



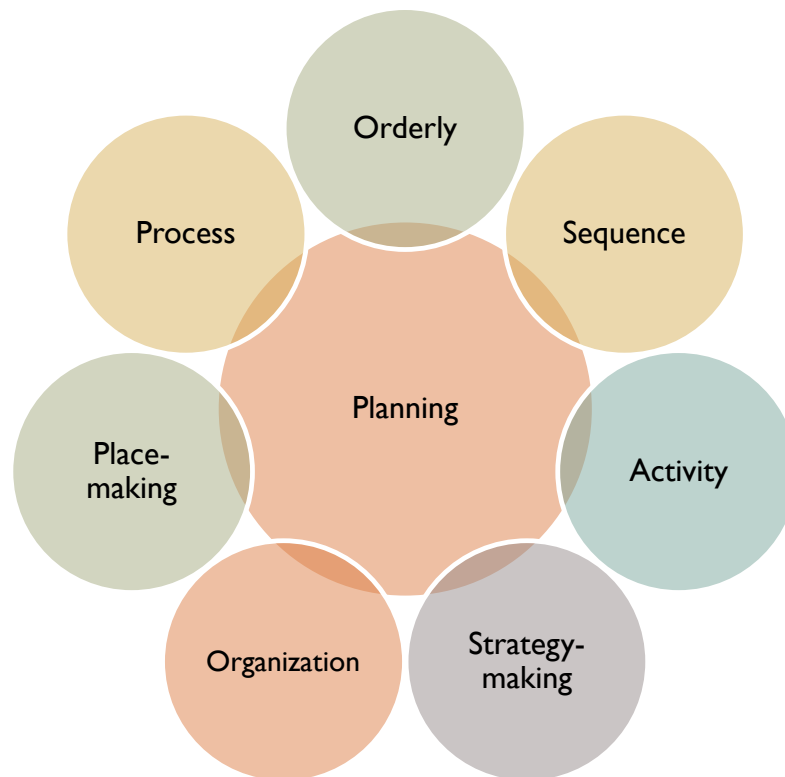
TOWN PLANNING I

DR. SAMEIR M. HAMMAD

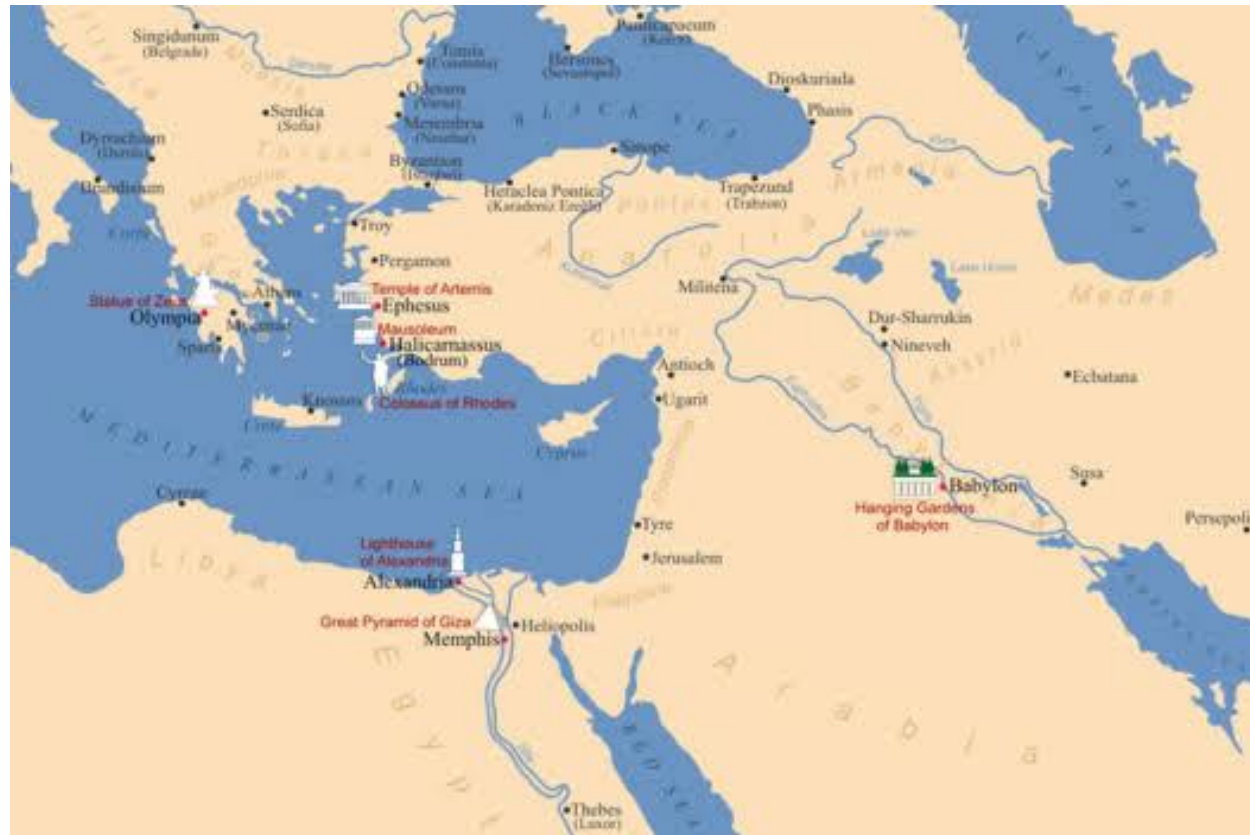
ASSISTANT PROFESSOR, ARCHITECTURAL ENGINEERING DEPARTMENT, BENHA FACULTY OF ENGINEERING



