Theories of Architecture

ENAR 329

Arch. Nadia Asali
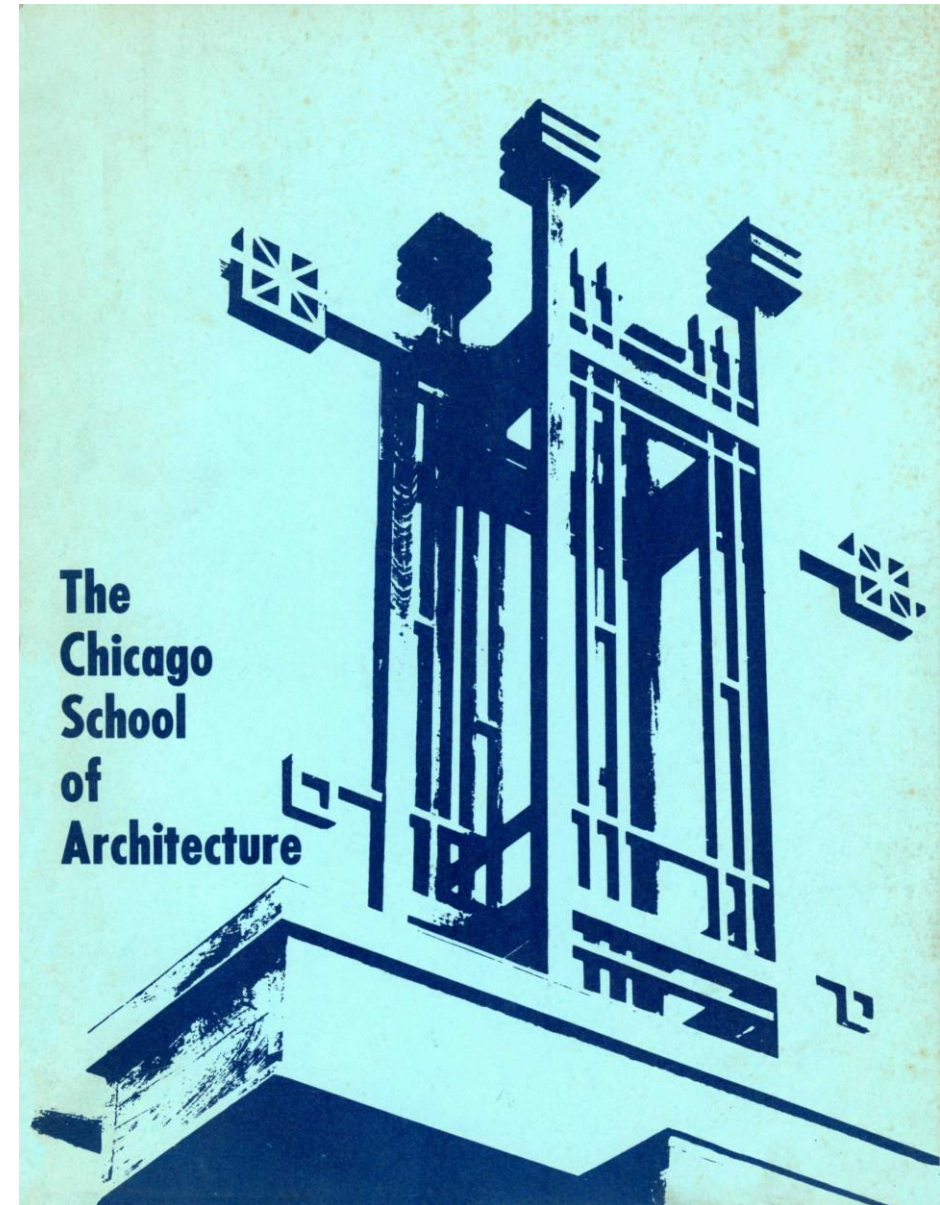
Lecture 3
Architecture Beyond the Industrial Revolution
Schools and Architectural Movements acted as cues and initiators for Modernity

09.Oct.2021

Chicago School of Architecture and the Birth of Skyscrapers

1890 – 1910

The Chicago School of Architecture

The Industrial Revolution started to change the face of the world. **It marked the end of the era of handcrafted products and introduced mass production using machinery powered by steam engines**. Among the revolutionary products that highly benefited from mass production is steel. **The availability of steel, in addition to the invention of the elevator, led construction and structure engineers to dream of a new world of possibilities, but we could sum it up in one word: "Skyscrappers".**

1890 – 1910

Problems facing American architecture

•The absence of good architectural models

•There was a need for a universal culture of architecture such as existed in Europe

•Baux-arts system failed to produce an architecture appropriate to modern life.

المشاكل التي واجهت العمارة الأمريكية

• عدم وجود نماذج معمارية جيدة
• كانت هناك حاجة لثقافة عالمية للهندسة المعمارية مثل تلك الموجودة في أوروبا
• فشل نظام Baux-Arts في إنتاج بنية مناسبة للحياة الحديثة.

Chicago Savings Bank Building
1904-05, Holabird & Roche

Also Known as Commercial style, the Chicago school was a school of architects active in Chicago at the turn of the 20thcentury.

They were among the first to promote the new technologies of **steel-frame construction** in commercial buildings.

Beginning in the early 1880s, the Chicago School **pioneered steel-frame construction and, in the 1890s, the use of large areas of plate glass.**

These were among the first modern skyscrapers.

Many world-famous architects played a significant role in the development of Chicago – **rising from the ashes of the 1871 Great Chicago Fire into one of the world's largest cities and greatest collections of modern architecture.**

THE CHICAGO SCHOOL . . .

The great fire in Chicago

In 1871 a devastating fire destroyed most of downtown Chicago. This frontier American city, unfettered with European traditions, **now had a blank slate upon which to rebuild.**

Social and economic factors after the fire, as well as the technological advances of the time, gave rise here to the world's first skyscrapers.

The architects that contributed to this unprecedented type of commercial building, including Louis Sullivan, were collectively known as the Chicago School'.

THE GREAT CHICAGO FIRE

Conflagration that began on Sunday, October 8, 1871, and burned until early October 10, devastating an expansive swath of the city of Chicago. After the smoke cleared, the extent of the disaster revealed itself: the fire had burned thousands of acres, killing hundreds of people and causing millions of dollars in damage. The city rebuilt quickly, its population increasing from 324,000 in 1871 to 500,000 by 1880.

$200 MILLION IN DAMAGE
$3.77 billion in 2016
$200 million in 1871

300 FATALITIES (estimated)
= 5 people

17,450 BUILDINGS DESTROYED
= 1,000 buildings

100,000 PEOPLE LEFT HOMELESS
31%

STARTED BY (THEORIES)
- vandals
- milk thieves
- spontaneous combustion
- drunken neighbor
- the O'Learys' legendary cow

FUELED BY
- months without rain
- strong southwest wind
- congested poor neighborhoods
- wooden buildings, streets, sidewalks
- technical and human errors in alarm system

STOPPED BY
- rainfall
- Lake Michigan
- stretches of unbuilt lots
- gunpowder explosions

The 2nd star from the left on the Chicago flag represents the Great Chicago Fire.

THE BURNT DISTRICT
2,124 acres burned

Lincoln Ave. — Halsted St. — North Ave. — Division St. — Mahlon Ogden residence survived. — Water Tower survived. — Chicago Ave. — Kinzie St. — Wells St. — Clark St. — CHICAGO — Chicago River — Madison St. — State St. — Michigan Ave. — Harrison St. — Wind direction — Lake Michigan

0 1/4 1/2 mi
0 1/2 km
Map source: The Newberry Library

A Where the great fire began: De Koven St. barn of Patrick and Catherine O'Leary. Current location of the Chicago Fire Department training academy.

B Area burned by the October 7 fire, which had exhausted firefighters and damaged equipment.

REBUILT BY
talented architects who were drawn by postfire rebuilding opportunities:
Louis Sullivan
Dankmar Adler
Daniel H. Burnham
John Wellborn Root
William Holabird
William Le Baron Jenney

© Encyclopædia Britannica, Inc

The development of the skyscraper can be understood not **only as an architectural style but as the manifestation of the Chicago fire 1871 turned into redemption.** الخلاص

Designed by William Le Baron Jenney , **the home insurance building was an icon. He used cast iron as a fireproof construction which melts at high temperatures and clad the building's exterior with traditional masonry .**
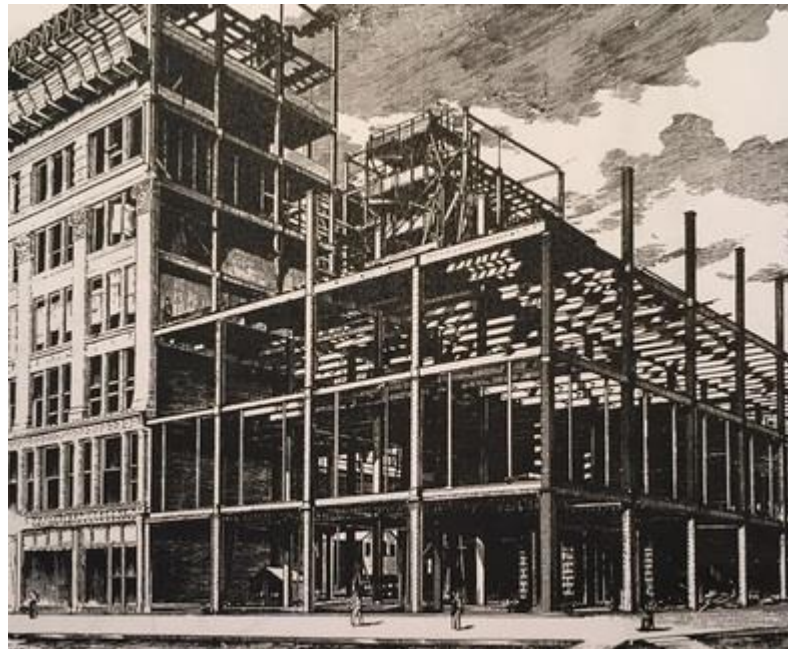
The steel frame during construction

the home insurance building

One of the distinguishing features of the Chicago **School is**
 -the use of steel-frame buildings with masonry cladding ,
 - allowing large plate-glass window areas and limiting the amount
of exterior ornamentation.

**The "Chicago window" originated in this school. It is a three-part
window consisting of a large fixed center panel flanked by two
smaller double-hung sash windows. The arrangement of windows on
the facade typically creates a grid pattern**, with some projecting out
from the facade forming bay windows. The Chicago window combined
the functions of light-gathering and natural ventilation

**The Chicago window
combined the functions of
light-gathering and natural
ventilation;** a single central
pane was usually fixed, while
the two surrounding panes
were operable.

From this in 1871 …

… to this in 1896

Chicago School window grid

Rookery Building

The Rookery Building is a historic landmark completed by Ohin wellborn and Daniel Burnham in 1888. The building is 12 storey tall and is considered the oldest standing high rise in Chicago . Has an interior steel frame .

There is nothing bolder more original or more inspiring in modern civic architecture than its glass covered court" wrote the critic henry Van Brunt .

Making good use of light and ornamentation . The architects designed a central light court to serve as the focal point for the entire building and provide daylight to interior offices.

https://www.youtube.com/watch?v=reS3jFrS1o4
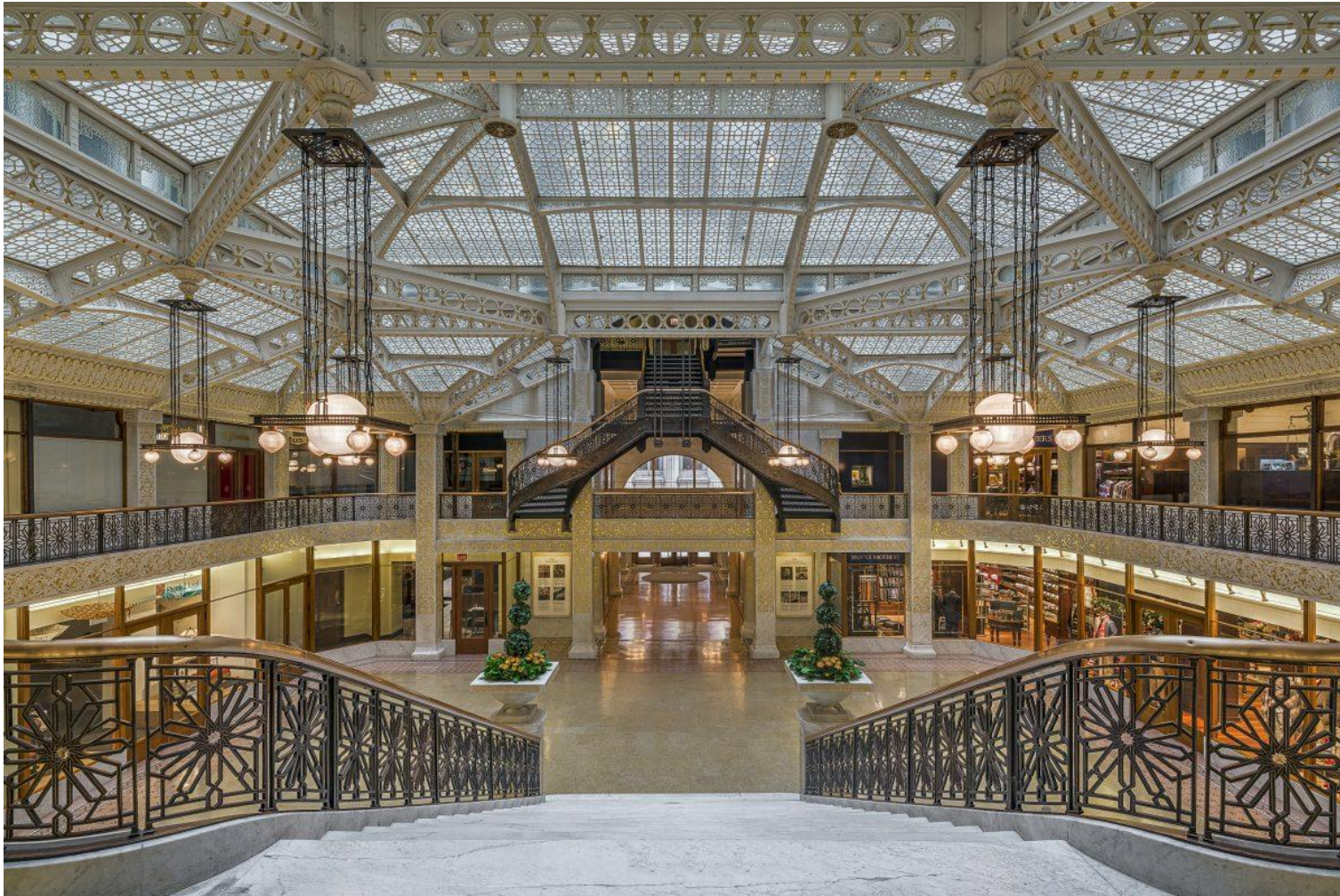
Reliance Building

