design. It is known for the re-emergence of surface ornament, reference to its surrounding buildings, and historical references.

أخذ المكونات السابقة من أنماط مختلفة ودمجها معًا لخلق وسائل جديدة للتصميم. تشتهر بإعادة ظهور الزخرفة السطحية والإشارة إلى المباني المحيطة بها والمراجع التاريخية.



Charles Moore, 1933 The Piazza d'Italia in New Orleans (1975-79) consists of a flamboyant, wildly Neo-Classical, neon-outlined, scenographic backdrop for a contour map of Italy set in a pool of water that is demarcated by concentric rings of marble paving.



# CHARACTERISTICS POSTMODERNISM

4.Revival of traditional elements and techniques. Post modernists looked into past architecture in order to learn from it. Classical designs such as pillars, arches, and domes .

إحياء العناصر والتقنيات التقليدية. ينظر ما بعد الحداثيين إلى العمارة السابقة من أجل التعلم منها.  
تصاميم كلاسيكية كالدعامات والأقواس والقباب.



Philip Johnson Bank of America Center, Houston, John Burgee and Philip Johnson, 1984 combines architecture elements of pre-WWII skyscrapers with elements of modern aesthetics.



## CHARACTERISTICS POSTMODERNISM

### 5. It favoured personal preferences and variety over objective truths and principles

فضلت التفضيلات الشخصية والتنوع على الحقائق والمبادئ الموضوعية

With this building and its references to architectural styles of the past, Philip Johnson broke completely with the Miesian tradition. **In fact, his client had said emphatically that the company did not want another glass box.**

Philip Johnson and John Burgee, American Telephone and Telegraph Headquarters, New York, 1984. The Miesian Tradition



## CHARACTERISTICS POSTMODERNISM

6.sensitivity to the building's context, history and the client's requirements physical characteristics

الحساسية لسياق المبنى وتاريخه وخصائص متطلبات العميل المادية

Team Disney Burbank, California, 1991. Michael Graves designed the building, which features large figures of the dwarves from Snow White and the Seven Dwarfs on its facade acting as caryatids.



## CHARACTERISTICS POSTMODERNISM

7.the use of sculptural forms, ornaments and anthropomorphism conceptual characteristics  
high ceilings, irony, paradox & contextualism

استخدام الأشكال النحتية و  
أسقف عالية ، مفارقة ، مفارقة وسياقية

Michael Graves, 1934 Graves describes his work as 'figurative', with the figural elements traceable to 'classical and anthropomorphic sources'.

The Portland Building in Portland, Oregon (1980) is replete with quotations from the classical language: the temples on the roof (never built), the giant keystone beneath them, the pair of fluted pilasters of indeterminate order, and the tiered stylobate at street level.



# **MODERNIST ARCHITECTURE VS POSTMODERNIST ARCHITECTURE**

**Playfulness:** Postmodern design takes itself seriously but not too seriously. Elements of humor, irony, whimsy, and kitsch are often featured in postmodern buildings. **Postmodern architects may regard many modern buildings as soulless and bland. Modernist architects may regard postmodern buildings as vulgar**



Villa Savoye



Michael Graves: Team Disney Building, Burbank, California, USA, 1986.

غالبًا ما تظهر عناصر الفكاهة والسخرية والنزوة في مباني ما بعد الحداثة ، وقد يعتبر المهندسون المعماريون ما بعد الحداثة أن العديد من المباني الحداثة عديمة الروح ، وقد يعتبر المعماريون الحداثيون مباني ما بعد الحداثة مبتذلة

**Color** ; Postmodern design embraces the use of color, often in contrast to the natural hues of building materials like sandstone or marble. Postmodern architects were not shy in their use of pastels and bright neon color palettes.



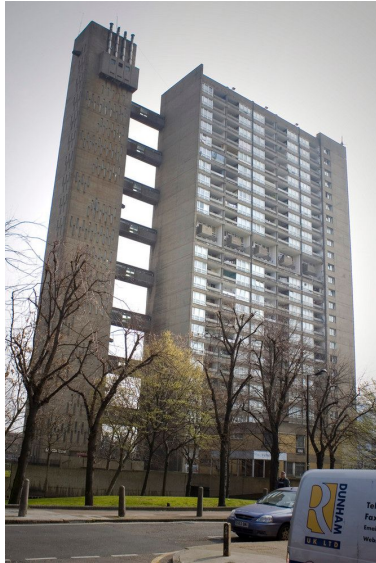
Bauhaus Building by Walter Gropius



St. Coletta School by Michael Graves



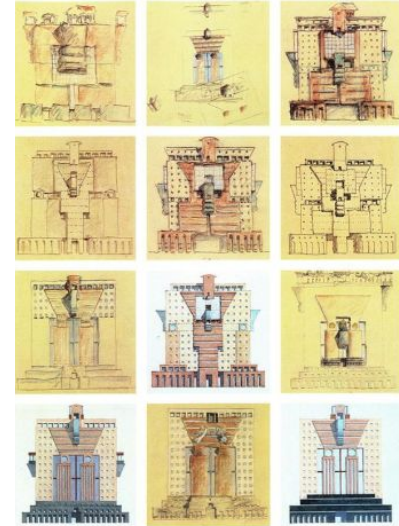
**Classical motifs** الزخارف الكلاسيكية: Postmodern design mixes various classical architectural features—like arches and pillars—with modern materials like steel and glass.



The Balfour Tower  
by architect Erno Goldfinger



The Portland Building Designed by Michael Graves and built in  
1982 as administrative offices for the City of Portland



**Variety of materials and shapes:** Postmodern architects valued sculptural forms over rigid, clean lines. Many postmodern buildings feature curves and asymmetrical angles.



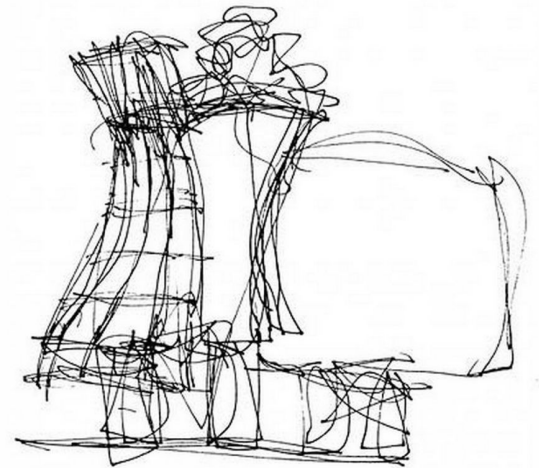
The Unité d'Habitation



The Orgues de Flandre, are a group of residential buildings in the 19th arrondissement of Paris, France. Built from 1974 to 1980 by the architect Martin van Trek.

Modern	Postmodern
Duration: late 19th- early 20th century	Late 20th -21st century
<p>Modernism is efforts to reconcile the principles underlying architectural design with rapid technological advancement and the modernization of society. الجهود المبذولة للتوفيق بين المبادئ الأساسية للتصميم المعماري والتقدم التكنولوجي السريع وتحديث المجتمع.</p>	<p>Postmodernism refers to the functional and formalized shapes and spaces of the modernist style are replaced by diverse aesthetics. تشير ما بعد الحداثة إلى الأشكال الوظيفية والشكلية والمساحات للأسلوب الحداثي التي يتم استبدالها بجماليات متنوعة.</p>
There are universal truths that govern the world	No universal truths
Seriousness, directness	Irony, parody, lack of seriousness
Faith in a deeper meaning over superficial appearances	No depth, only superficial appearances
Believes in learning from past experiences and the historical record	Rejects focusing on past experiences and rejects objective historical truth
Major concept: Form follows function	Major concept: pluralism, flying buttresses and high ceilings, irony and paradox, and contextualism.

# Deconstructivism



**Deconstructivism** in architecture, also called deconstruction, is a development of postmodernism that began in the late 1980s.