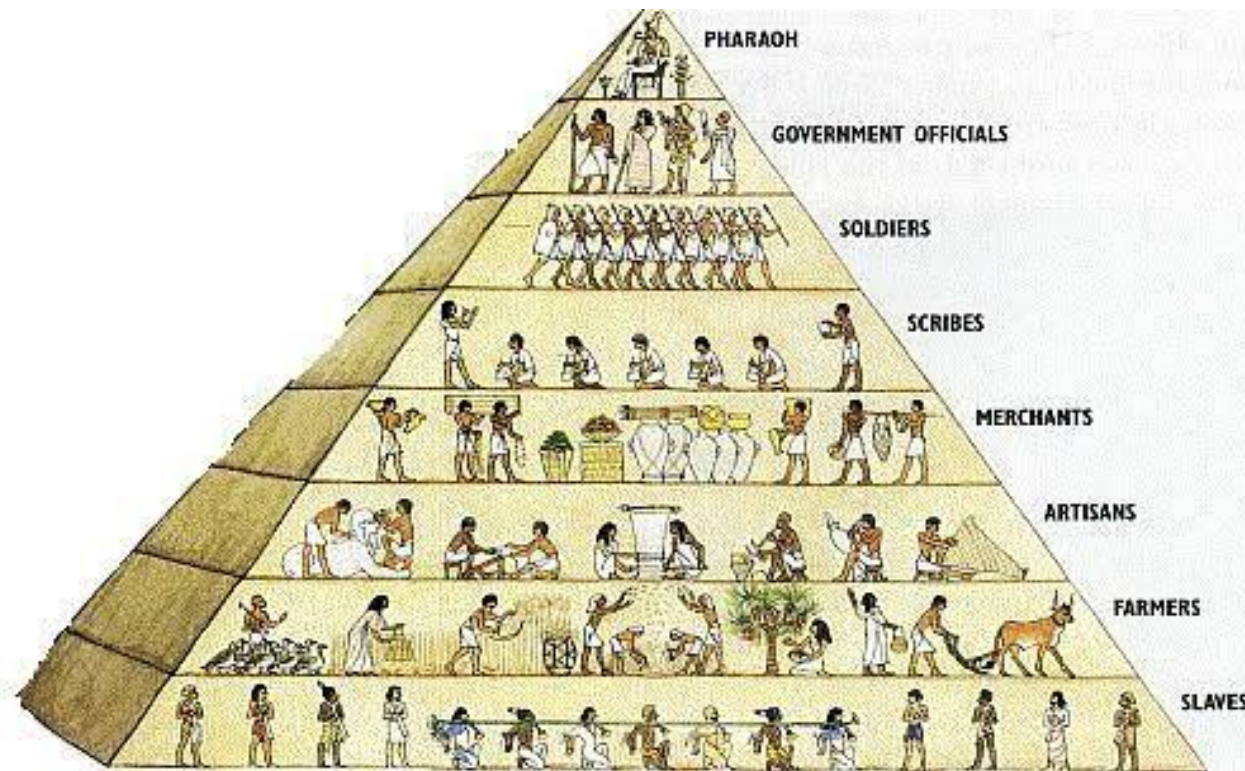
WHAT IS ... PLANNING



HISTORY OF URBAN PLANNING



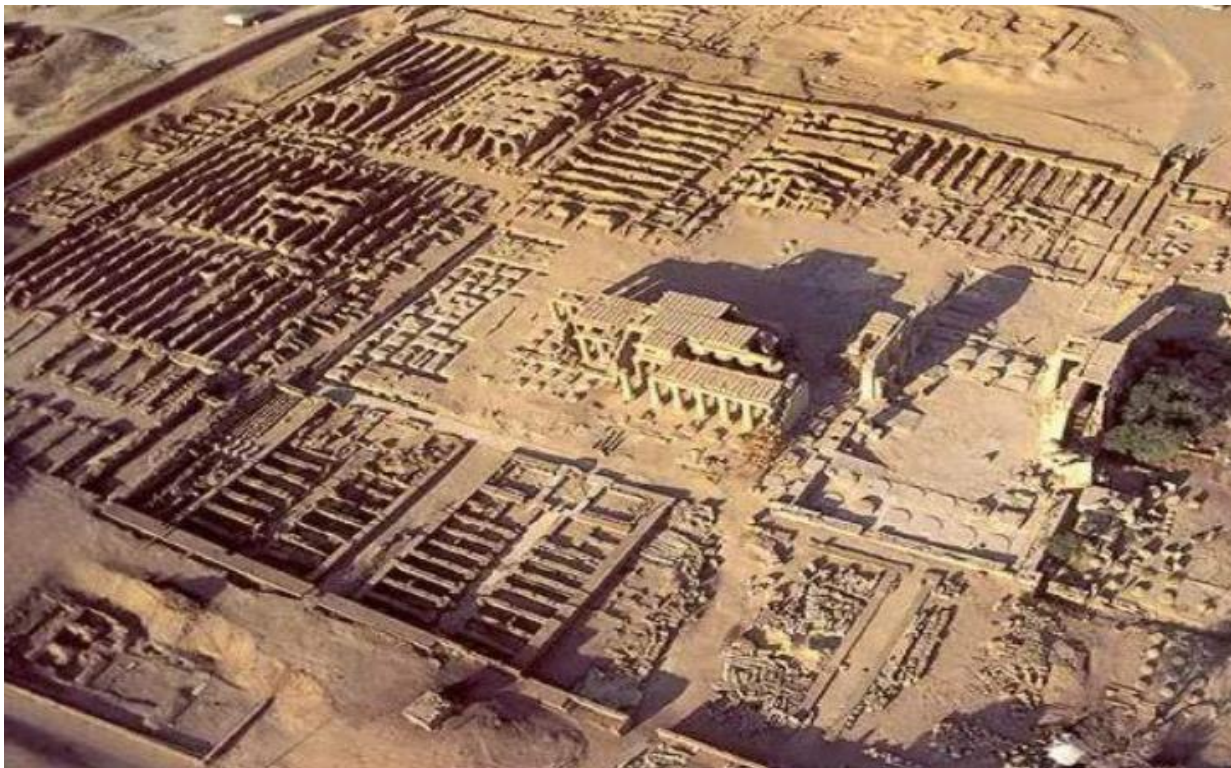
ANCIENT EGYPT .. 3,000 – 300 BC