One of the 1st skyscrapers to **have large plate glass windows** that make up the majority of its surface area, **foreshadowing a design feature that would become dominant in the 20th century.**

Architect Daniel Burnham

Location Chicago

Building early skyscraper, commercial office tower
Type - 14 floors

Detail: bay window · Reliance Building · Chicago, Illinois

www.GreatBuildings.com
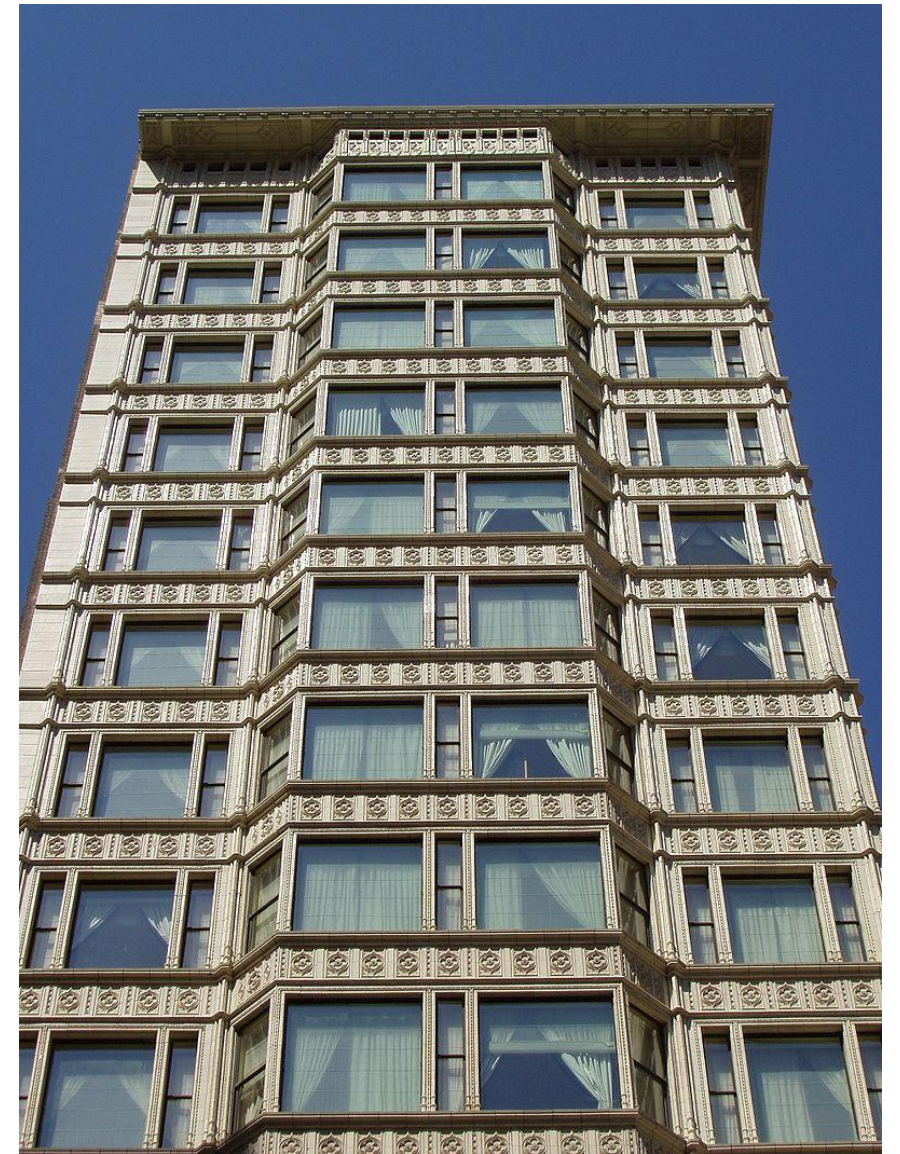
A bay window has three openings, available in angled projections.

Louis Sullivan, in full Louis Henry Sullivan . 1856-1924.

American architect, regarded as **the spiritual father of modern American architecture** and identified with the aesthetics of early skyscraper design.

His more than 100 works in collaboration (1879–95) with Dankmar Adler include the Auditorium Building, Chicago (1887–89); the Prudential Building and the Wainwright Building, St. Louis, Missouri. Frank Lloyd Wright apprenticed for six years with Sullivan at the firm.

"form ever follows function"

For Sullivan, a building should respond to its own particular environment, just as a plant would grow "naturally, logically, and poetically out of all its conditions."
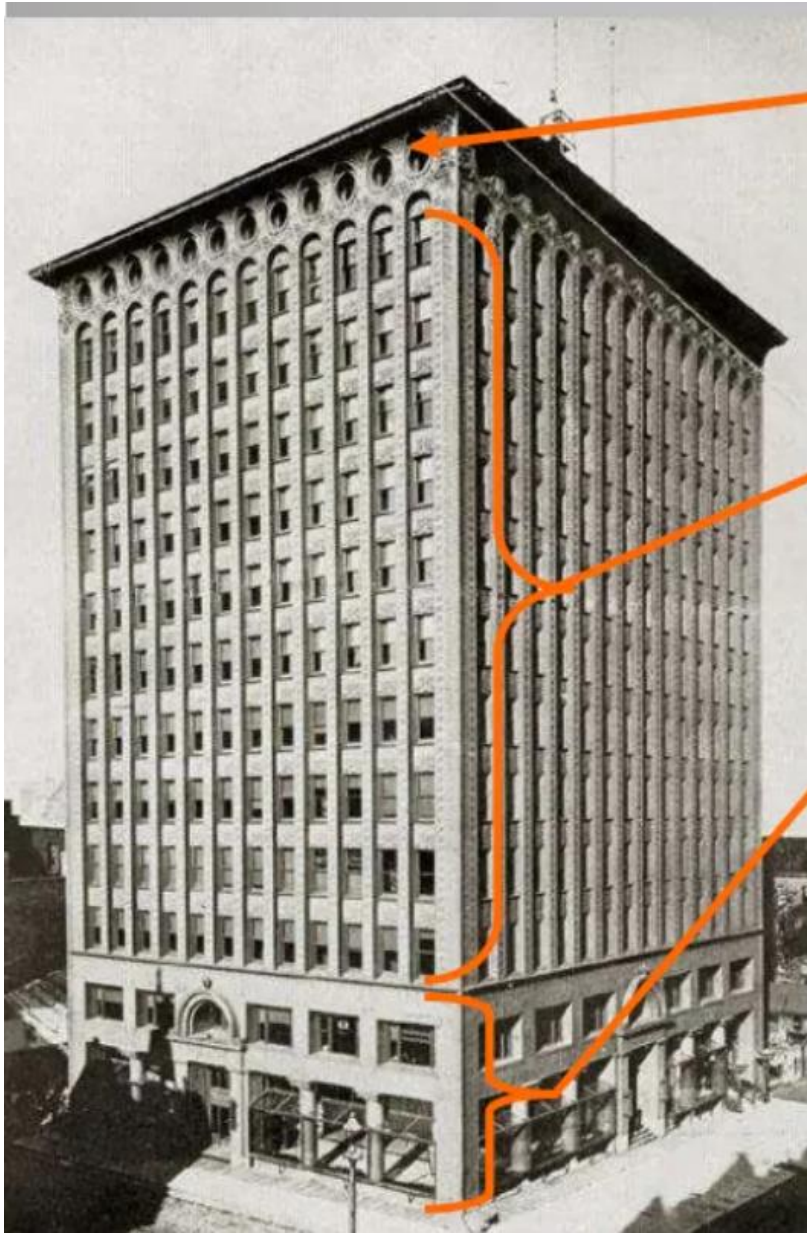
The top level houses mechanical devices such as elevator engines and water tanks. Its appearance proclaims its difference in function from the rest of the building.

A succession of workers offices fill the upper stories and are modular and repetitive in appearance.

Street level spaces for shops, banks, and public commerce. These are large, open spaces "liberal, expansive and sumptuous" that will flow up into the second storey.

Louis Sullivan. Prudential Building in Chicago.

Prudential Building in Chicago Divided into 4 Zones

1. The basement was the mechanical and utility area. Since this level was below ground, it did not show on the face of the building.

2. The next zone was the ground-floor zone which was the public areas for street-facing shops, public entrances and lobbies.

3. The third zone was the office floors with identical office cells clustered around the central elevator shafts.

4. The final zone was the terminating zone, consisting of elevator equipment, utilities and a few offices.
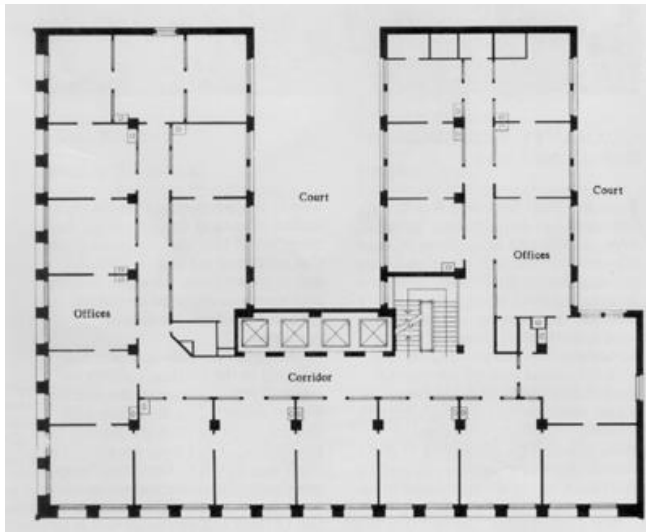
Typical upper floor plan

New construction was more than just rebuilding in more permanent materials. It was driven by explosive demographic and economic growth.

City became railroad center of continent.

Land became extremely expensive which led to Piling up stories to structures of 8, 12, 16 or more stories. Accessible by the elevator

Reliance Building, Chicago.

كان البناء الجديد أكثر من مجرد إعادة بناء بمواد أكثر ثباتًا. كان مدفوعا بنمو ديموغرافي واقتصادي متفجر.

أصبحت المدينة مركز السكك الحديدية في القارة.

أصبحت الأرض باهظة الثمن مما أدى إلى تكديس الطوابق إلى مباني من 8 أو 12 أو 16 طابقًا أو أكثر. يمكن الوصول إليها عن طريق المصعد

Among the first skyscrapers built in the world, **the Wainwright Building** by Louis Sullivan and partner Dankmar Adler is regarded as **an influential prototype of a modern office architecture.**

The higher floors of the Wainwright Building were for offices, and the top houses water tanks and building machinery. Retail openings required large glazed openings, which elegantly and delicately sit under the massive building. The windows up the facades of the Wainwright Building are all inset slightly behind their surrounding columns and piers, to withhold Sullivan's vertical aesthetic.

Aesthetically, the Wainwright Building exemplifies Sullivan's theories about the tall building, which included a tripartite (three-part) composition (base-shaft-attic) based on the structure of the classical column. And his desire to emphasize the height of the building. He wrote: "[The skyscraper] must be tall, every inch of it tall. The force and power of altitude must be in it the glory and pride of exaltation must be in it. It must be every inch a proud and soaring thing, rising in sheer exultation that from bottom to top it is a unit without a single dissenting line.

Sullivan believed that the ornament is an extension of the structure.

Auditorium Building

CITY BEAUTIFUL MOVEMENT
1890s and 1900s
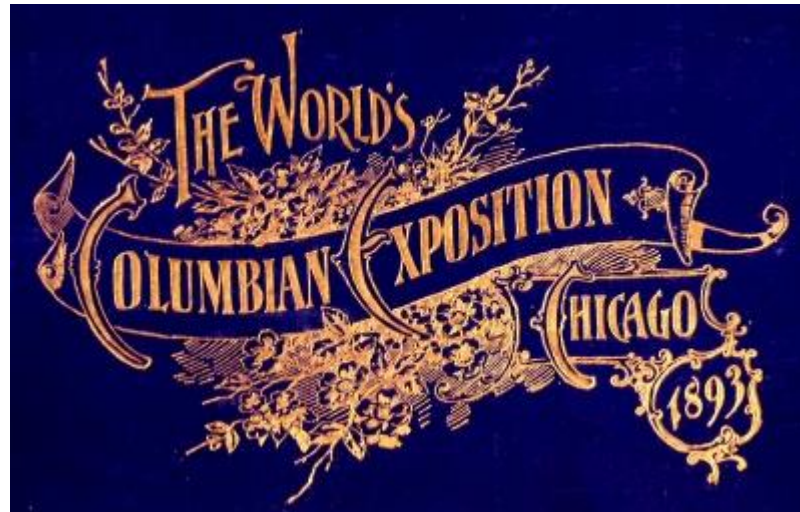
By 1910 America was on the verge of an urban majority population, marking a pivotal moment in the nation's history. **From 1860 to 1910, the US population tripled from 31.4 million to 91.9 million residents.**

The industrial revolution was drastically **changing the American landscape and people clustered in the urban centers in search of manufacturing jobs.**

- **Cities could not support the mass migration** and quickly **became overcrowded**, consumed by poverty and poor sanitation. labour strikes and disease. **Overall urban ugliness at alongside corrupt government structures set the tone for social unrest**

Architect and Urban Designer, Daniel Burnham, and Landscape Architect, Fredrick Law-Olmsted recognized the **dismal state of American urban affairs and hoped to reverse these conditions. They believed that the built environment held the power to permeate the urban psyche and foster a more civil society.**

كانوا يعتقدون أن البيئة المبنية لديها القدرة على اختراق الروح الحضرية وتعزيز و تحسين المجتمع المدني .