- It is characterized by ideas of fragmentation, an interest in manipulating ideas of a structure's surface or skin, non-rectilinear shapes which serve to distort and dislocate some of the elements of architecture, such as structure

يتميز بأفكار التجزئة ، والاهتمام بالتلاعب بأفكار سطح أو جلد الهيكل ، والأشكال غير المستقيمة التي تعمل على تشويه وخلع بعض عناصر العمارة ، مثل الهيكل



Walt disney concert hall



Guggenheim Museum, Bilbao, Spain

# PRINCIPLES OF DECONSTRUCTION

9 It attempts to move away from the supposedly constricting "rules" of modernism such as:

**A**

~~Form follows function.~~



form follows fantasy

**B**

~~Purity of form~~



Non-purity of shape

**C**

~~Truth to materials~~



The Nature of the material is

## GENERAL CHARACTERISTICS OF DECONSTRUCTIVISM

- Explodes architectural form into loose collections of related fragments.
- Destroys the dominance of the right angle and the cube by using the diagonal line.
- Provokes shock, uncertainty, unease, disquiet, disruption, distortion by challenging familiar ideas about space, order and regularity in the environment.
- Rejects the idea of the 'perfect form' for a particular activity and rejects the familiar relationship between certain forms and certain activities.

ينفجر الشكل المعماري إلى مجموعات فضفاضة من الأجزاء ذات الصلة.

• يدمر هيمنة الزاوية اليمنى والمكعب باستخدام الخط القطري.

• يثير الصدمة وعدم اليقين والقلق والاضطراب والتشويه من خلال تحدي الأفكار المألوفة حول المكان والنظام والانتظام في البيئة.

• ترفض فكرة "الشكل المثالي" لنشاط معين وترفض العلاقة المألوفة بين أشكال معينة وأنشطة معينة.



Walt disney concert hall



Guggenheim Museum, Bilbao, Spain

## Guggenheim Museum, Bilbao, Spain

The work of American architect **Frank O. Gehry**, the Guggenheim Museum has played a key role in the urban revitalization and transformation of the area, in addition to becoming the symbol of the city of Bilbao, Spain.

It is situated on a plot of 32,500 square meters, of which 24,000 square meters are occupied by building. 9,066 square meters are devoted to exhibition spaces.





The design of the building follows the style of Frank Gehry.

It consists of a series of interconnected volumes, some formed of orthogonal **متعامد** coated stone and others from a titanium skeleton covered by an organic skin.

The connection between volumes is created by the glass skin. The museum is integrated into the city both by its height and the materials used.

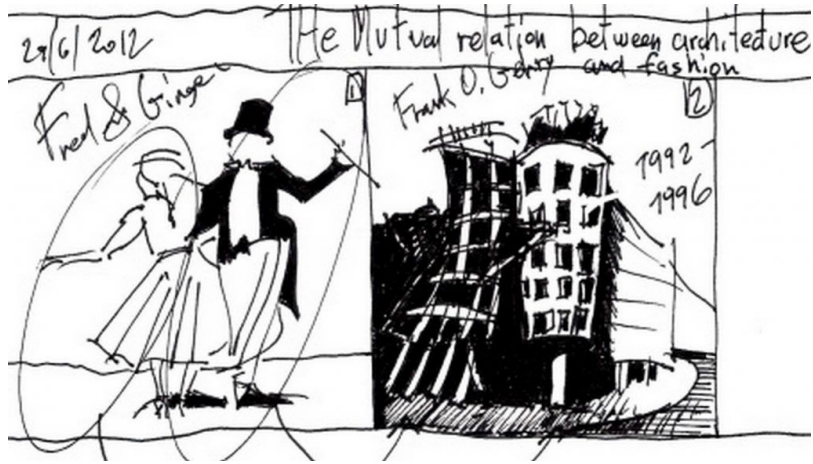


<https://www.youtube.com/watch?v=XrVCVJOcvzs>

## Dancing House in Prag

The Nationale-Nederlanden office building, more often recognised as 'The Dancing House' is a commercial building sitting on the corner plot, looking over the magnificent Vltava river and the surrounding historical structures.

Constructed in 1996, the structure was itself a bold statement that stood out in the monotonous neighbourhood defined by the typical 'Art Nouveau' buildings.



'The Dancing House', the two parts of the building clearly resemble a pair of dancers. Named as an honour to dancers Ginger Rogers and Fred Astair (the legendary dancing couple from the 1930s),

Constructed in Deconstructivist style, the structure contains a static and a dynamic part, existing together, yet seen separately. The rock-solid tower represents the 'Male' or rigid part, while the flowy-glass building symbolises 'Female' or the dynamic side.



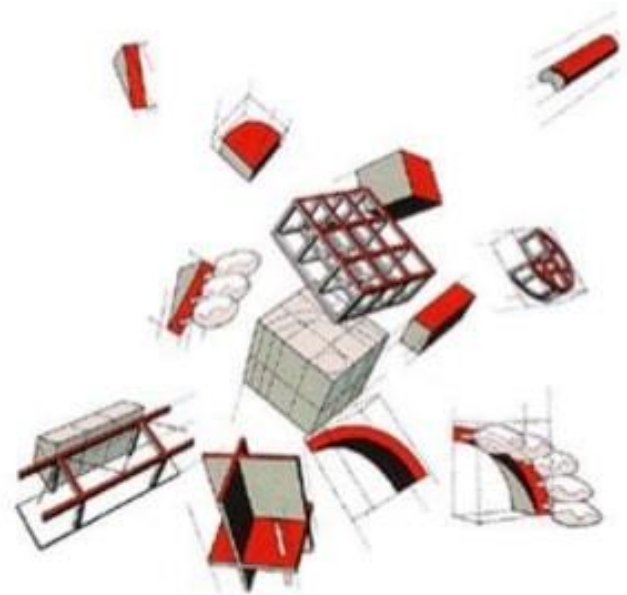
# **Bernard Tschumi and the Urban Park of parc de la villette**

# The Urban Park ; Bernard Tschumi parc de la villette

Bernard Tschumi (1944) is an architect, writer, and educator, commonly associated with deconstructivism.

He works and lives in New York City and Paris. He studied in Paris and at ETH in Zurich, where he received his degree in architecture in 1969.

During the 1970s, through drawings and written texts, Bernard Tschumi insisted that there **is no architecture without events, without actions or activity.**

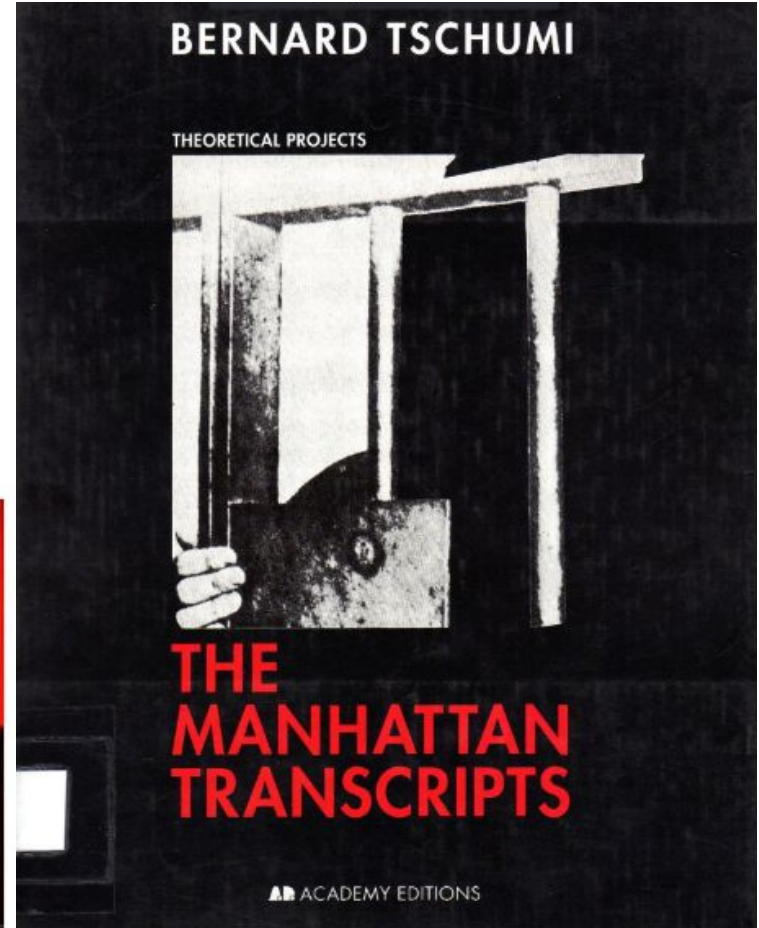


*"Any relationship between a building and its users is one of violence, for any use means the intrusion of a human body into a given space, the intrusion of one order into another." -Bernard Tschumi*

أي علاقة بين مبنى ومستخدميه هي علاقة عنف ، لأن أي استخدام يعني تدخّل جسم بشري في فضاء  
" معين ، وتدخل نظام في آخر .