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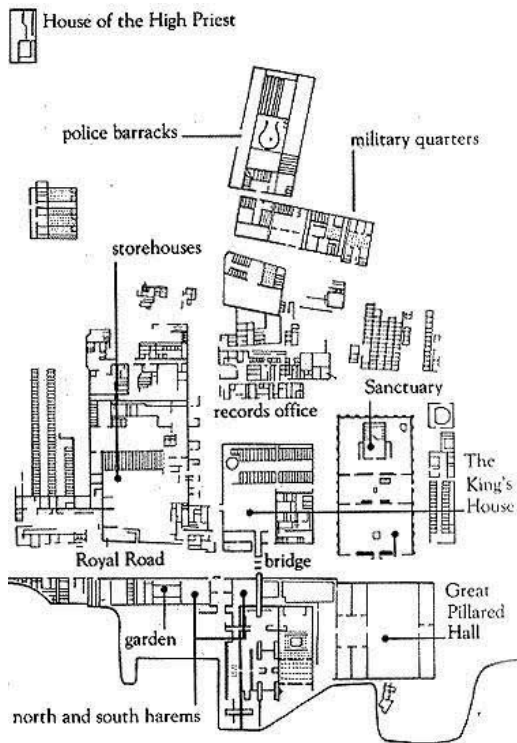
Lahun City, 12th Dynasty
Senusert II

ANCIENT EGYPT .. 3,000 – 300 BC



Tell al-Dabaa, Middle Kingdom, around 2000 BC.