Their ideology became known at **the City Beautiful Movement** and was first introduced at the 1893 World's Columbian Exposition in Chicago.

ORIGIN

WHY it began ?

The City Beautiful movement emerged at a time in U.S. history when the country experienced *rapid urbanization.* Most city dwellers perceived that cities were ugly, congested, dirty, and unsafe. As cities grew, an increasingly rapid condition enhanced by an influx of immigrants at the end of the 19th century- public space was being usurped leading to increased congestion.

Launched at World's Columbian Exposition

BIRDS-EYE VIEW OF THE WORLD'S COLUMBIAN EXPOSITION, CHICAGO, 1893.
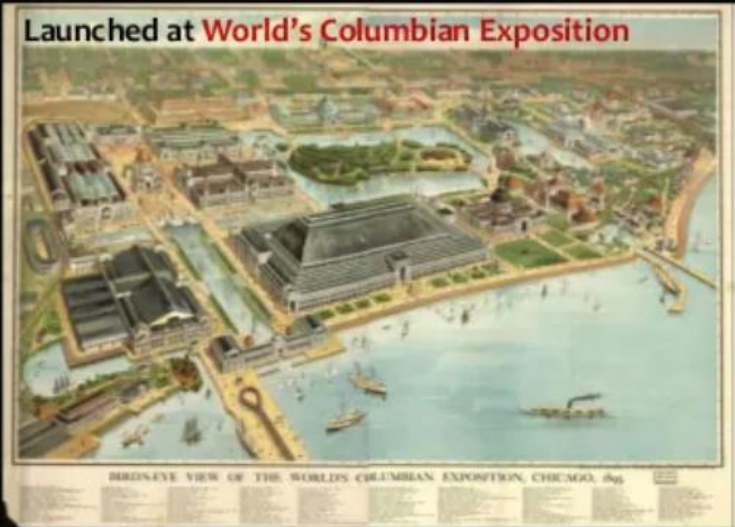
HOW was it executed ?

With the construction of the fair's temporary city, the so-called *White City* where visitors were treated to a harmony of Neoclassical and Baroque architecture from the collaborative designs of architects from the École des Beaux-Arts in Paris. The landscape for the Exposition included lagoons and big green expanses and was designed by Frederick Law Olmsted.

WHERE ?

WHO ?

Started by Daniel Burnham

Make No Little Plans

Through the City Beautiful Design, Burnham believed that it can provide *'breathing spaces'* for healthy activities to those citizens who could not afford to travel and heavily reliant on the city to provide recreational and cultural enrichment.

WHEN ?

1893

WHAT is it about ?

The City Beautiful Movement emerged in response to the 1893 World's Columbian Exposition in Chicago. The fundamental idea expounded at the fair was that the city **was no longer a symbol of economic development and industrialization, but could now be seen as enhancing the aesthetic environment of its many inhabitants.**

لم تعد المدينة رمزًا للتنمية الاقتصادية والتصنيع فحسب ، ولكن يمكن اعتبارها الآن بمثابة تعزيز للبيئة الجمالية للعديد من سكانها.

Bird's-eye view of the 1893 World's Columbian Exposition, Chicago

-The World Fair grounds in Chicago in 1892 **resulted in the development of a new attitude toward industrial cities.**

- The Chicago-based railroads brought people from all across the country to visit the grounds with its pavilion and the exciting Midway entertainment district.

-**It was an opportunity to show off all sorts of new designs and styles.**

chicago worlds columbian exposition 1893 city beautiful movement

THE WHITE CITY
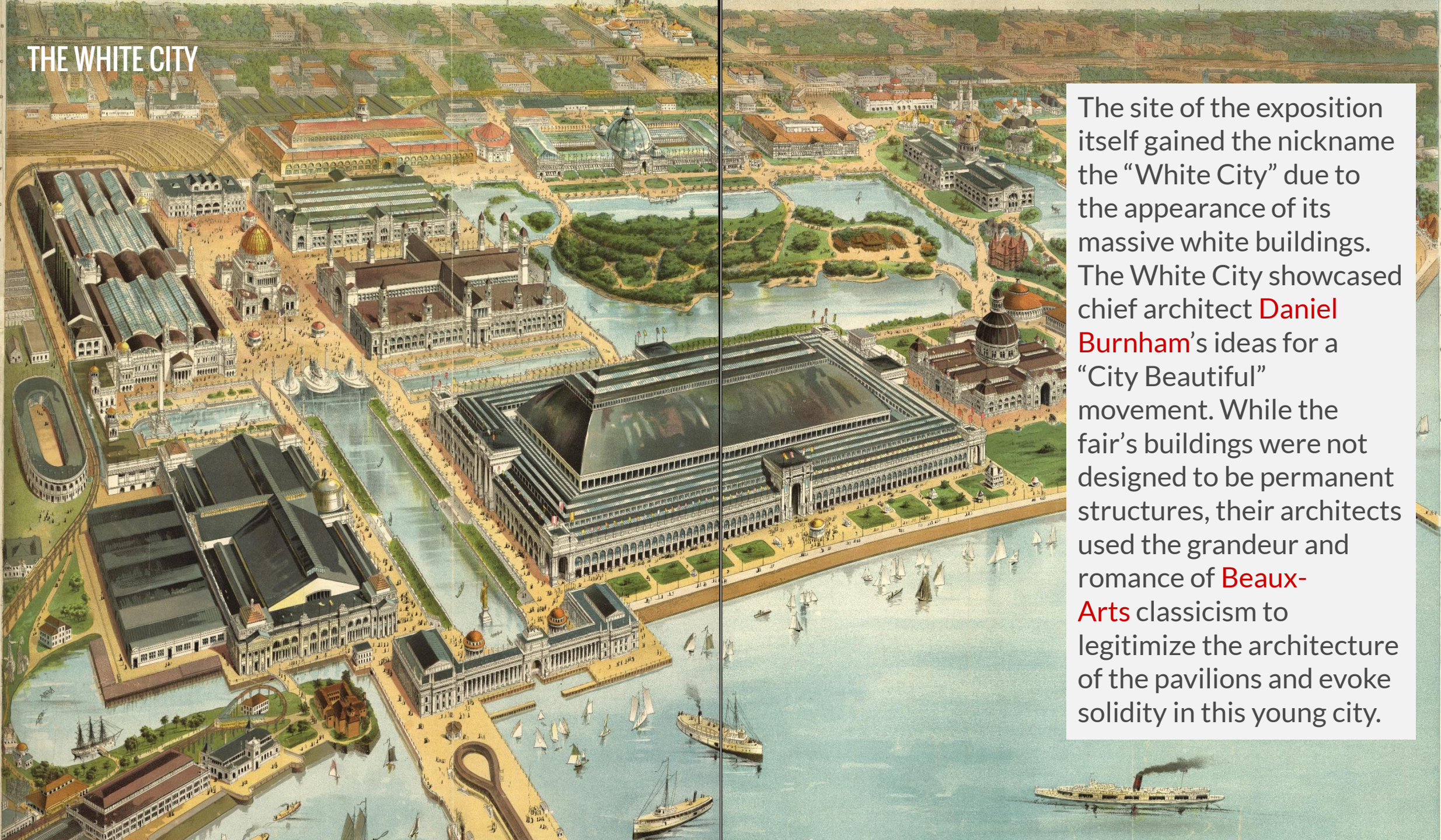
The site of the exposition itself gained the nickname the "White City" due to the appearance of its massive white buildings. The White City showcased chief architect Daniel Burnham's ideas for a "City Beautiful" movement. While the fair's buildings were not designed to be permanent structures, their architects used the grandeur and romance of Beaux-Arts classicism to legitimize the architecture of the pavilions and evoke solidity in this young city.

After the World's Columbian Exhibition, the movement gathered support from progressives, reformists and utopians across North America.

In 1901, Washington D.C. produced a comprehensive planning document for its monument core based on City Beautiful ideas. **The plan, titled The McMillan Plan.**

It proposed eliminating the existing Victorian landscaping of the National Mall and instead replacing it with grass for people to use for leisure. **The City Beautiful movement believed that inclusive green spaces provided a place where the lower classes of society could learn appropriate social behaviors by observing upper class citizens. By immersing people in a beautiful and cultural environment, the external enrichment would supposedly trickle into the minds of the public.** This ideology is also reflected in the McMillan Plans' proposal to construct several monuments and museums along the Mall's east-west axis. While the McMillan Plan was never implemented in full, it continues to guide Washington's urban planning policies today.

من خلال غمر الناس في بيئة جميلة وثقافية ، من المفترض أن يتدفق الإثراء الخارجي إلى أذهان الجمهور

the National Mall ; The long, grassy National Mall is home to iconic monuments including the Lincoln Memorial and the Washington Monument. At the eastern end is the domed U.S. Capitol, and the White House is to the north.

The McMillan Plan

Jefferson Memorial

Lincoln Memorial

White House

Washington Monument

Maryland Avenue

Pennsylvania Avenue
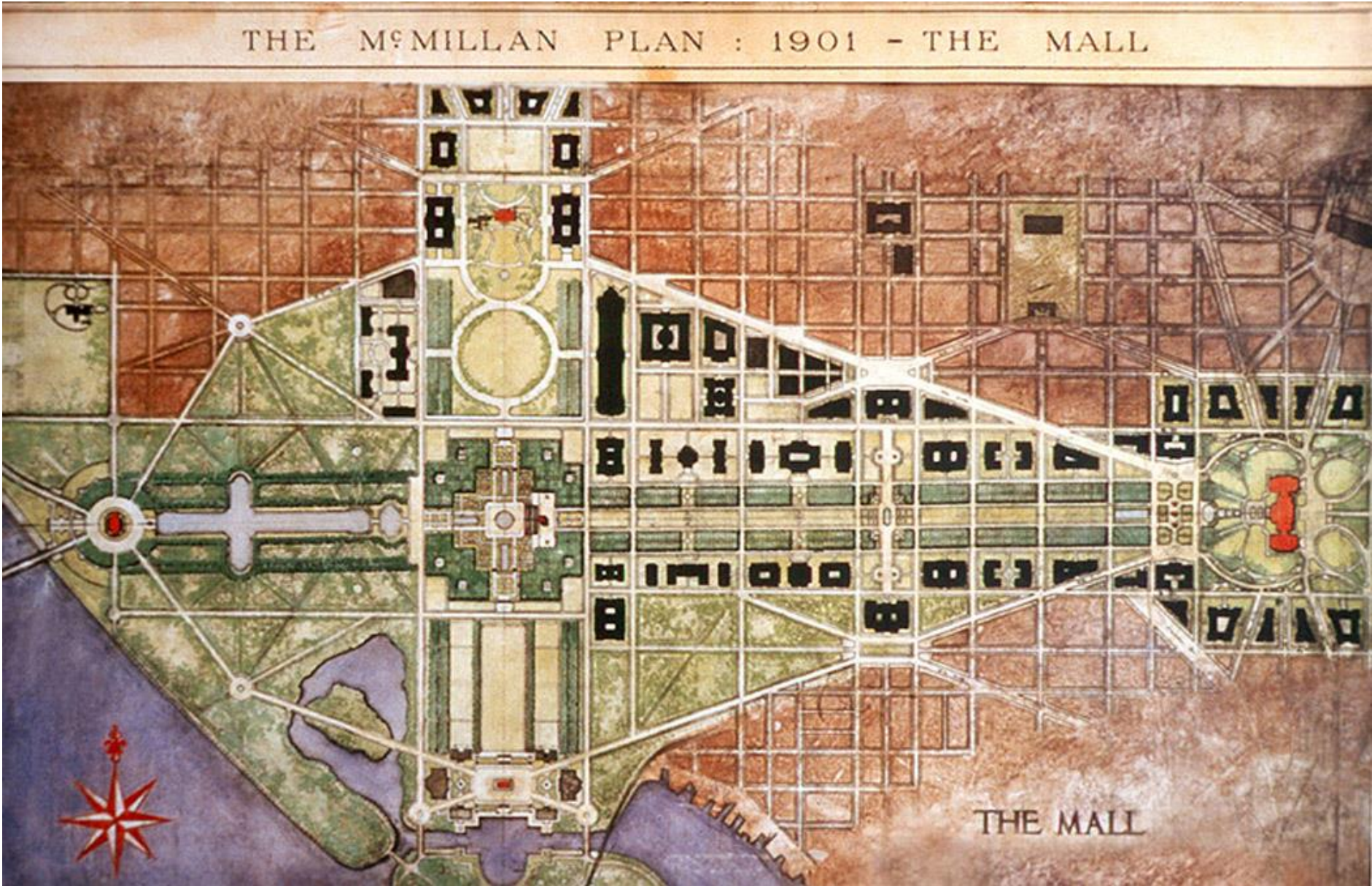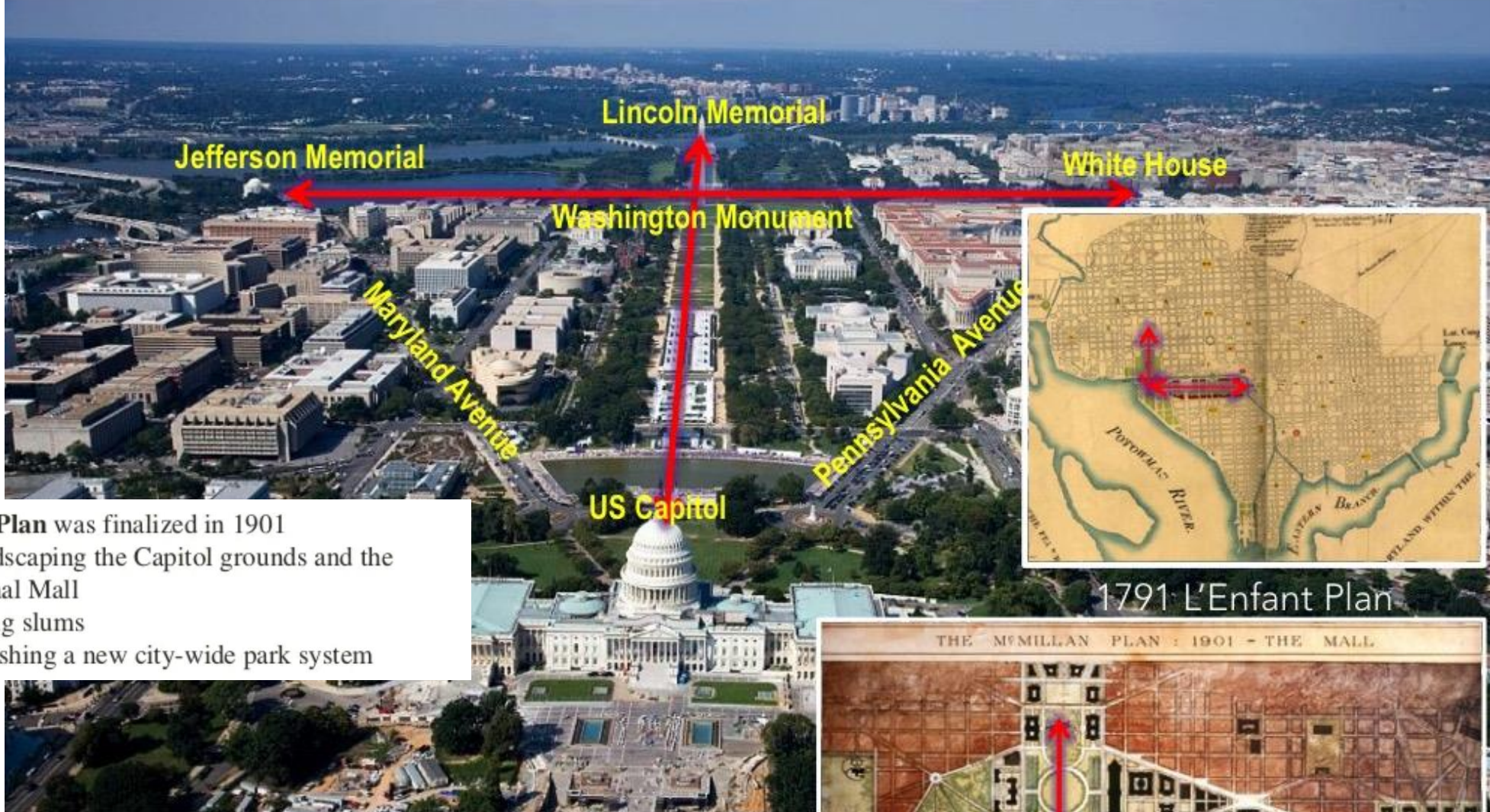
US Capitol