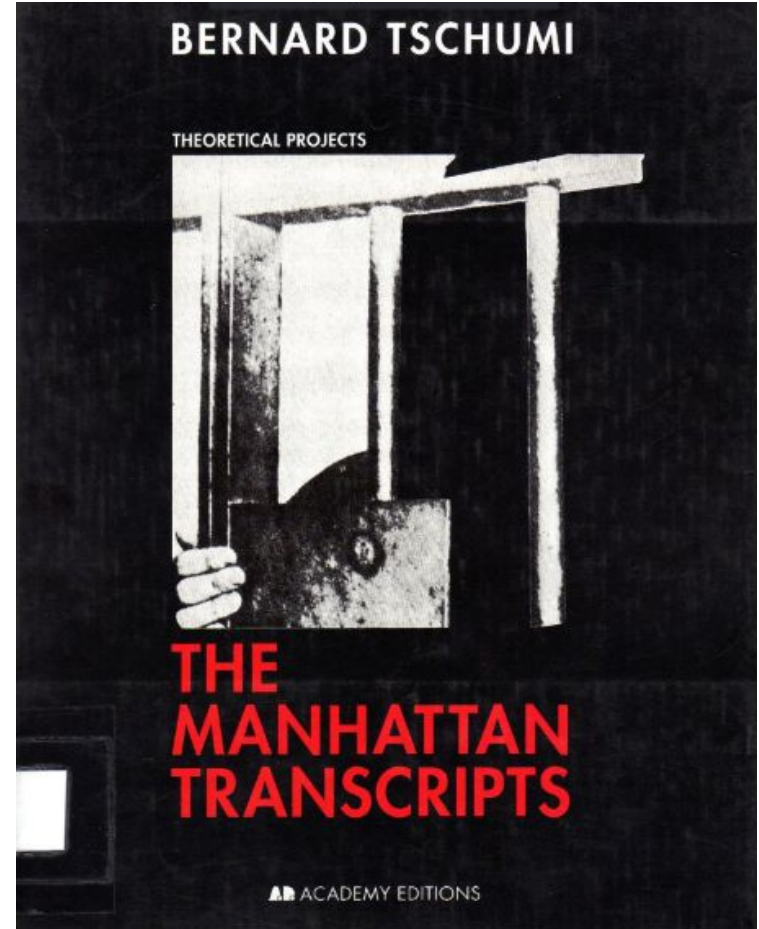
**‘Form follows fiction’** is one example of Bernard Tschumi's rules of architectonic notation that have made him an internationally influential theorist.

- He has applied his theories to the problems of cultural and educational institutions, with his approach evident in his successful proposal for the project that catapulted him to prominence, the Parc de la Villette, Paris in 1998.



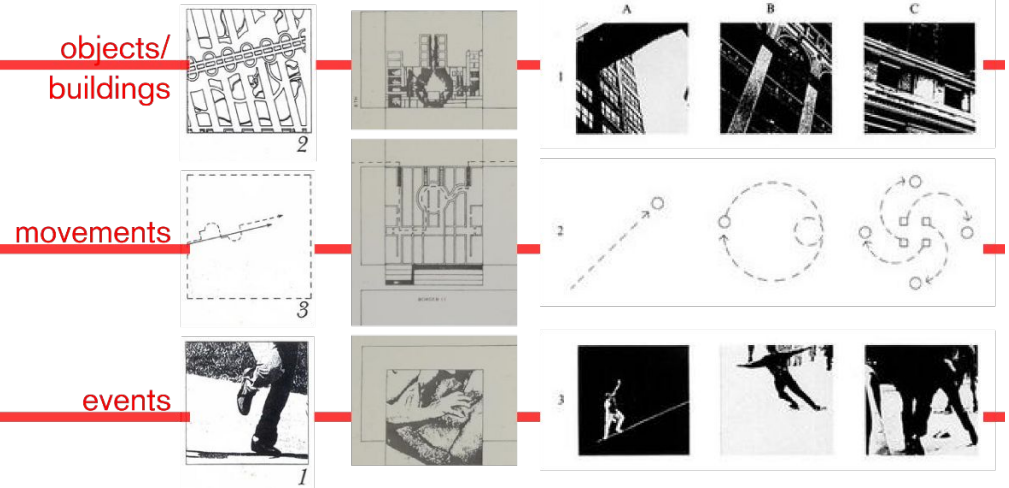
Developed between 1976 and 1981, the Manhattan Transcripts are a theoretical visual work by Swiss-born architect Bernard Tschumi. Bernard Tschumi's The Manhattan Transcripts are a collection of architectural drawings that do not act as a completed proposal. They hang between reality and fantasy. Tschumi uses the transcripts to make sense of an architectural reality that incorporates sequences, movement and functionality.

تم تطوير نصوص مانهاتن بين عامي 1976 و 1981 ، وهي عمل مرئي نظري للمهندس السويسري المولد برنارد تشومي. نصوص مانهاتن لبرنارد تشومي عبارة عن مجموعة من الرسومات المعمارية التي لا تعمل كاقتراح مكتمل. هم معلقون بين الواقع و الخيال



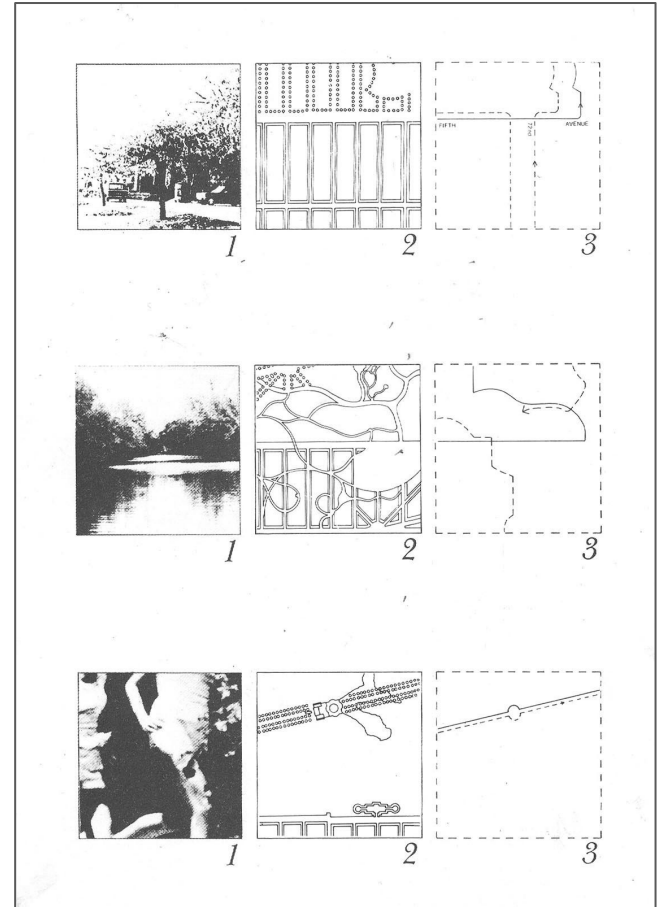


Tschumi complements his work with photographs, schemes and collages (combining axonometric projections, drawings, cut out photographs). He develops the formula object-movement-event.



For example, Episode 1, which is called “The Park”, reveal a murder in New York’s central park using several types of representations like photographs of the event, site plans, and finally illustrated diagrams.