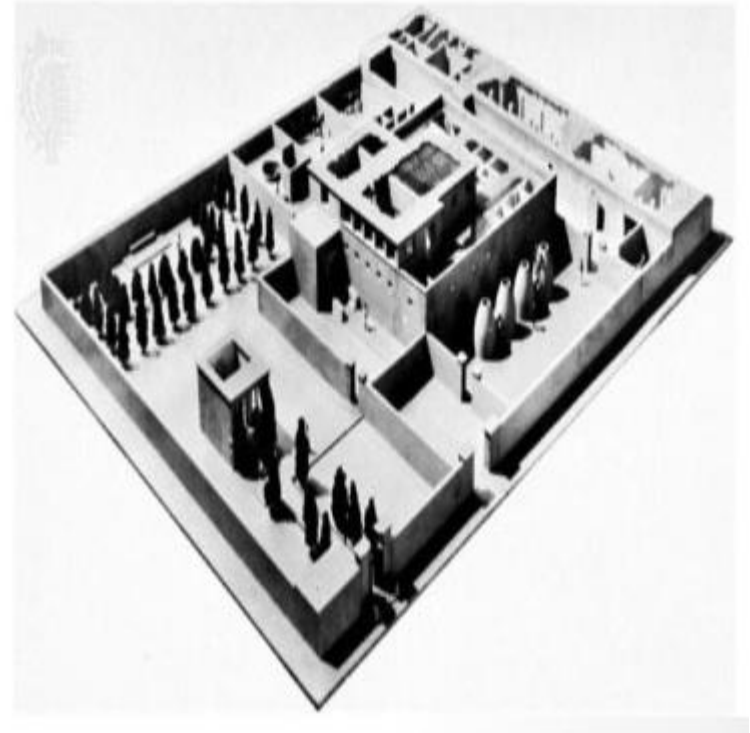
ANCIENT EGYPT .. 3,000 – 300 BC



Amarna ... Capital of ancient Egypt 1348-1336 BC Akhetaten

ANCIENT EGYPT .. 3,000 – 300 BC

- Estimated population 20000 to 50000.
- The layout divided into 3 areas: **The main temple, The royal palace** in the middle, Three city quarters laid out for development