McMillan Plan was finalized in 1901
    re-landscaping the Capitol grounds and the
    National Mall
    clearing slums
    establishing a new city-wide park system

1791 L'Enfant Plan

THE McMILLAN PLAN : 1901 - THE MALL

THE MALL

The National Mall monuments, open spaces, and majestic vistas represent the legacy of the visionary 1791 L'Enfant Plan and 1901-1902 McMillan Plan.

1901-1902 McMillan Plan

Burnham and Edward H. Bennett's 1909 Plan of Chicago was a culmination of lessons learned at the fair. The plan offered Chicago a blueprint for growth and influenced city planning around the world.

The 1909 *Plan of Chicago*, also commonly referred to as the **"Burnham Plan,"** was a visionary Progressive Era proposal that sought **to beautify Chicago and improve efficiency of commerce**. Published through the support of the Commercial Club of Chicago, the plan used renderings to convey the possible scenarios for a rapidly growing city.

Although many of its aspirational ideas never became reality, as a document, the *Plan of Chicago* continues to serve as a reference in urban design today.

PLAN OF
CHICAGO

PREPARED UNDER THE DIRECTION OF

THE COMMERCIAL CLUB

DURING THE YEARS MCMVI, MCMVII, AND MCMVIII

BY

DANIEL H. BURNHAM
AND
EDWARD H. BENNETT
ARCHITECTS

EDITED BY

CHARLES MOORE
CORRESPONDING MEMBER AMERICAN INSTITUTE OF ARCHITECTS

CHICAGO
THE COMMERCIAL CLUB
MCMIX

I. CHICAGO. BIRD'S-EYE VIEW, SHOWING THE LOCATION OF THE CITY ON THE SHORES OF LAKE MICHIGAN, TOGETHER
WITH THE SMALLER SURROUNDING TOWNS CONNECTED WITH CHICAGO BY RADIATING ARTERIES.
Painted for the Commercial Club by Jules Guerin.

The 'Plan of Chicago' aligns with the "City Beautiful" movement that influenced urban planning in America around the turn of the century

The Burnham Plan focused on 6 major elements:

Systematic arrangement of streets.

- A regional highway system.
- Improvement of railway terminals.
- Improvement of the lakefront
- New outer parks.
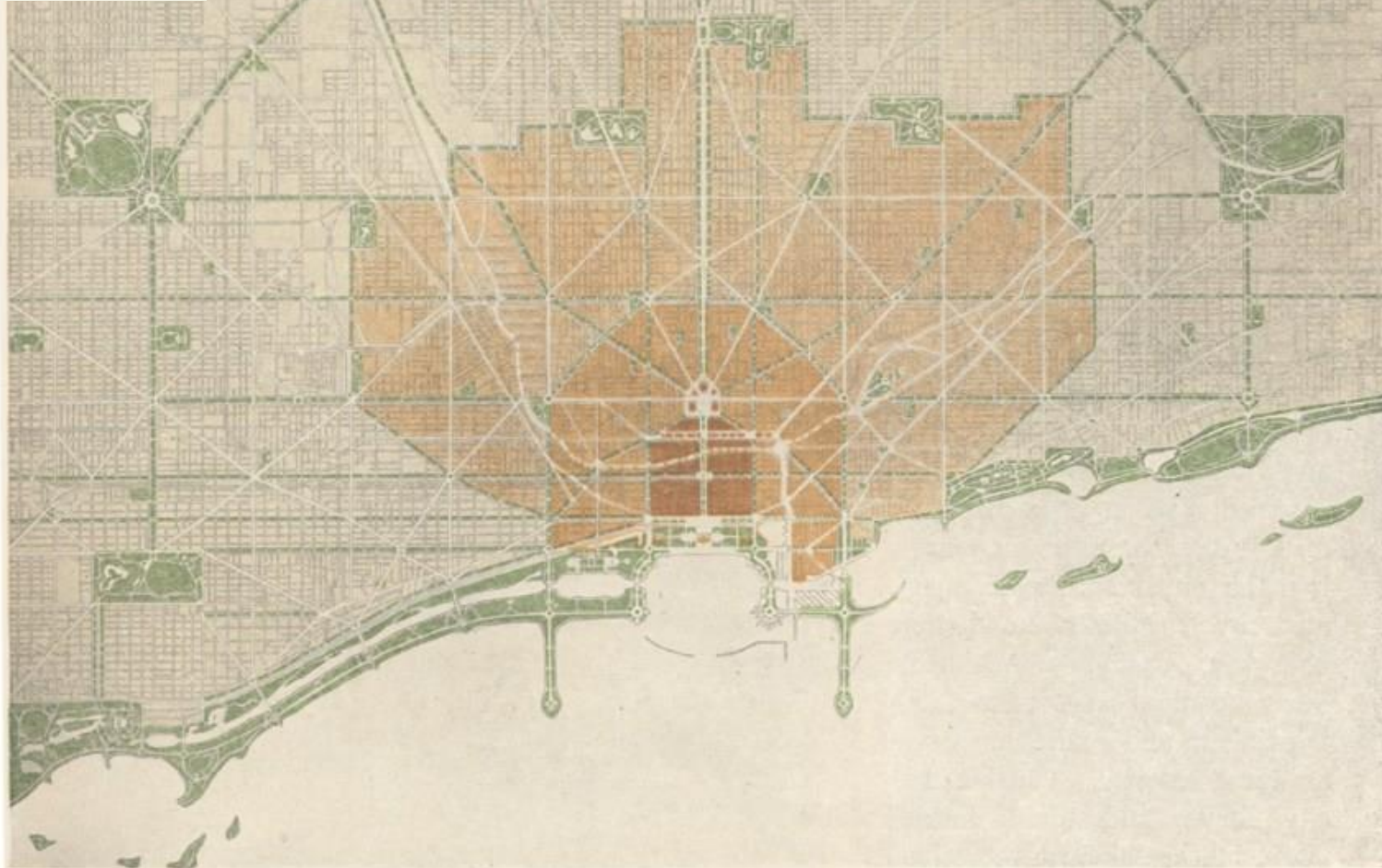- Civic and cultural centers.

COPYRIGHT, 1909, BY COMMERCIAL CLUB OF CHICAGO

CIII. CHICAGO. PLAN OF THE CITY, SHOWING THE GENERAL SYSTEM OF BOULEVARDS AND PARKS EXISTING AND PROPOSED.

The boulevards are planned to form a continuous system of circulation; the parks are related closely to the boulevard system, and are located, wherever possible, in connection with them.

COPYRIGHT, 1909, BY COMMERCIAL CLUB OF CHICAGO

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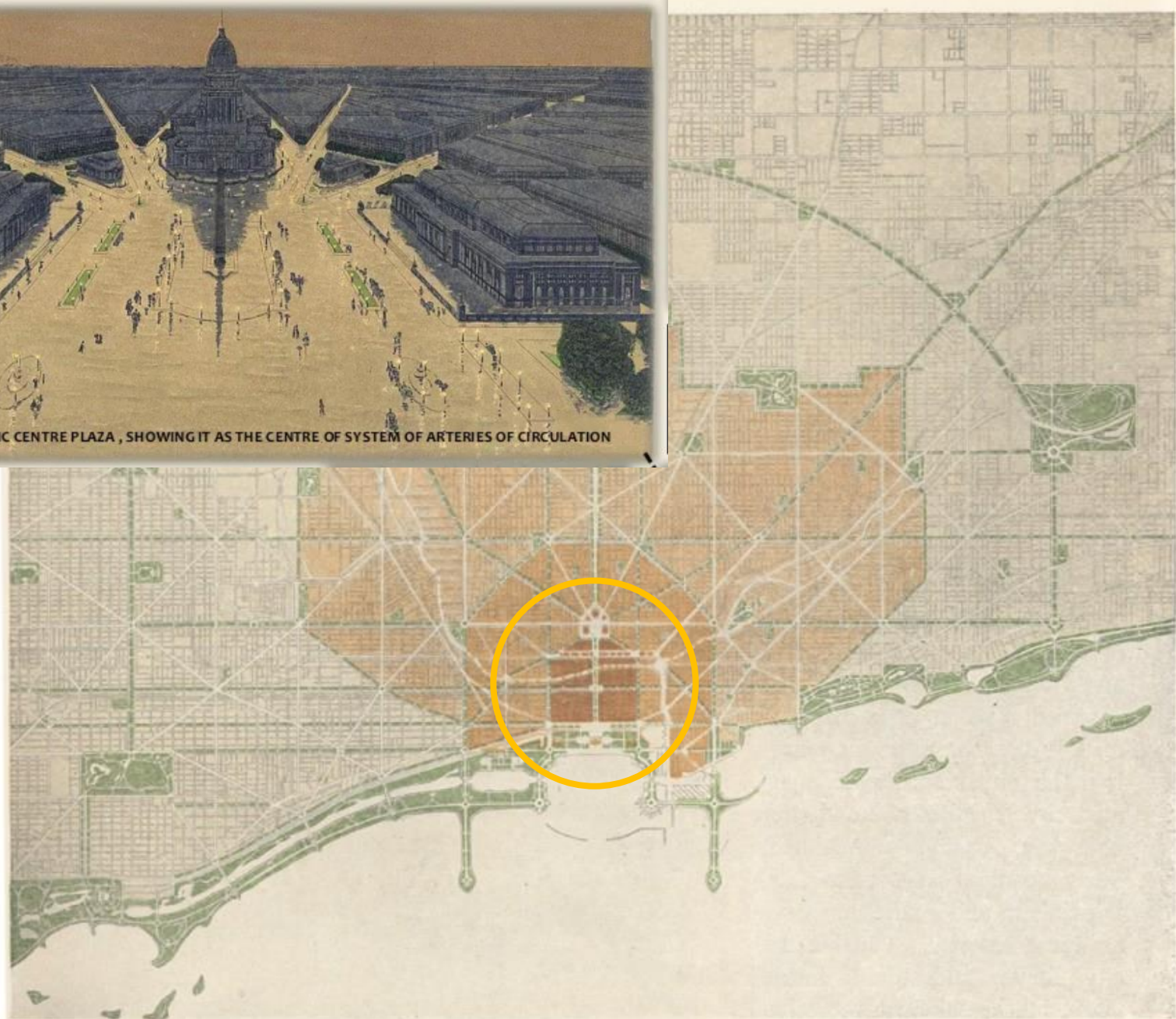
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major focus of the 'Plan' was on improving circulation through the city, including via an extensive grid of streets.