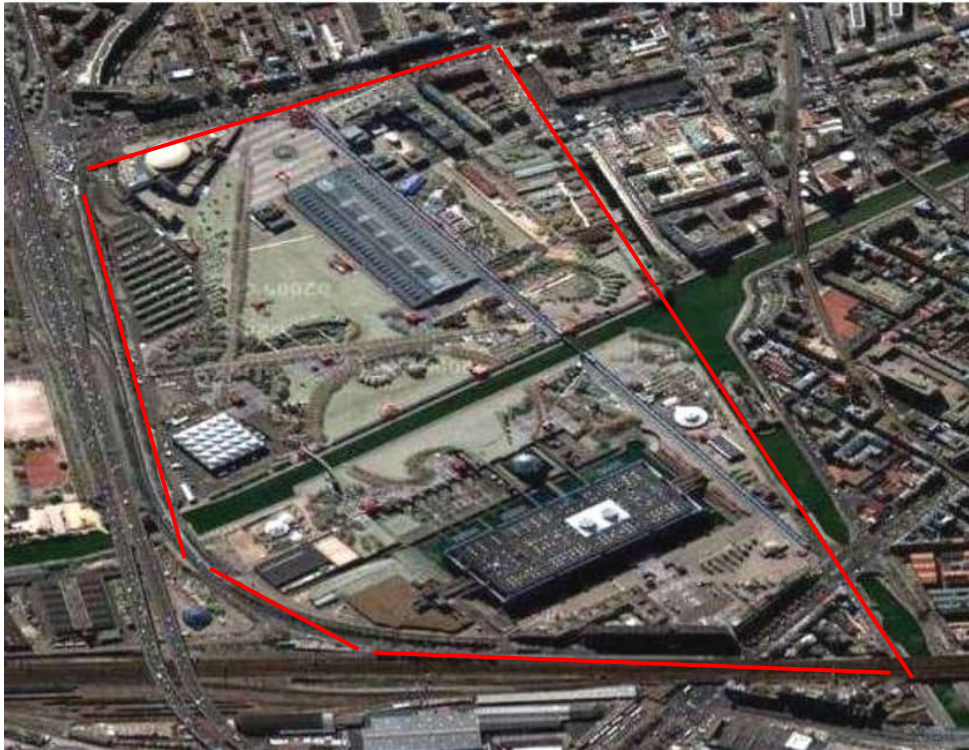
[https://issuu.com/autorizado/docs/the\\_manhattan\\_transcripts](https://issuu.com/autorizado/docs/the_manhattan_transcripts)



Snapshots of Episode 1: “The Park”

History of the site : • First, it was the former site of a slaughter house that employed more than 3,000 people.  
• Second, two canals run through the site.  
The Ourcq canal supplied water to the city of Paris and the St. Denis canal was used to transport cargo and freight.

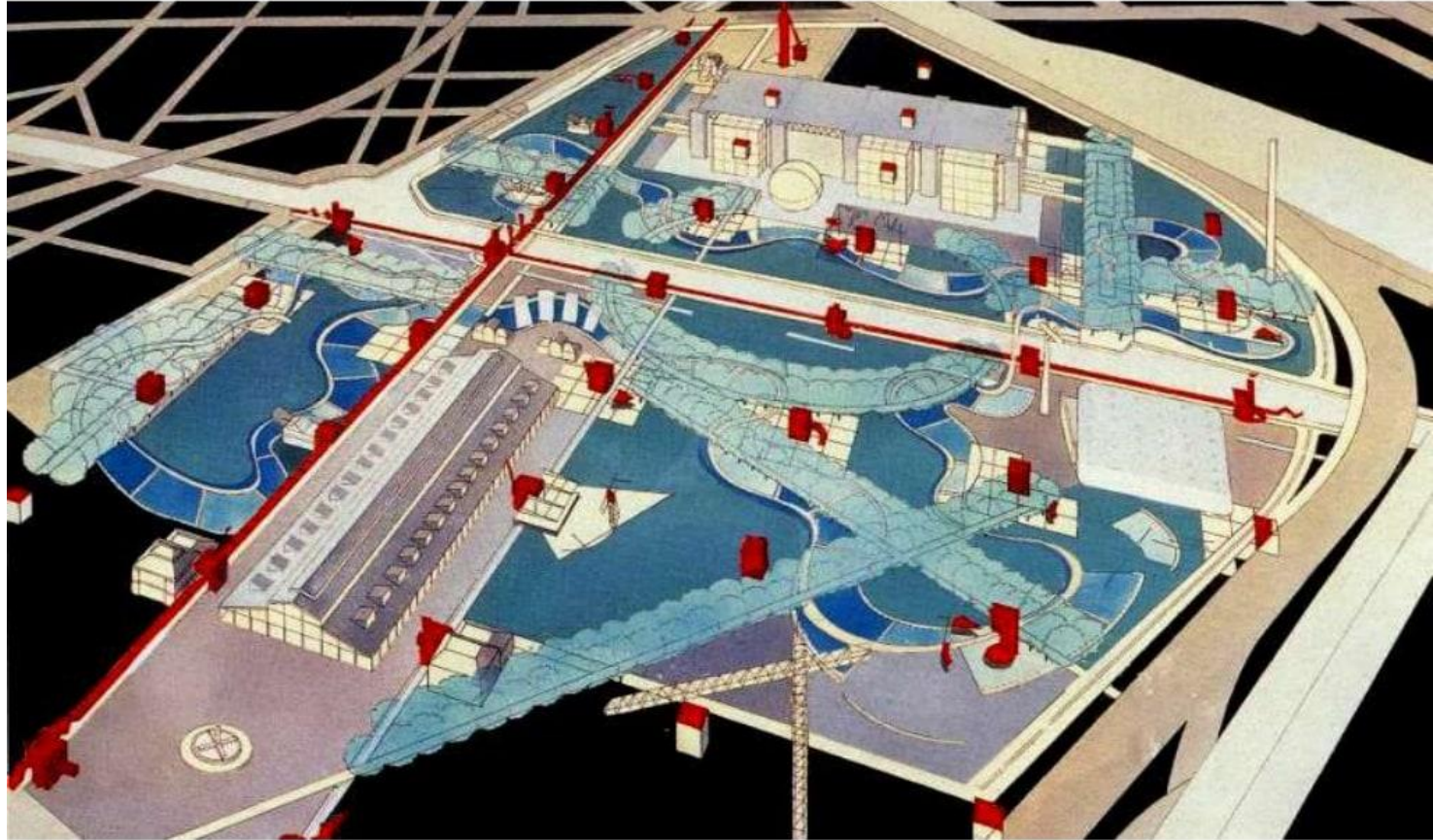
Parc de La Villette, Paris, 1982 - 97.



Aerial View of  
the site while  
under  
construction.

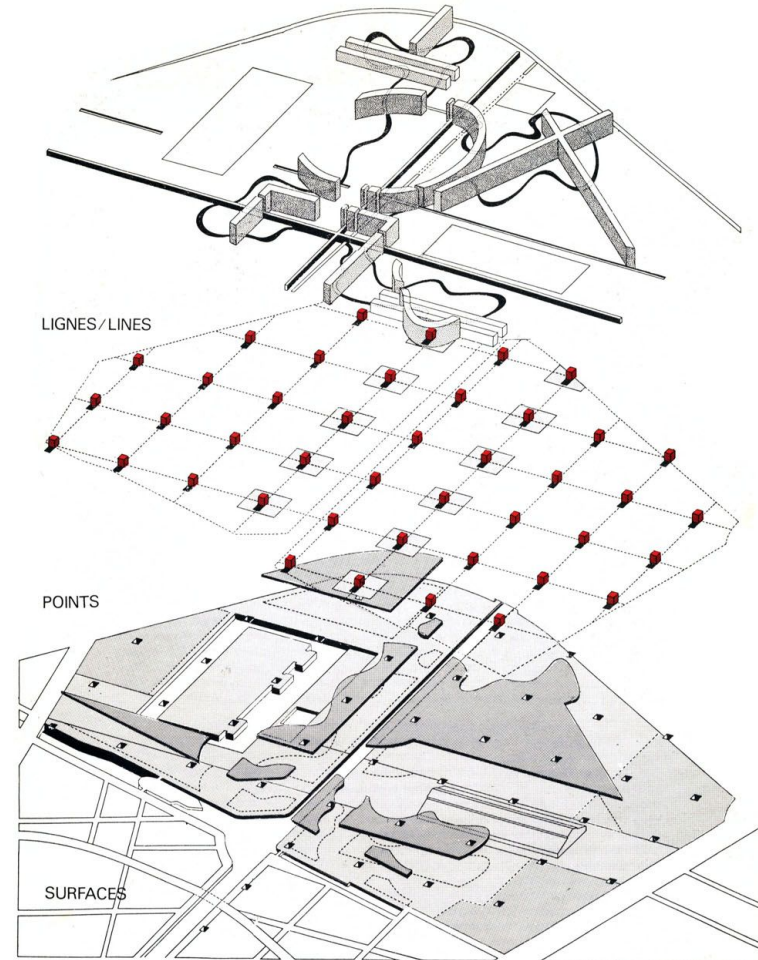
Parc de La Villette, Paris, 1982 - 97.