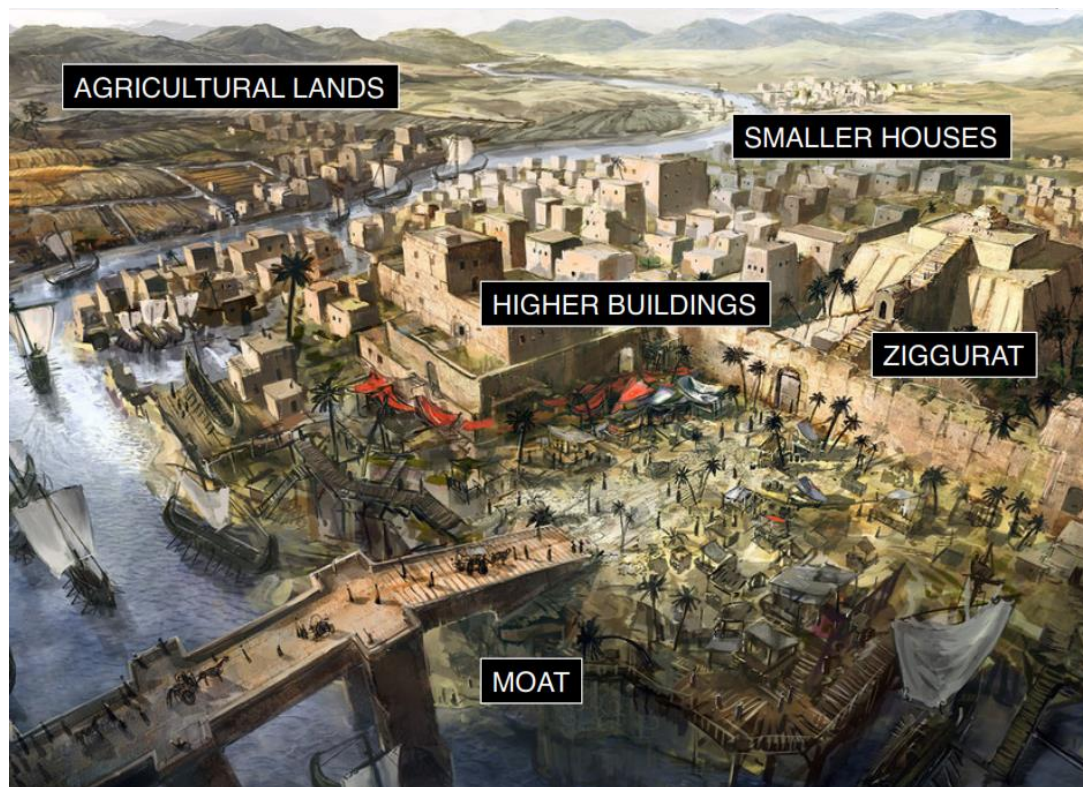


MESOPOTAMIA .. 10,000 BC – 7TH CENTURY AD

- Fertile crescent means land between rivers.
- Scope of the Tigris and Euphrates river systems.
- Water as a basis of urban development.



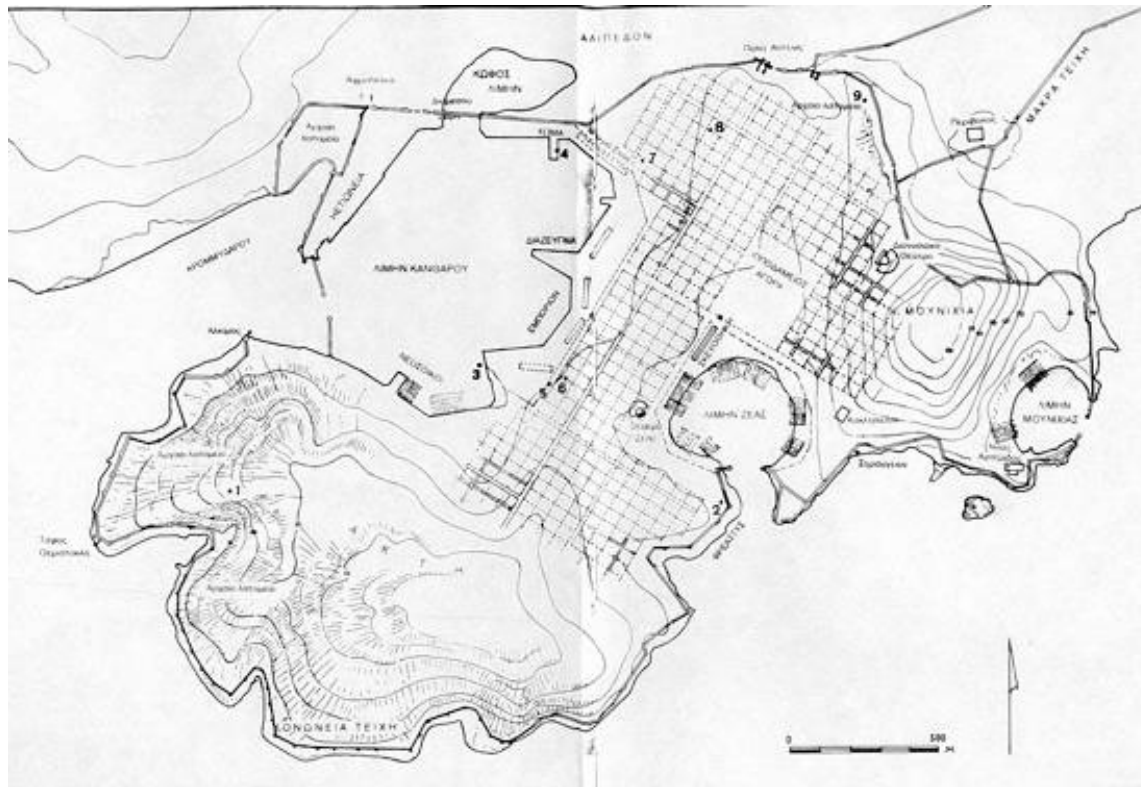
MESOPOTAMIA .. 10,000 BC – 7TH CENTURY AD



HIPPODAMUS OF MILETUS .. 498-408 BC

- Inventor / father of formal city planning.
- Made the Hippodamian Plan or the **grid city** to maximize winds in the summer and minimize them in winter
- Has a geometric, arranged style in design
- Also worked on the Piraeus Port and Alexandria