Improvement of railway terminals

Completion of railroads and pool usage of tracks for greater efficiency in freight handling. Consolidation of Chicago's six intercity railroad passenger terminals into new complexes, allowing the expansion of the business district.
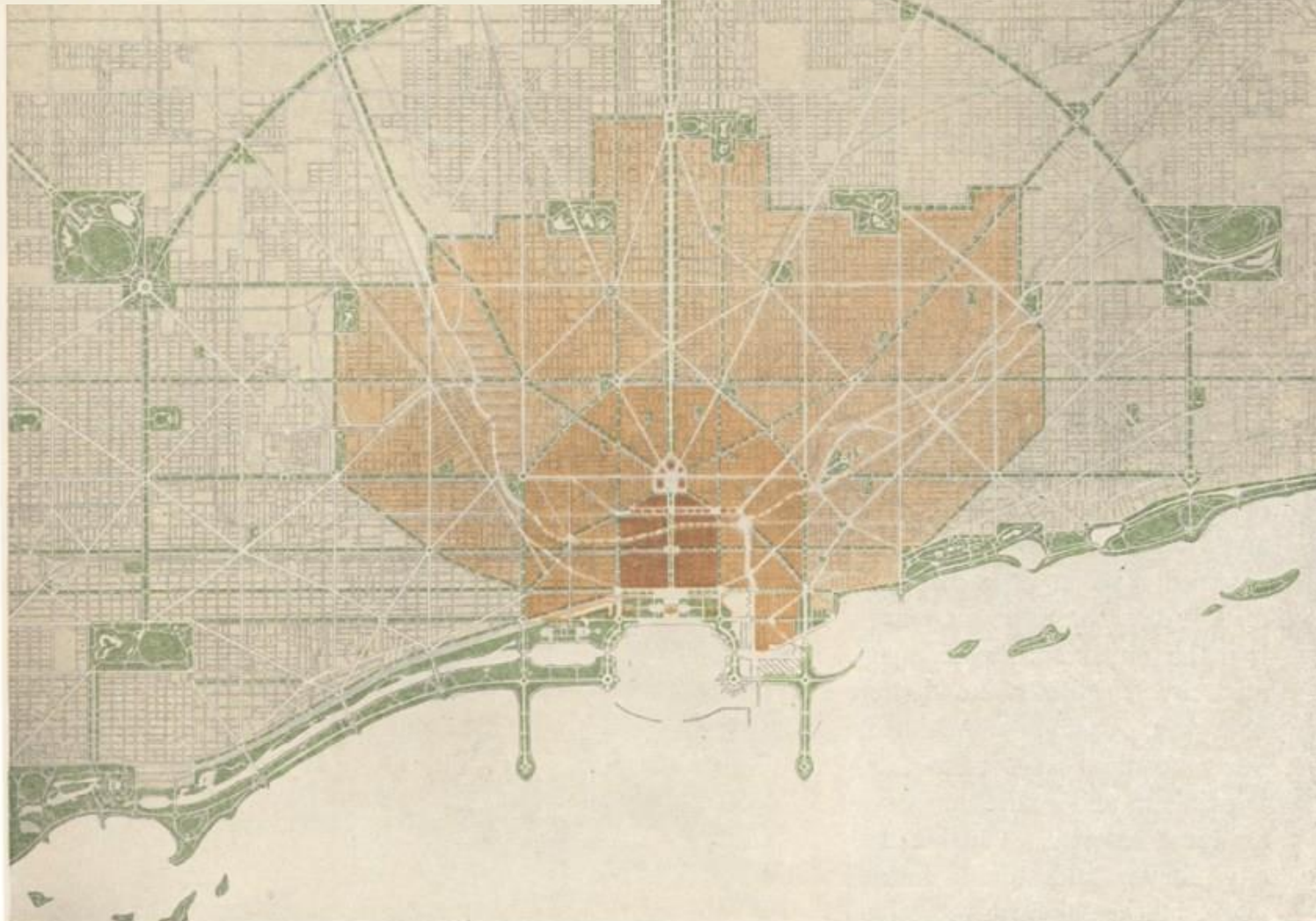
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Reclaiming and improving the lakefront

"The Lakefront by right belongs to the people, not a foot of its shores should be appropriated to the exclusion of the people." -Burnham
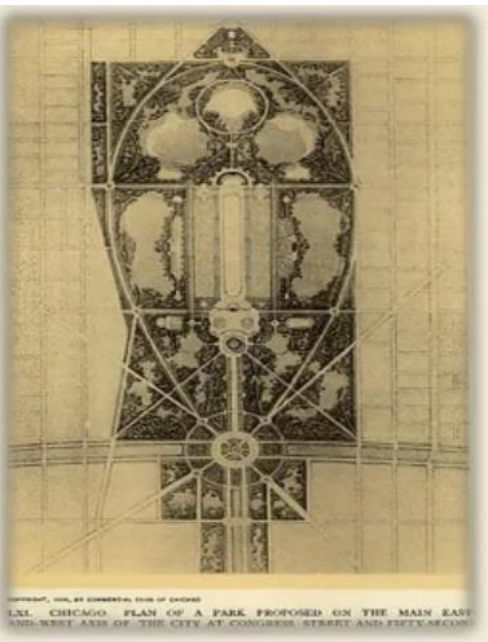
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VIEW OF THE PROPOSED CIVIC CENTRE PLAZA , SHOWING IT AS THE CENTRE OF SYSTEM OF ARTERIES OF CIRCULATION

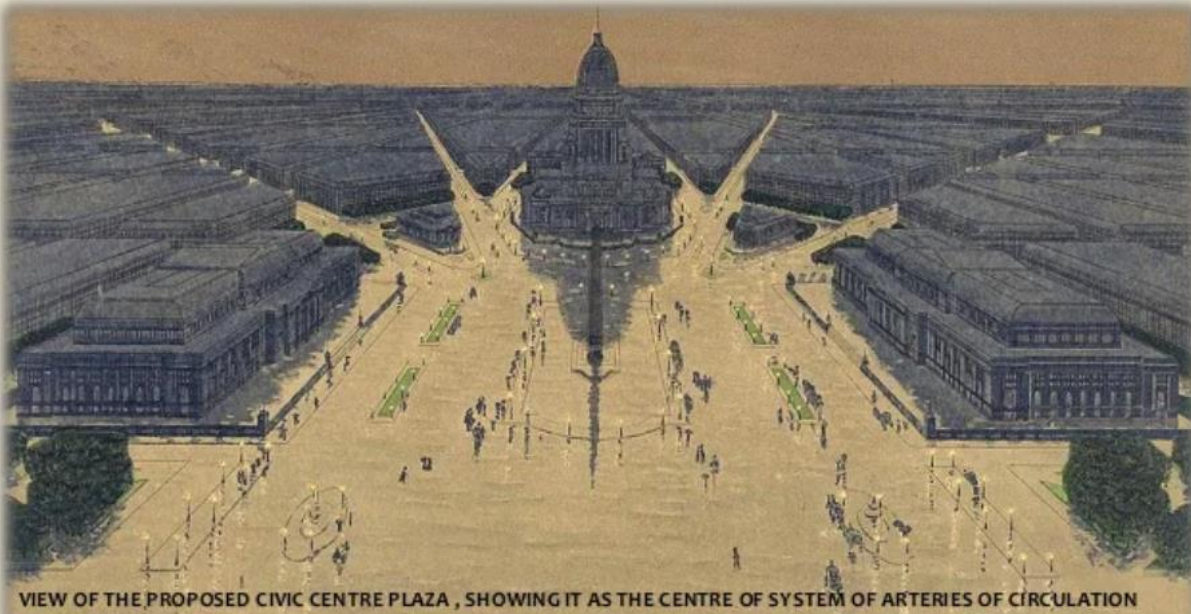COPYRIGHT, 1909, BY COMMERCIAL CLUB OF CHICAGO

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New outer parks

Preservation of natural zones and expansion of the city's park and boulevard system
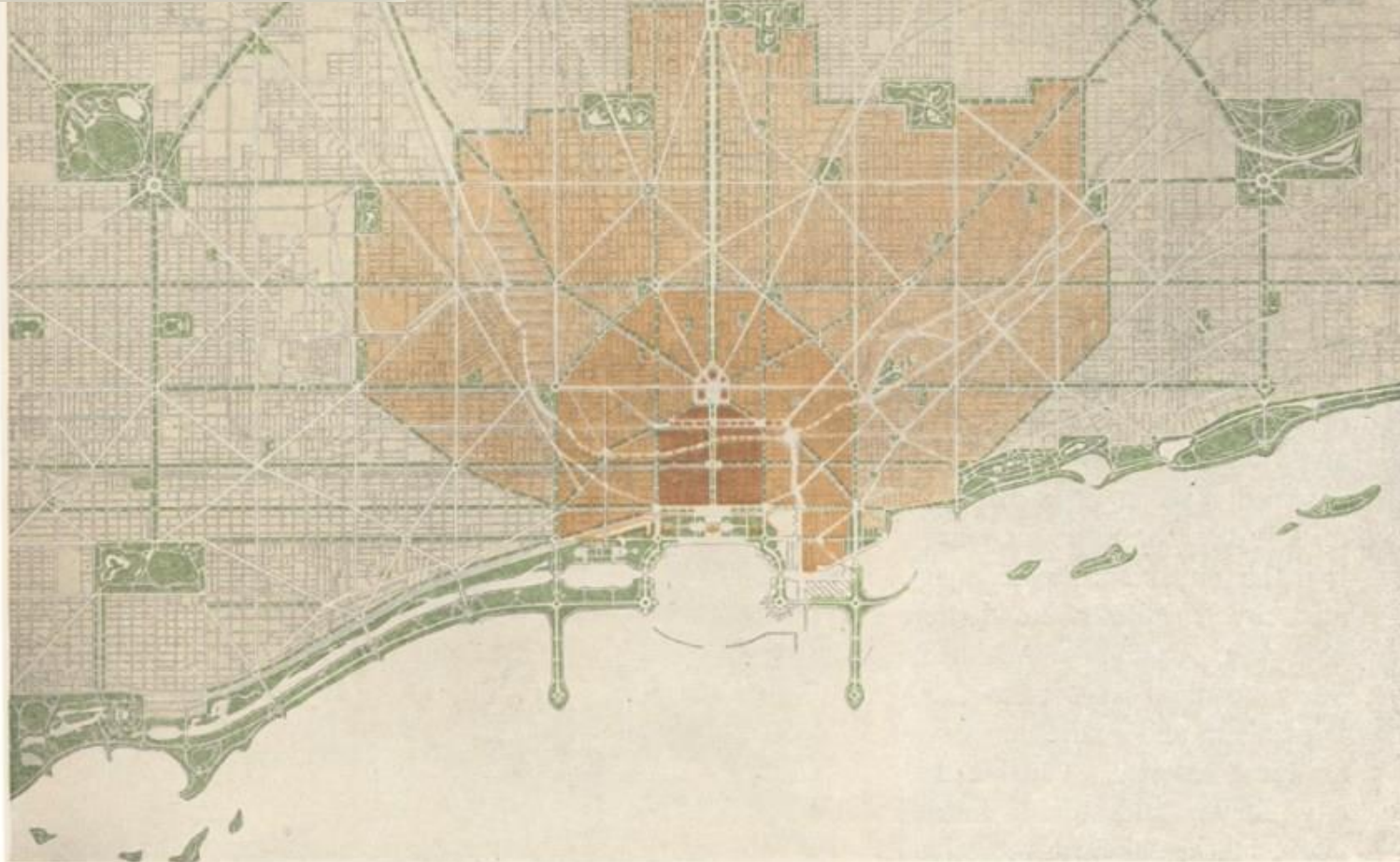
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# The "Burnham Plan of Chicago" focused on 6 major elements

A regional highway system

Diagramming of both radial and circumferential roads for the region extending 120 km from the city centre

Civic and Cultural centers

The most iconic image of the plan was the new civic center in the area around Congress & Halsted Streets. At the east end of Congress Street, Burnham proposed a cultural center.

VIEW OF THE PROPOSED CIVIC CENTRE PLAZA , SHOWING IT AS THE CENTRE OF SYSTEM OF ARTERIES OF CIRCULATION

LXI. CHICAGO. PLAN OF A PARK PROPOSED ON THE MAIN EAST AND WEST AXIS OF THE CITY AT CONGRESS STREET AND FIFTY-SECOND

New outer parks

Preservation of natural zones and expansion of the city's park and boulevard system

Improvement of railway terminals

Completion of railroads and pool usage of tracks for greater efficiency in freight handling. Consolidation of Chicago's six intercity railroad passenger terminals into new complexes, allowing the expansion of the business district.
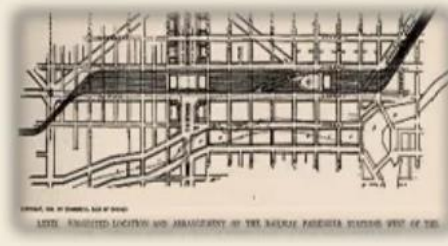
Reclaiming and Improving the lakefront

"The Lakefront by right belongs to the people, not a foot of its shores should be appropriated to the exclusion of the people." -Burnham

Systematic arrangement of Streets

New wider arterials and diagonal streets were prescribed to relieve traffic congestion and beautify the fast growing city.

PLAN OF CENTRAL CHICAGO

The Burnham Plan focused on 6 major elements:
- Improvement of the lakefront.
- A regional highway system.
- Improvement of railway terminals.
- New outer parks.
- Systematic arrangement of streets.
- Civic and cultural centers.