La Villette appears as a multiple programmatic field, containing in addition to the park, **the large Museum of Science and Industry, a City of Music, a Grande Halle for exhibitions and a rock concert hall.**



The basis of the design is the superimposition of three independent systems, namely:

1. Points
2. Lines
3. Surfaces



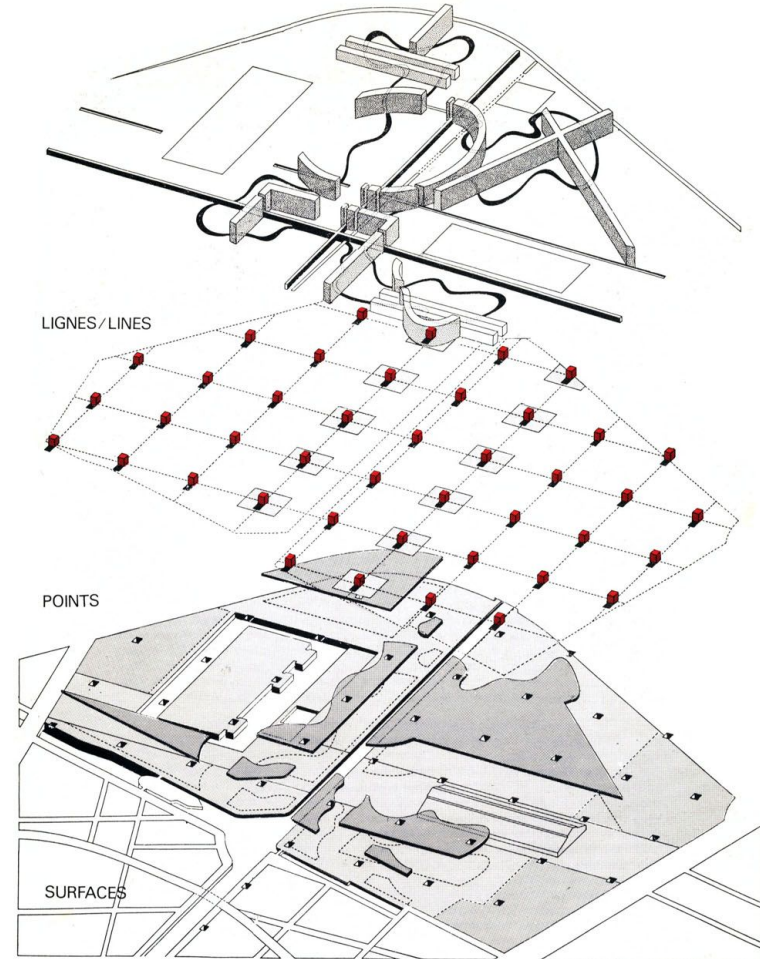
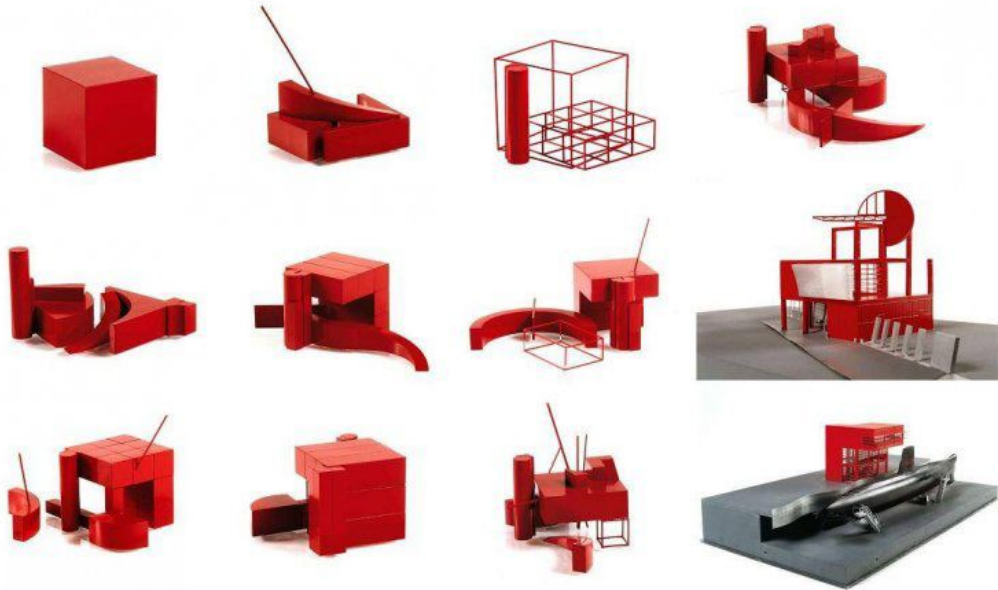
Superimposition: lines, points, surfaces.

THE SUPERIMPOSITION OF THE THREE SYSTEMS (POINTS, LINES, SURFACES) CREATES THE PARK AS IT GENERATES A SERIES OF CALCULATED TENSIONS WHICH REINFORCE THE DYNAMISM OF THE PLACE. EACH OF THE THREE SYSTEMS DISPLAYS ITS OWN LOGIC AND INDEPENDENCE

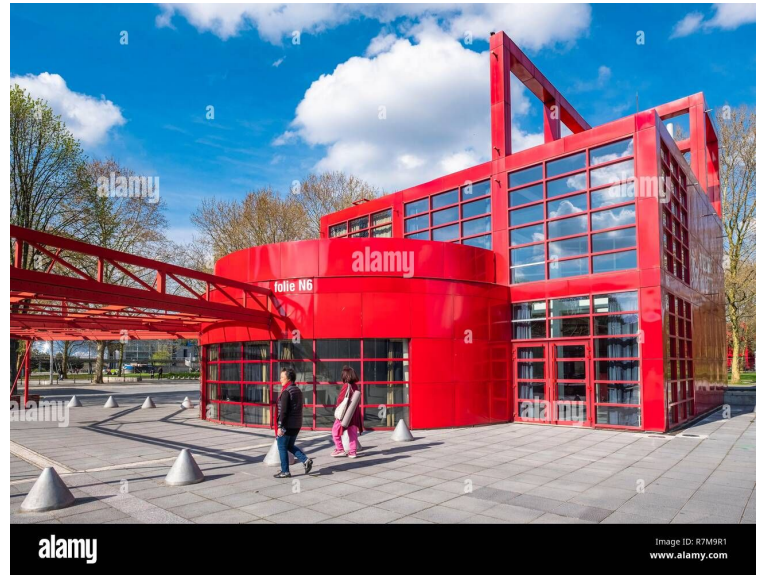
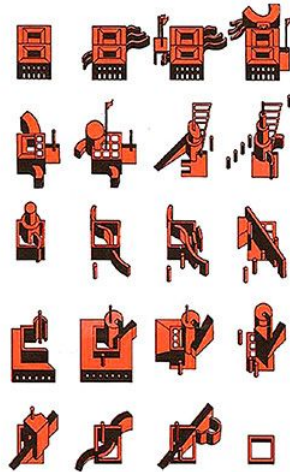
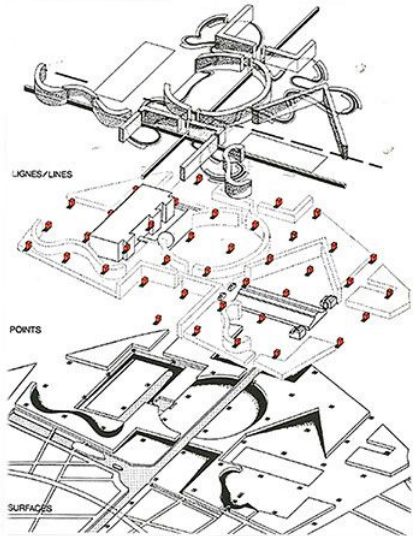
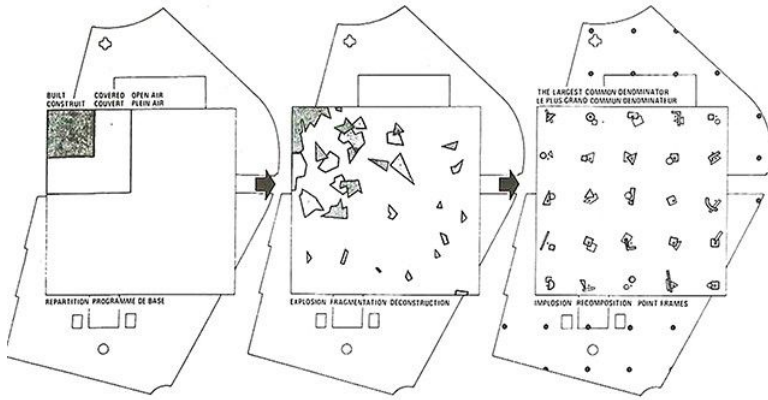
# 1. Points

• The folies .The form of each is a basic 10 x 10 x 10 meter cube or three-story construction of neutral space that can be transformed and elaborated according to specific programmatic needs.The repetition of folies is aimed at developing a clear symbol for the park, a recognizable identity as strong as the British public telephone booth .