Concluding Remarks

The City beautiful Movement sought to improve the city through beautification , which would have a no. of effects

The beauty of the city would inspire civic loyalty

من شأن جمال المدينة أن يلهم الولاء

American cities would be brought to cultural pairty with their European competitors through the use of the European Baux-Arts idiom

A more inviting city center still would bring people to work and spend money in the urban areas
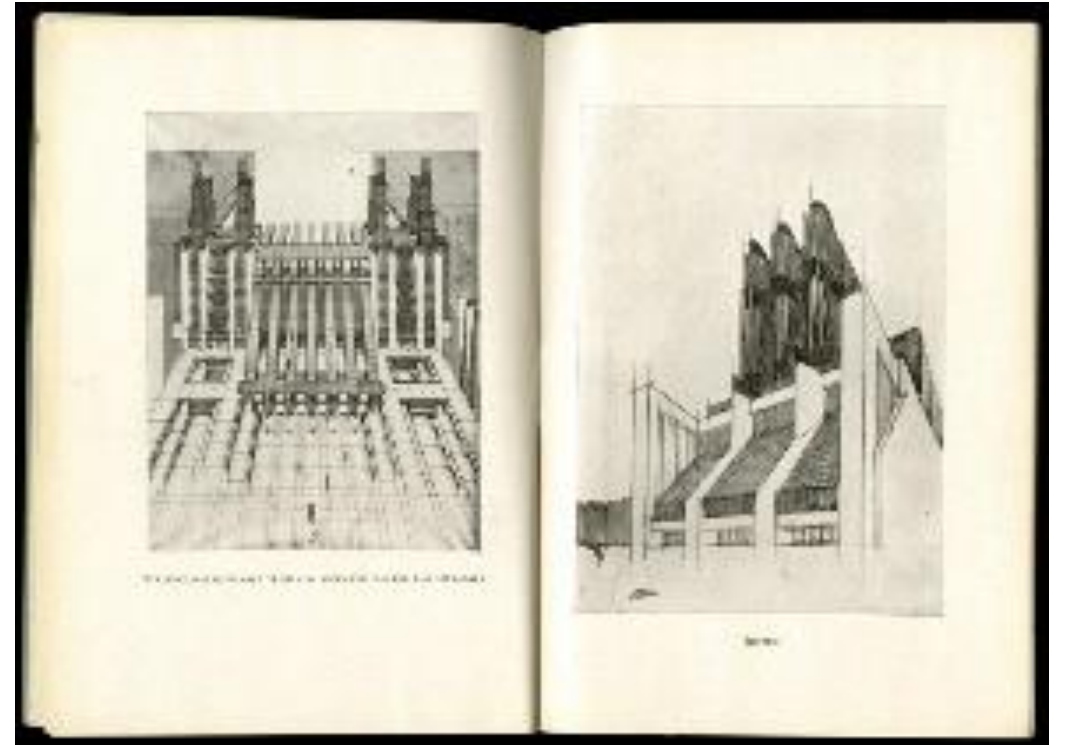
Futurism
(Early 20th Century
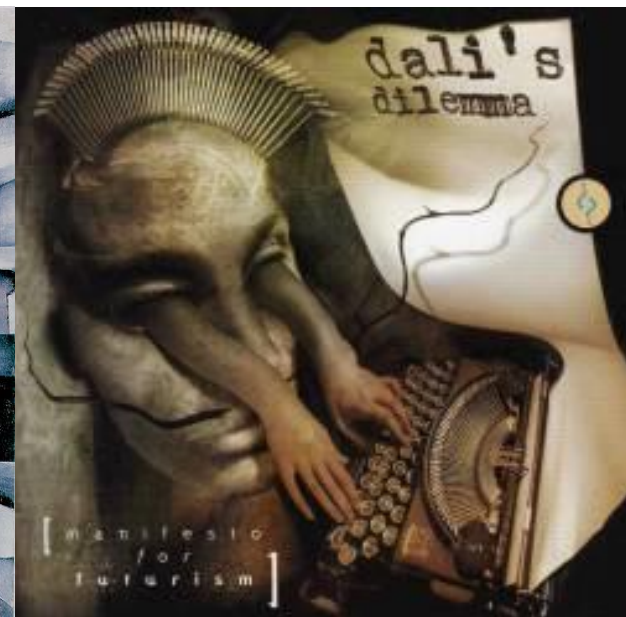
Italian Futurism was primarily a literary and painting movement in the early part of the twentieth century. **Architecture was added toward the end with the writing of the** *Manifesto of Futurist Architecture* **and the visionary designs of Antonio Sant'Elia.**

- Its an artistic and social movement established in Italy/ early 20th century
- Has been practiced in every medium of art
- **The founder of the movement** was the Italian Felippo Tommaso Mrrinetti, in his book "Futurist Manifesto", 1909,
- "*We want no part of it, the past*"
- Futurism has its influential implications in: Painting; Giacomo Balla, Umberto Boccioni

Futurist architecture

- Antonio Sant'Elia expressed his ideas of modernity in his drawings for *La Città Nuova* (The New City) (1912–1914)

- **It has never built but it became the source of inspiration for many later architects**

- The project expresses the **dynamism of futurism**

- The city had replaced the landscape as the setting for the exciting modern life.

- **They wanted to see the bare bones, the structure behind things as part of the aesthetic quality.**

*"**La Città Nuova**" or the New City 1914. The sketches depicted their vision of futuristic architecture.*
Sant'Elia's sketches reveal megastructures, industrial architecture, and extensive use of steel,
reflecting the spirit of the machine age.

The industrial landscape is widely accepted as ugly and not so impressive either. However, in early 1900s, the most optimistic people saw factories as the new churches, economic temples of social salvation. There was a kind of excitement caused by the monumentality and extreme functionalism of industrial architecture - two paradigms النماذج that were never put in practice together. "It's the future!" they said.

Chiattone - Buildings for a Modern Metropolis, 1914.
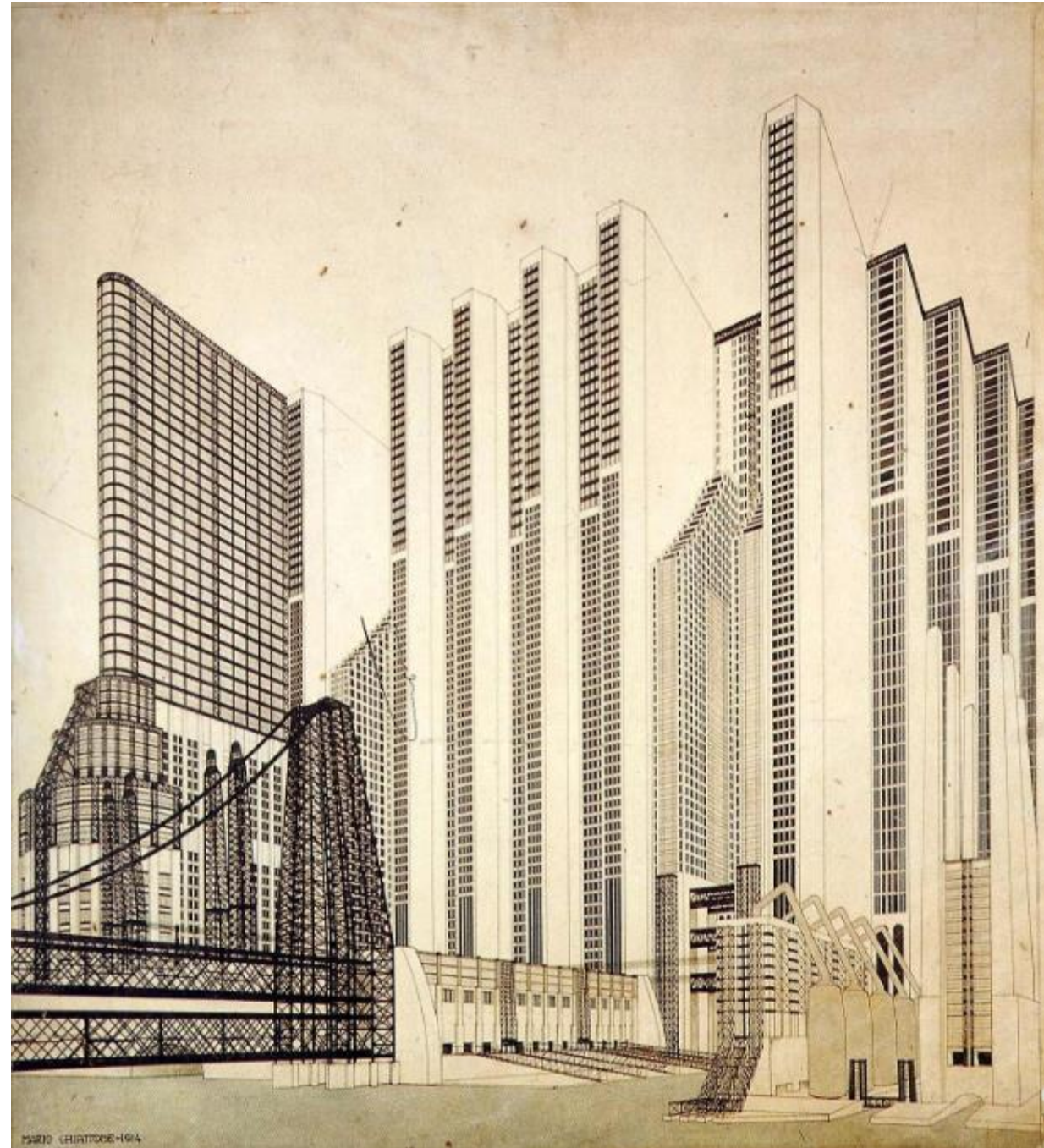
- Antonio Sant'Elia aimed to create *a city as a efficient, fast paced machine.*

- He manipulates light and shape to emphasize the sculptural quality of his projects.

- Baroque curves and encrustations had been stripped away to reveal the essential lines of forms unprecedented from their simplicity.

- **In the new city, every aspect of life was to be rationalized and centralized into one great powerhouse of energy**
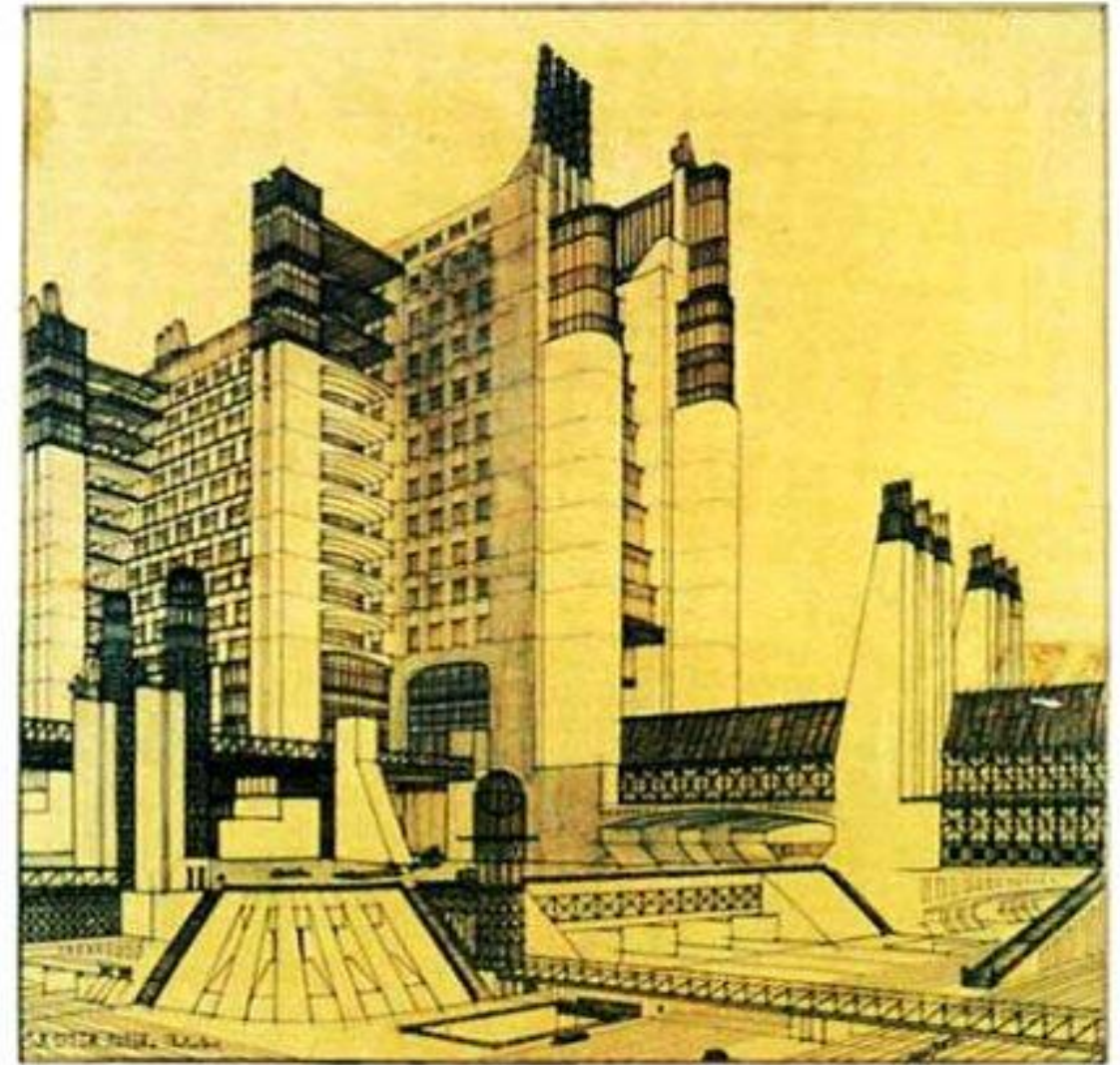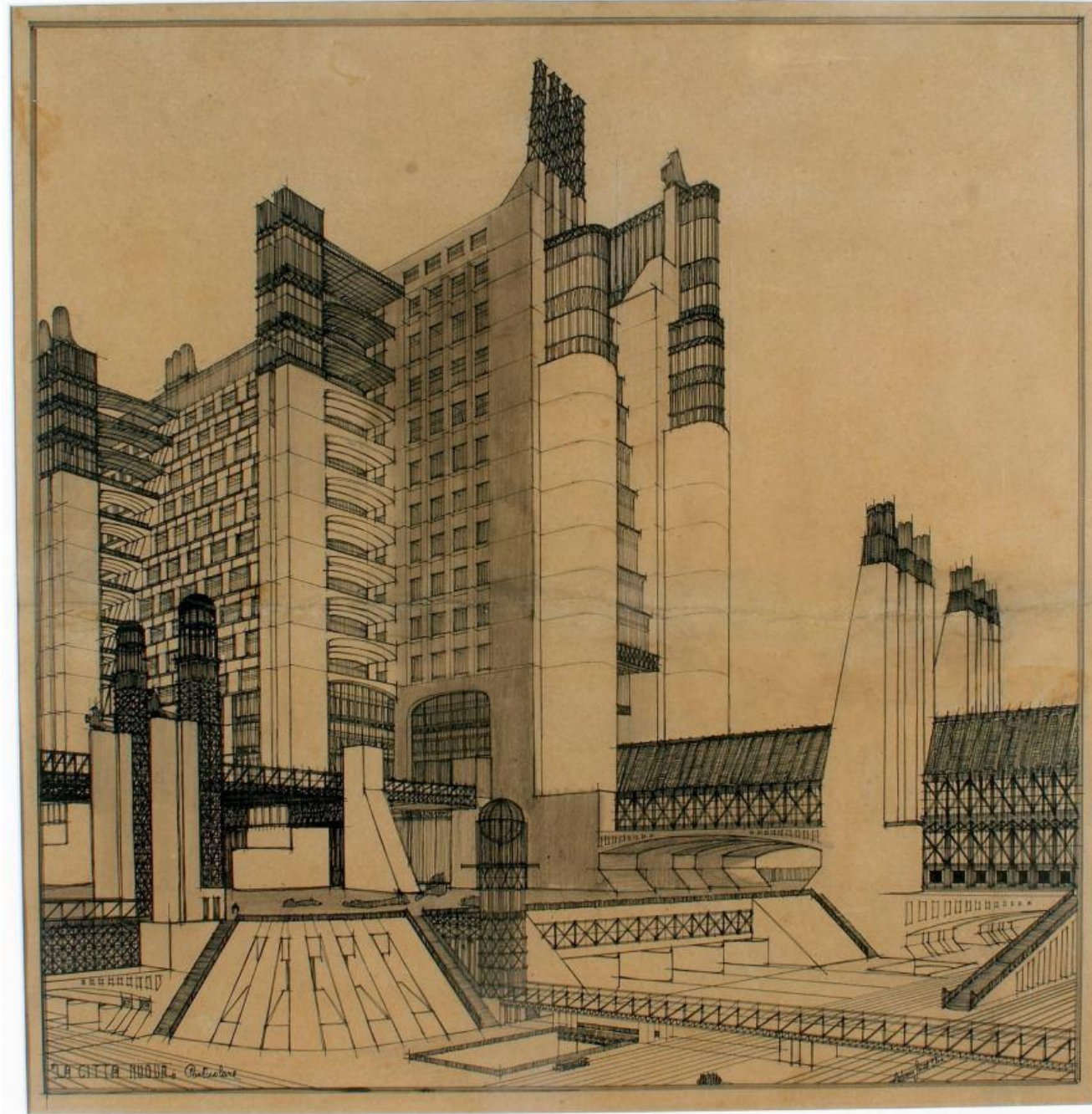