كتل هندسية : شكل كل منها عبارة عن مكعب أساسي بحجم  $10 \times 10 \times 10$  أمتار أو بناء من ثلاثة طوابق لمساحة محايدة يمكن تحويلها وتفصيلها وفقاً لاحتياجات برنامجية محددة. الحديقة ، هوية معترف بها قوية مثل كابينة الهاتف العامة البريطانية ..



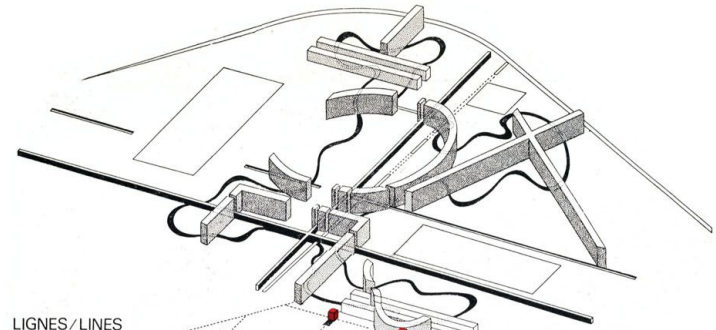
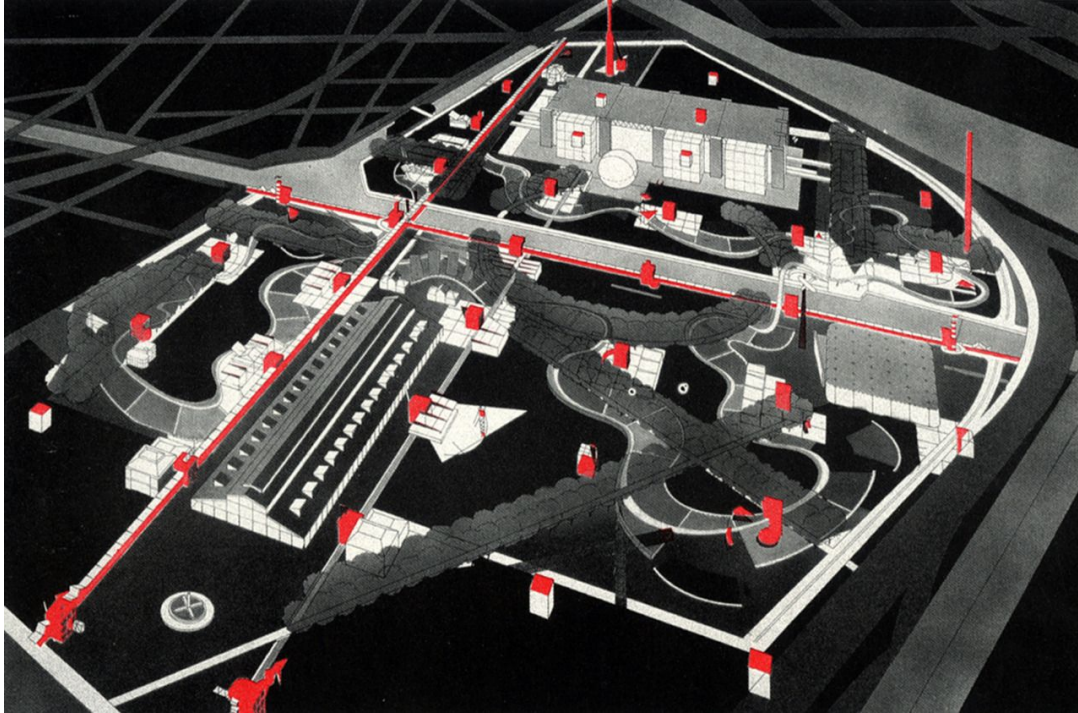
THE SUPERIMPOSITION OF THE THREE SYSTEMS (POINTS, LINES, SURFACES) CREATES THE PARK AS IT GENERATES A SERIES OF CALCULATED TENSIONS WHICH REINFORCE THE DYNAMISM OF THE PLACE. EACH OF THE THREE SYSTEMS DISPLAYS ITS OWN LOGIC AND INDEPENDENCE



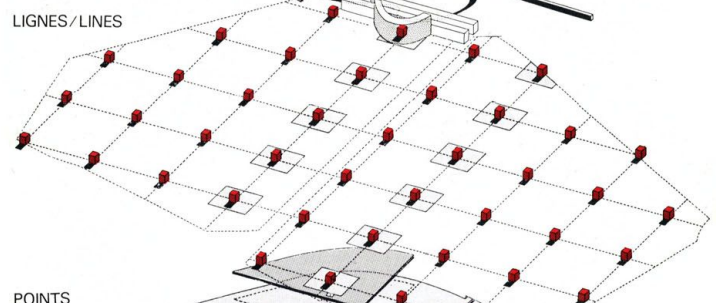


## 2. Lines

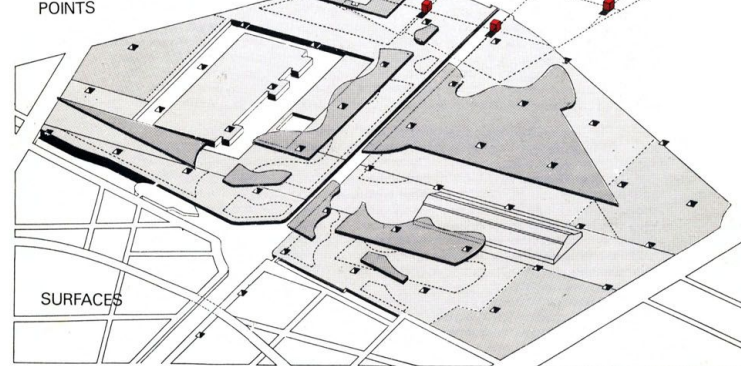
The folie grid is related to a larger coordinate structure, an orthogonal system of high-density pedestrian movement.



LIGNES / LINES



POINTS



SURFACES

THE SUPERIMPOSITION OF THE THREE SYSTEMS (POINTS, LINES, SURFACES) CREATES THE PARK AS IT GENERATES A SERIES OF CALCULATED TENSIONS WHICH REINFORCE THE DYNAMISM OF THE PLACE. EACH OF THE THREE SYSTEMS DISPLAYS ITS OWN LOGIC AND INDEPENDENCE





gettyimages  
Lily FRANNEY

### 3.Surfaces

The park surfaces receive all activities requiring large expanses of horizontal space for play, sports and exercise, mass-entertainment, markets and so forth.

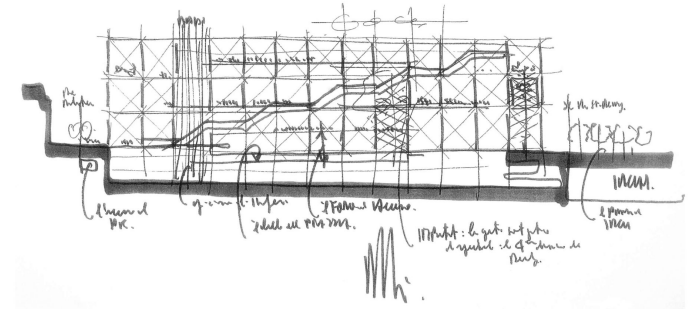
During summer nights, for example, the central green becomes an open air film theater for 3,000 viewers.

تستقبل أسطح المنتزهات جميع الأنشطة التي تتطلب مساحات شاسعة من المساحات الأفقية للعب والرياضة والتمارين الرياضية والترفيه الجماعي والأسواق وما إلى ذلك

خلال ليالي الصيف ، على سبيل المثال ، تتحول المنطقة الخضراء المركزية إلى مسرح سينما في الهواء الطلق يتسع لـ 3000 مشاهد

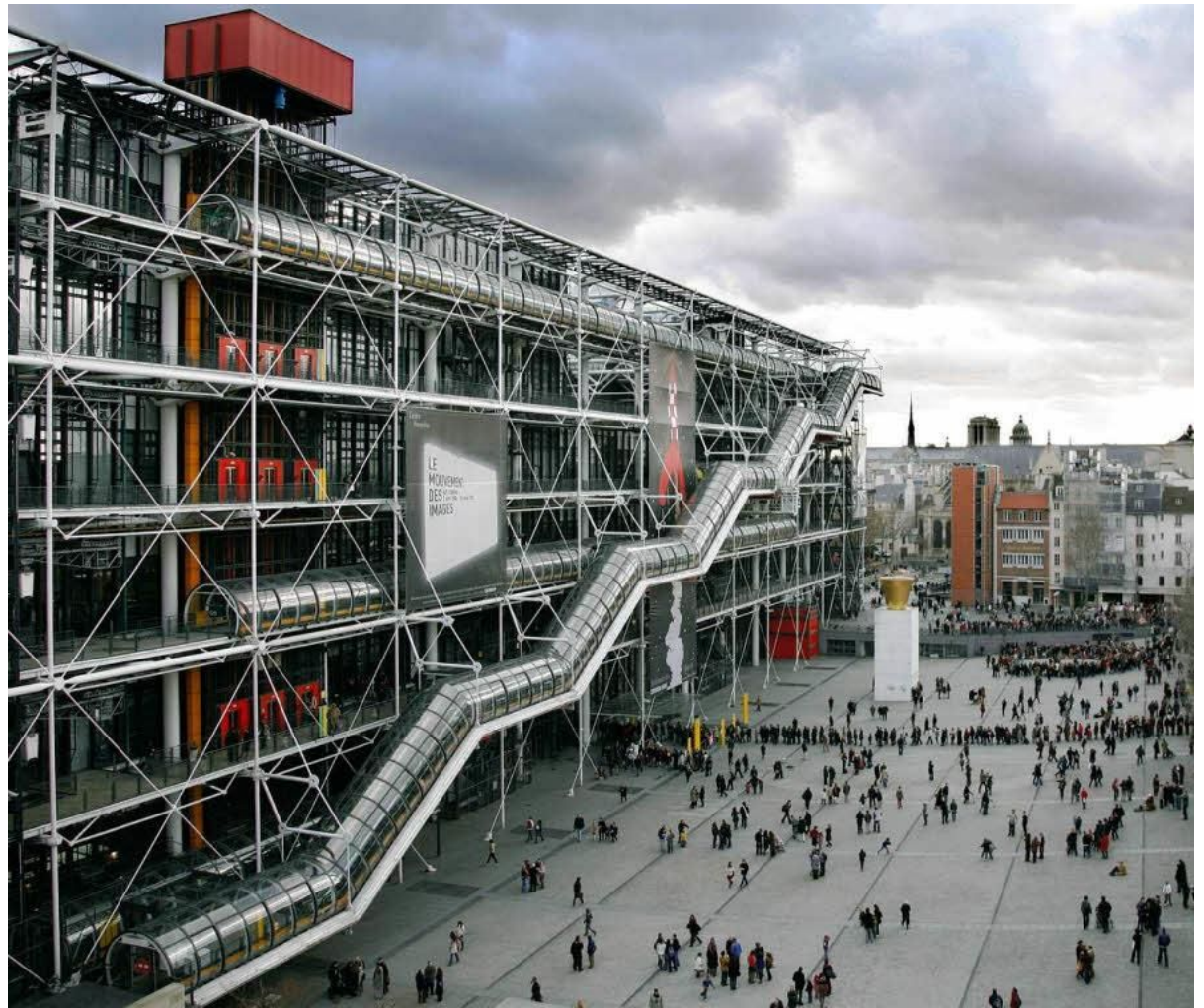


# Richard Rogers & Renzo Piano and the Pompidou Center

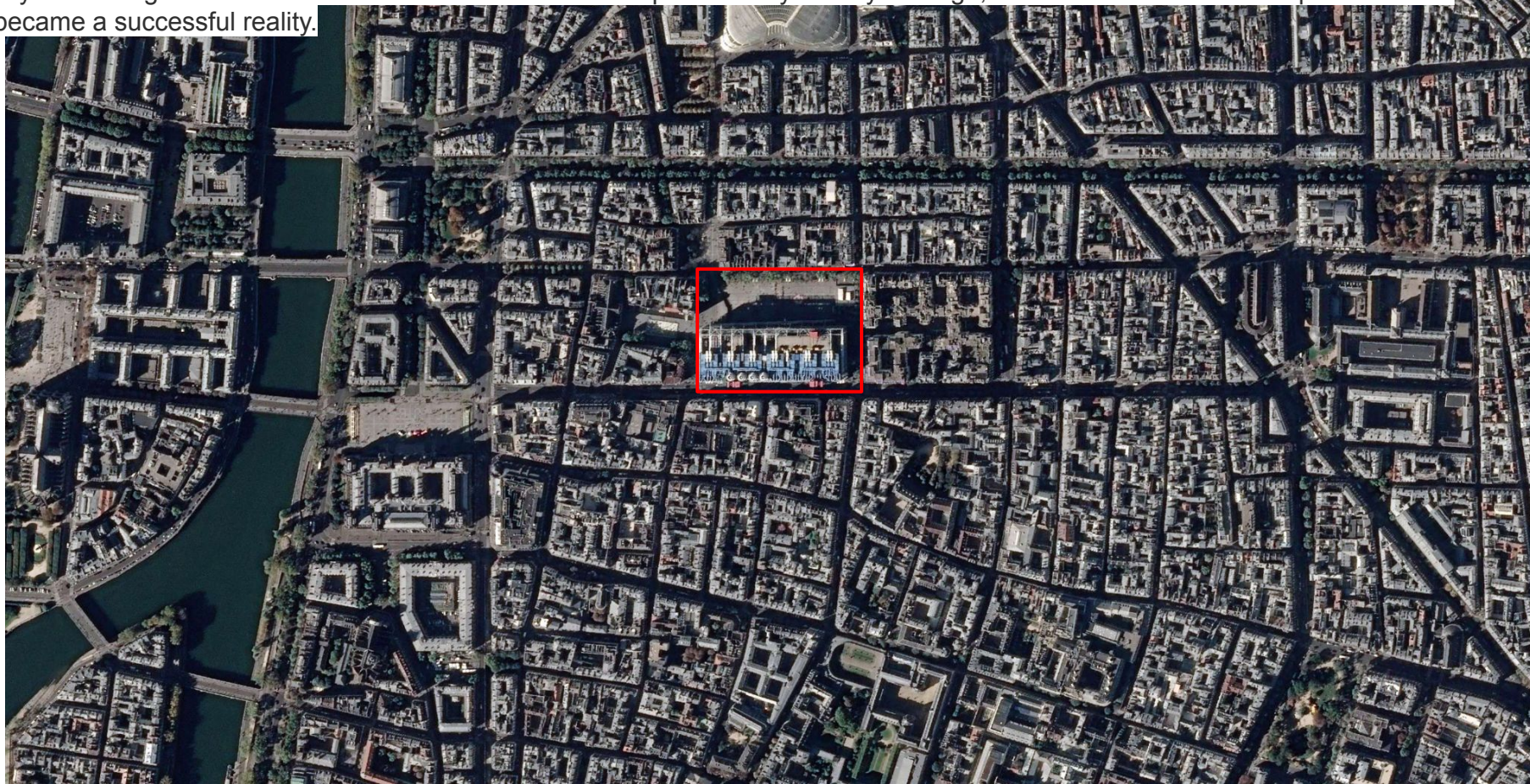


# Pompidou Center

- Centre Georges Pompidou
- Paris, France
  
- Designed by Richard Rogers & Renzo Piano
  
- Postmodern/High-Tech
  
- Built from 1971-1977
  
- Housed the Public Information Library, Musée National d'Art Moderne, and IRCAM



The cultural center in [Paris](#), France turned our world inside out, literally. It all began with Georges Pompidou, President of France from 1969 to 1974, who wanted to construct a cultural center in [Paris](#) that would attract visitors and be a monumental aspect of the city. Receiving more than 150 million visitors since its completion thirty three years ago, there is no doubt that Pompidou's vision became a successful reality.