ANTONIO SANT'ELIA   LA CITTÀ NUOVA   CASAMENTO SU TRE PIANI STRADALI   1914

Their buildings are lean, decidedly vertical, rhythmic and complex; they are generally integrated with mechanical and infrastructural systems, such as tram lines and bridges.

Sant'Elia's drawing of an apartment building in Città Nuova.

The show features one of Sant'Elia's best-known drawings, which depicts a combined railway station and airport. **The trains pull in on tracks below grade, while the planes land on runways constructed atop the railroad rights-of-way.**

The concept, while impractical in an age of dense cities and jumbo jets, was, at the time, stunningly logical. It's a future that, arguably, could have happened.
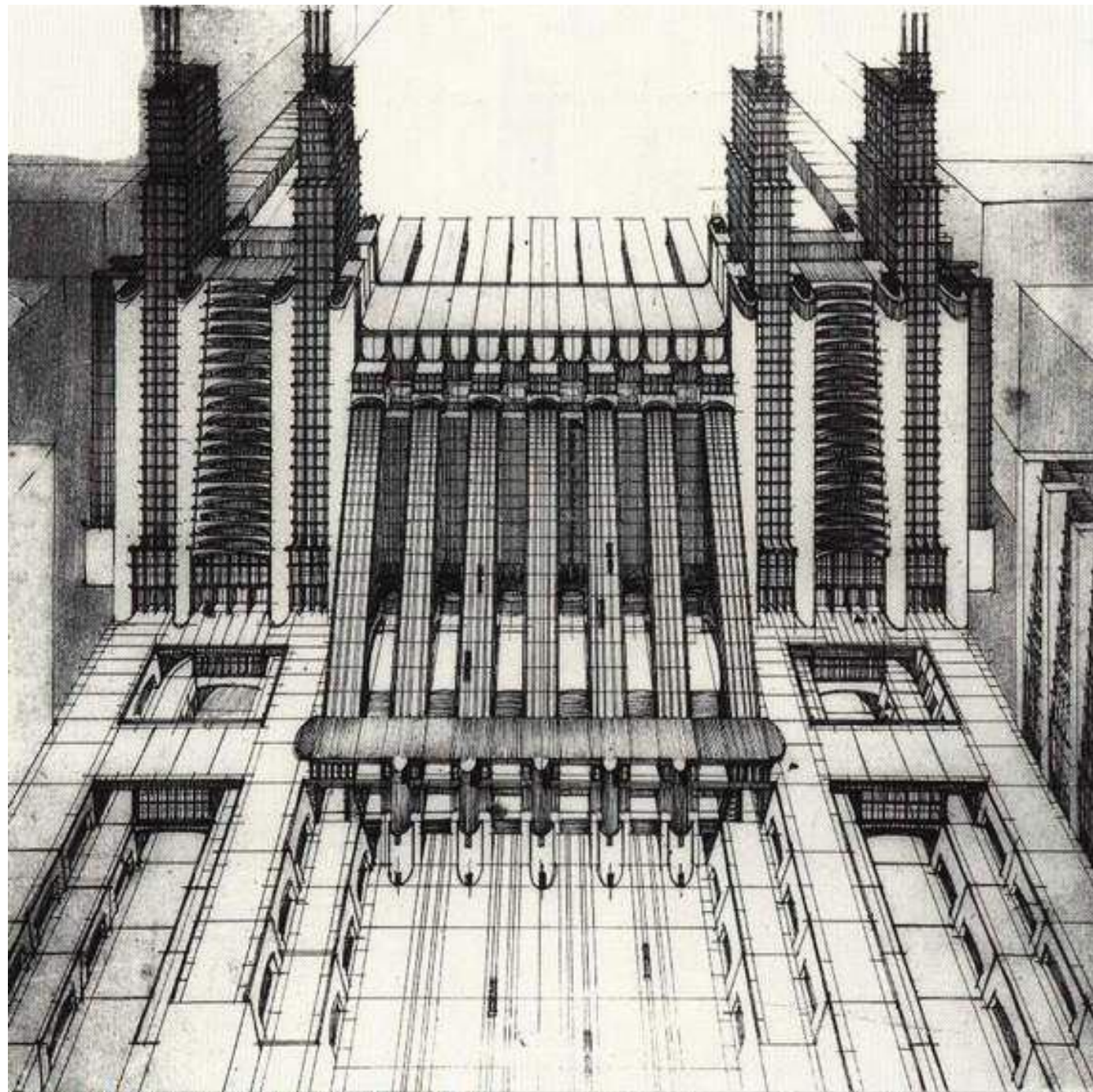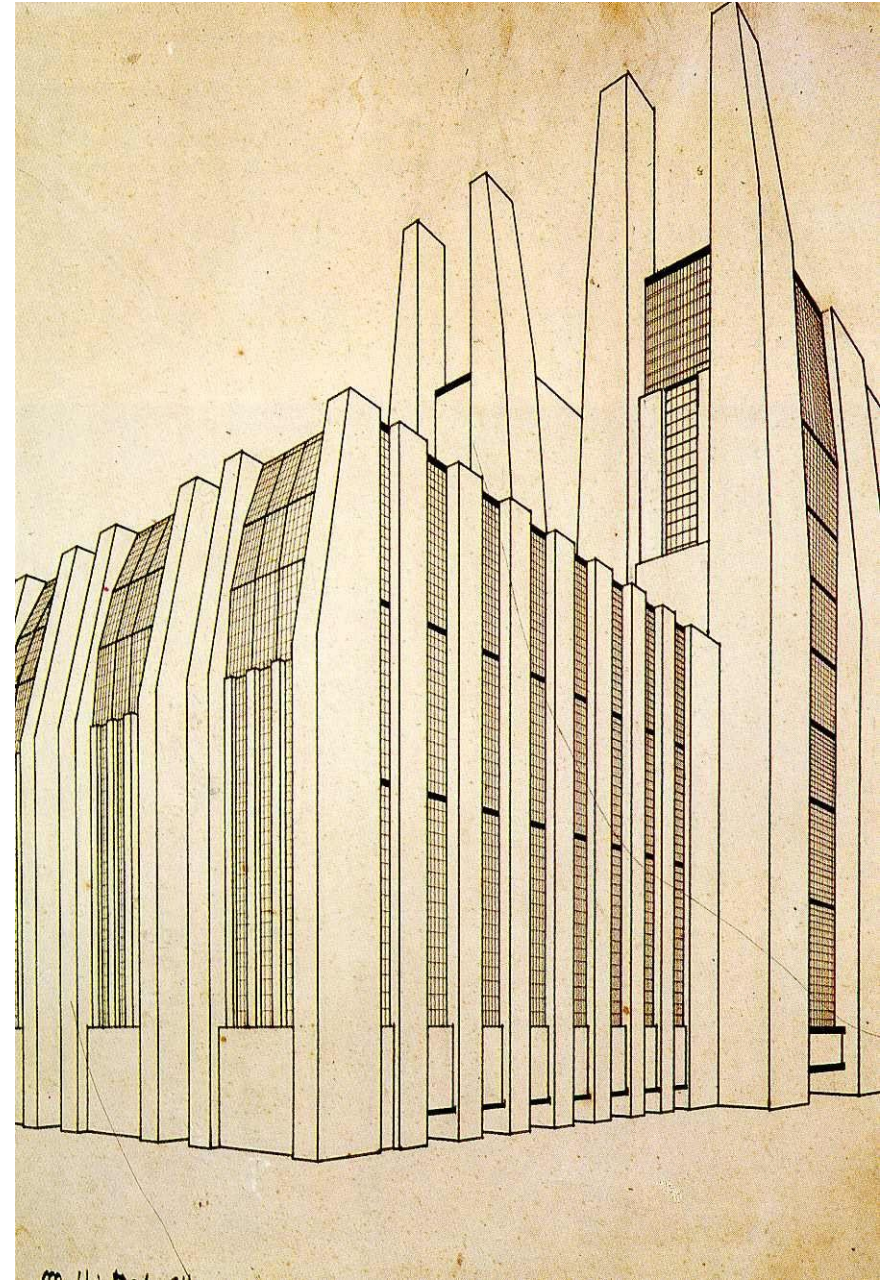

A perspective drawing from Città Nuova.
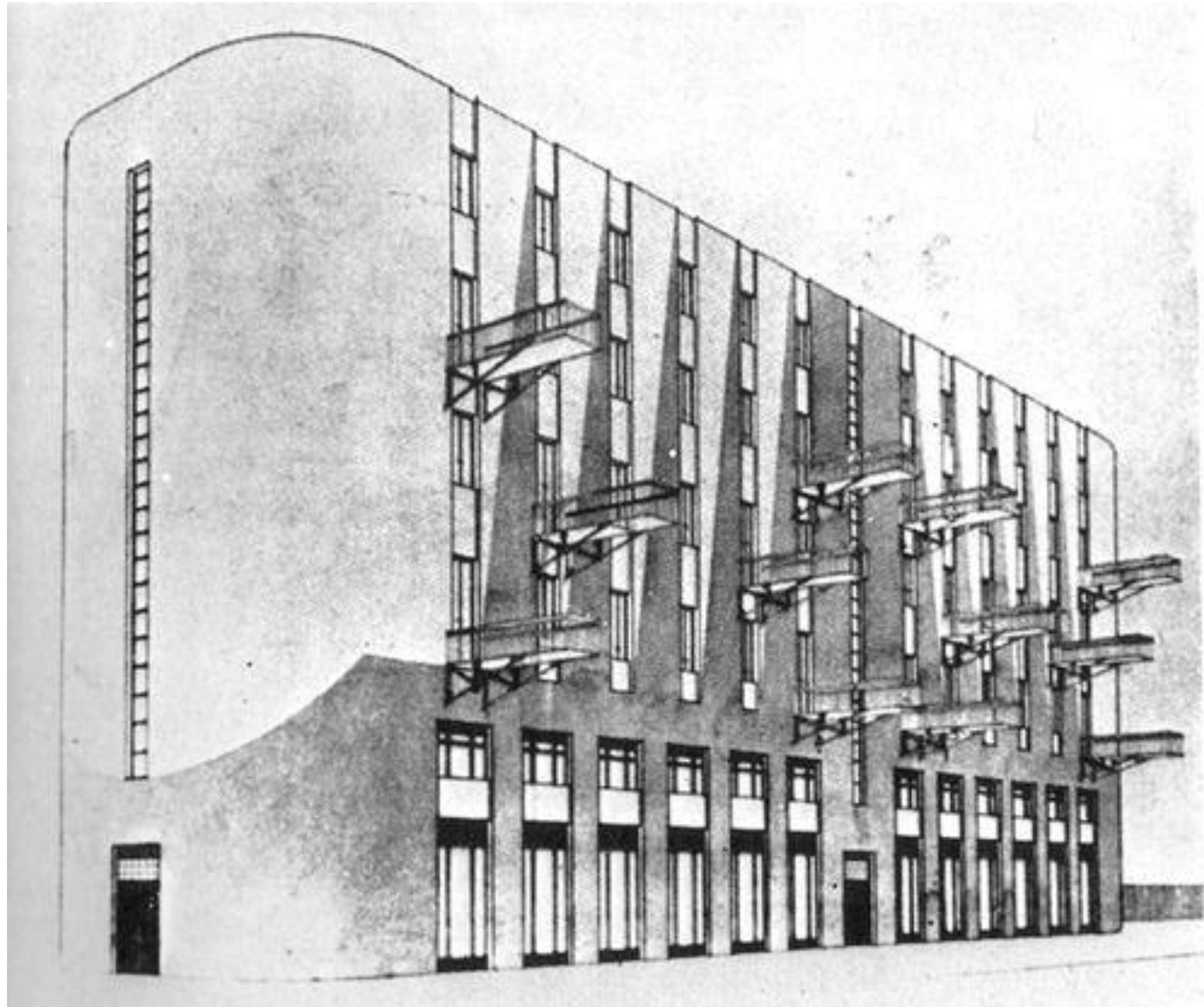
Chiattone - City with raised railways, 1914.
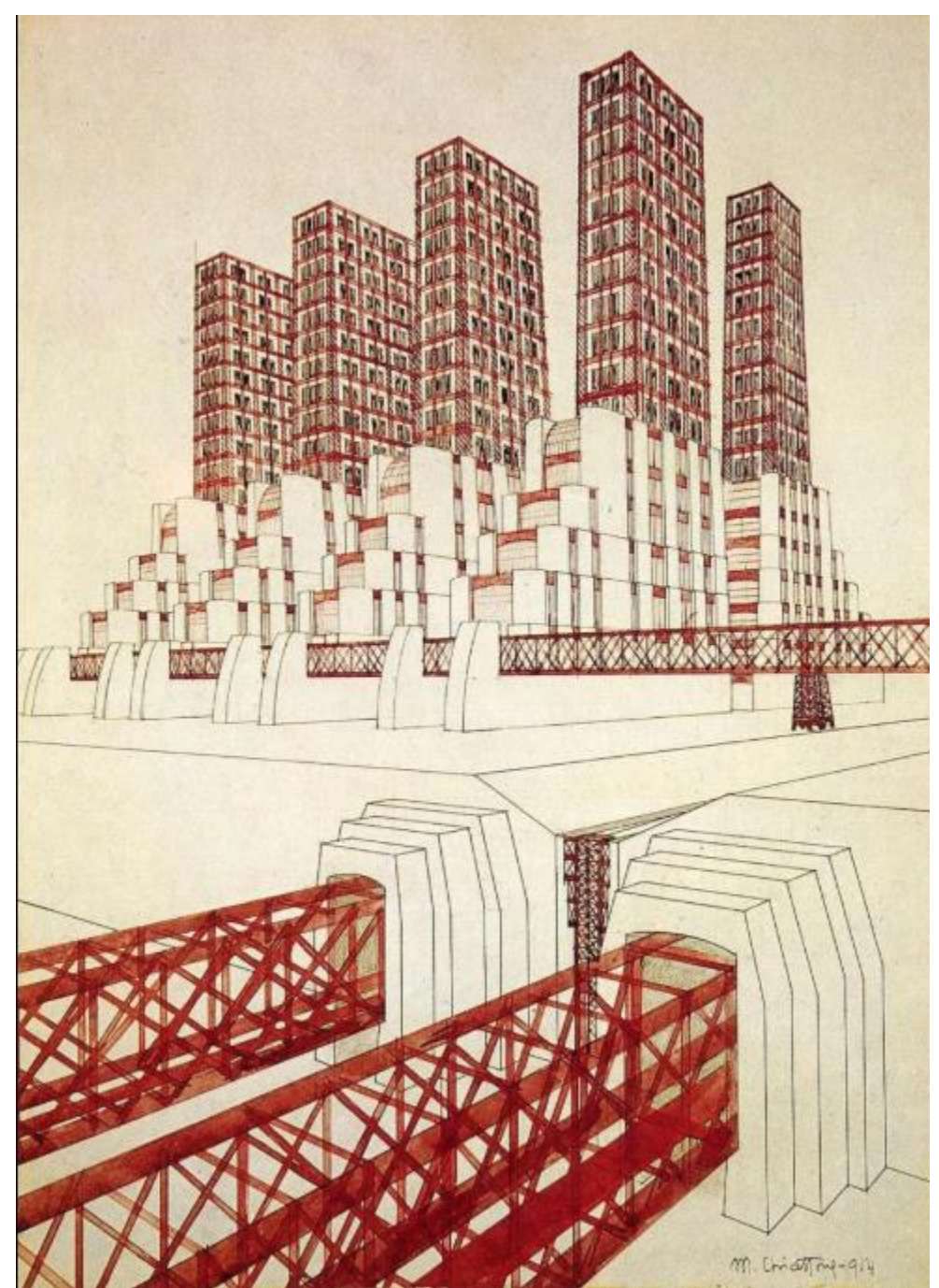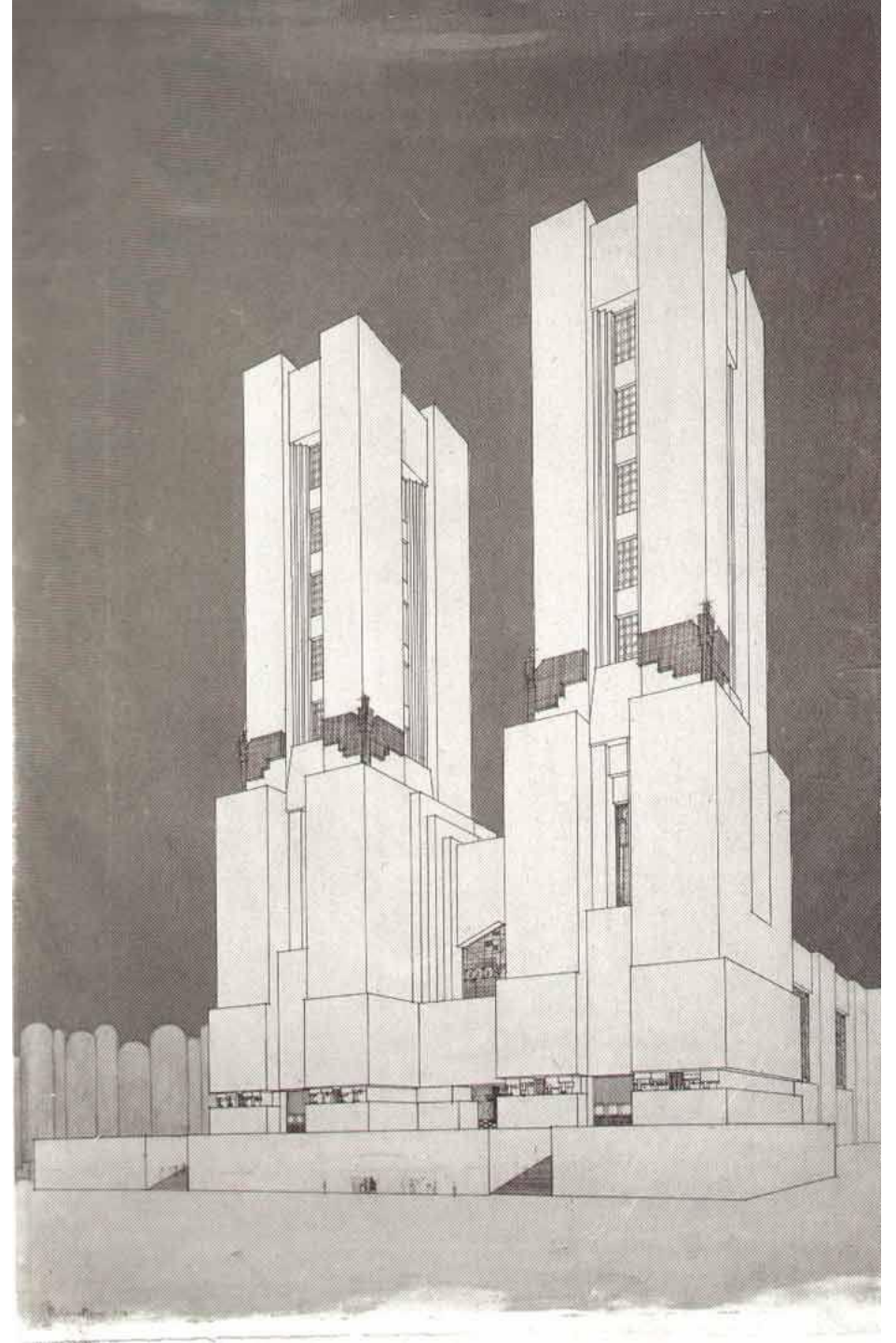
Chiattone- Industrial building - 1914.

Chiattone - Apartment building with balconies.

Chiattone - Cathedral.

Referencing
APA STYLE

APA style

The **American Psychological Association** has drawn up reference rules widely adhered to in the liberal arts and used in many journals covering a wide range of domains.

Unique characteristics of the APA-style
•Title of a book or name of a journal in italics or underscored
•References in the text with the name of the first author(s) (name-date system).
•Bibliography alphabetically ordered per author.

Citations

Becker (2012), Lee (2016), and McAdoo (2017) wrote blog posts about APA Style.

References

Becker, D. (2012, October 4). Cite what you see, cite what you use [Blog post]. Retrieved from http://blog.apastyle.org/apastyle/2012/10/cite-what-you-see-cite-what-you-use.html

Lee, C. (2016, November 30). Writing website in-text citations and references [Blog post]. Retrieved from http://blog.apastyle.org/apastyle/2016/11/writing-website-in-text-citations-and-references.html

McAdoo, T. (2017, September 20). References versus citations [Blog post]. Retrieved from http://blog.apastyle.org/apastyle/2017/09/citations-versus-references.html

CITATIONS IN THE TEXT

Citations in the text refer to the reference list by stating the author(s) and year or publication.
•e.g. On the basis of kinetic **(Beckman, 1975)** and spectroscopic studies…

<u>If the author is mentioned in the text only include year of publication.</u>
•Glass **(1972)** compared 34 studies…

<u>In the case of two authors citation is as follows.</u>
•Glass and Smith **(1972)** compared…
•Research to ideal class sizes **(Glass & Smith 1993)**

<u>When there's three or more (and less than six) authors, all authors are mentioned first time round but the next citation states only the first followed by "et al.". When there's more than six "et al." is used immediately.</u>
•…**Kernis, Cornell, Sun & Harlow, 1993)…**
•**…(Kernis et al., 1993)…**

<u>When multiple authors share their surname the first initial is included to avoid confusion.</u>
•**(E. Johnson, 2001; L. Johnson, 1998)**

<u>When two or more sources are used to state a point the differing sources are separated by a semicolon.</u>
•**(Glass, 1980; Smith, 1984)**

REFERENCE LIST

Basic rules:

•Author's names are generally written down as surname followed by initials. In the case of six or more authors, the first six are mentioned followed by "et al.".

•References are sorted alphabetically by the surname of the first author

•If there's multiple sources by the same author, the sources by the same author or sources with the same multiple authors are ordered according to year of publication starting with the eldest.

•Titles of books and journals are mentioned in italics (or underscored).

BOOKS

Author, A.A. (year). Title. Location: Publisher.

Calfee, R. C., & Valencia, R. R. (1991). *APA guide to preparing manuscripts for journal publication.* Washington, DC: American Psychological Association.

Books with editor(s)

Duncan, G.J., & Brooks-Gunn, J. (Eds.). (1997). *Consequences of growing up poor.* New York: Russell Sage Foundation.

Books with editor(s) and author(s)

Plath, S. (2000). *The unabridged journals* (K.V. Kukil, Ed.). New York: Anchor.

Dissertation (not published officially)

Cairns, R.B. (1965). Infrared spectroscope studies of solid oxygen. Unpublished doctoral dissertation, University of California, California.

Author Rules:
1. Initials are separated and ended by a period eg Mitchell, J.A
2. Multiple authors are separated by commas and an ampersand eg Mitchell, J.A., Thomson, M., & Coyne, R
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Date Rules:
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Calfee, R. C., & Valencia, R. R. (1991). *APA guide to preparing manuscripts for journal publication.* Washington, DC: American Psychological Association. URL….

APA Citation:
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(year, Month day).

Newspaper.

Concert raises thousands for earthquake victims. (2019, August 9). The News

Review. http://www.news-ridgecrest.com/news/story.pl?id=0000010343

Newspaper continued.

URL

Bibliography.com
TEACHER APPROVED. STUDENT LOVED.

Examples

1 author:

•Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science,* 11, 7-10.

2 authors:

•Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality & Social Psychology,* 66, 1034-1048.

3 to 6 authors:

•Kernis, M. H., Cornell, D. P., Sun, C. R., Berry, A., & Harlow, T. (1993). There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem. *Journal of Personality and Social Psychology,* 65, 1190-1204.

More than 6 authors:

•Harris, M., Karper, E., Stacks, G., Hoffman, D., DeNiro, R., Cruz, P., et al. (2001). Writing labs and the Hollywood connection. *Journal of Film and Writing,* 44(3), 213-245.

Publications of the same author: first come the works with one author:

•Berndt, T. J. (1999). Friends' influence on students' adjustment to school. *Educational Psychologist,* 34, 15-28.

•Berndt, T. J., & Keefe, K. (1995). Friends' influence on adolescents' adjustment to school. *Child Development,* 66, 1312-1329.

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•Wegener, D. T., Kerr, N. L., Fleming, M. A., & Petty, R. E. (2000). Flexible corrections of juror judgments: Implications for jury instructions. *Psychology, Public Policy, & Law,* 6, 629-654.

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•Berndt, T. J. (1981a). Age changes and changes over time in prosocial intentions and behavior between friends. *Developmental Psychology,* 17, 408-416.

•Berndt, T. J. (1981b). Effects of friendship on prosocial intentions and behavior. *Child Development,* 52, 636-643.