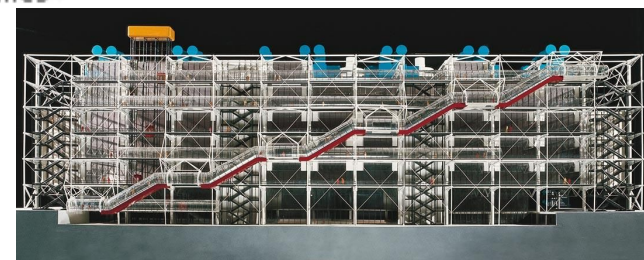
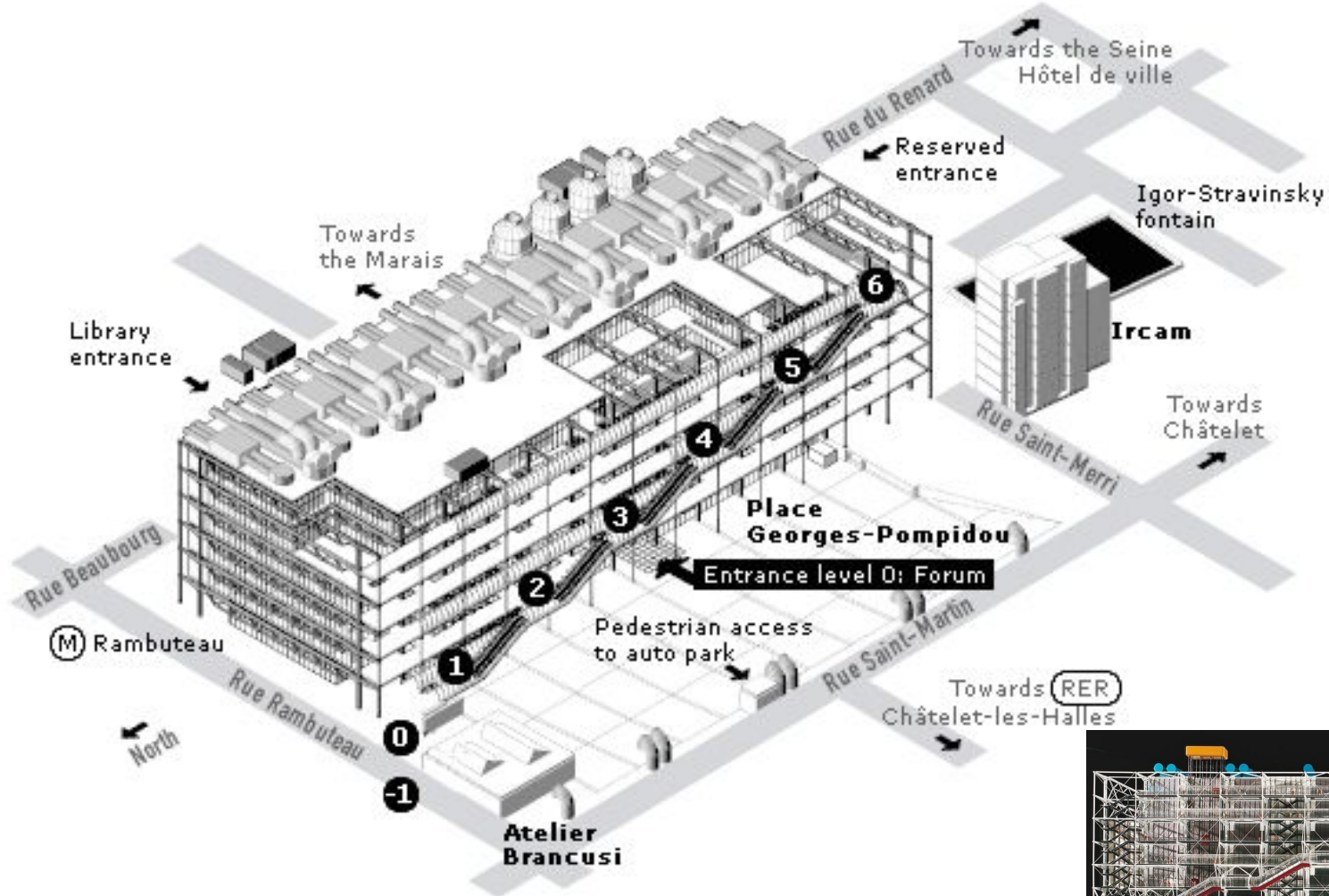




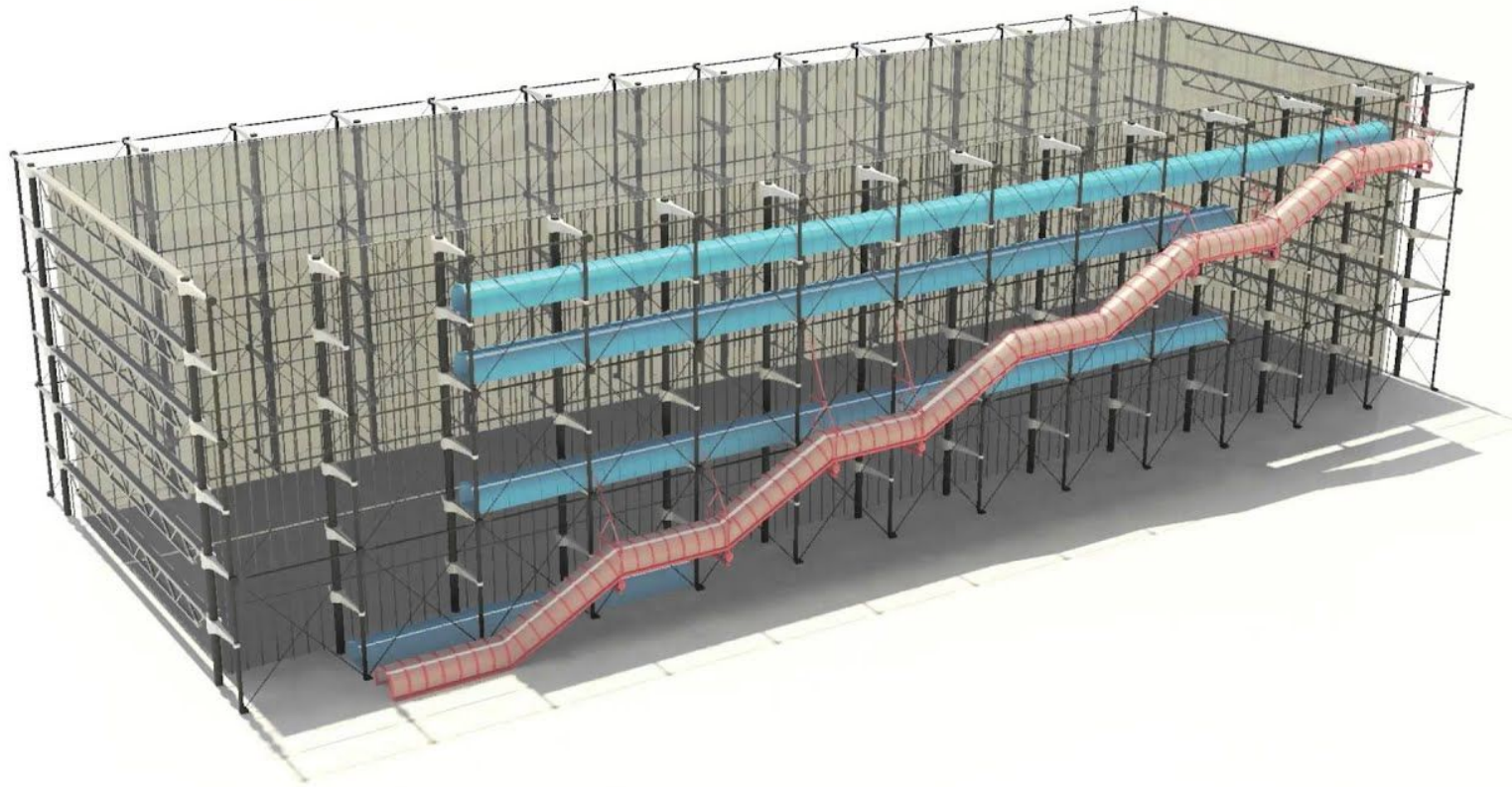








# Vertical Circulation



<https://www.youtube.com/watch?v=QVa4ljHlu6o>

## Mechanical Systems

- Everything is color coated
- Green = Plumbing
- Blue = Climate control
- Yellow = Electrical
- Red = Circulation Elements and Safety devices