HIPPODAMUS OF MILETUS .. 498-408 BC

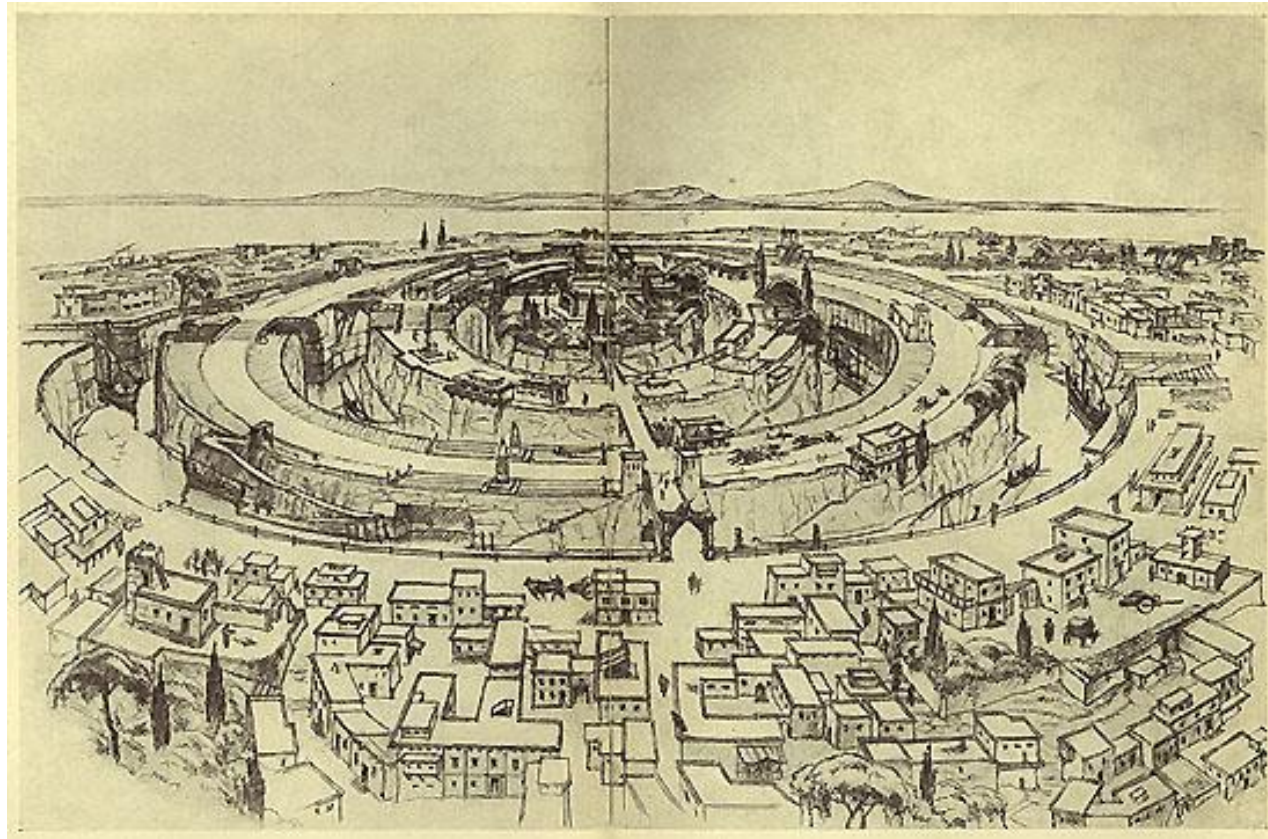


PLATO.. 428 - 347 BC

- Established the **Polluter Pays Principle**

“If any one internationally pollutes the water of another, whether the water of a spring, or collected in reservoirs, either by poisonous substances, or by digging, or by theft, let the injured party bring the cause before the wardens of the city, and claim in writing the value of the loss; if the accused be found guilty of injuring the water by deleterious substances, let him not only pay damages, but purify the stream or the cistern which contains the water, in such manner as the laws... order the purification to be made by the offender in each case.”

PLATO.. 428 - 347 BC



ARISTOTLE .. 384 - 322 BC

- Provided the foundation for the concept of **intergenerational equity** ... for our children's children.

“Human well-being is realized only partly by satisfying whatever people’s preferences happen to be at a particular time; it is also necessary for successive generations to leave behind sufficient resources so that future generations are not constrained in their preferences.”

THE ROMAN EMPIRE .. 29 BC – 393 AD

- Excelled in military science and engineering.
- Designs and inventions looked at improving.
- transport and military strategies.

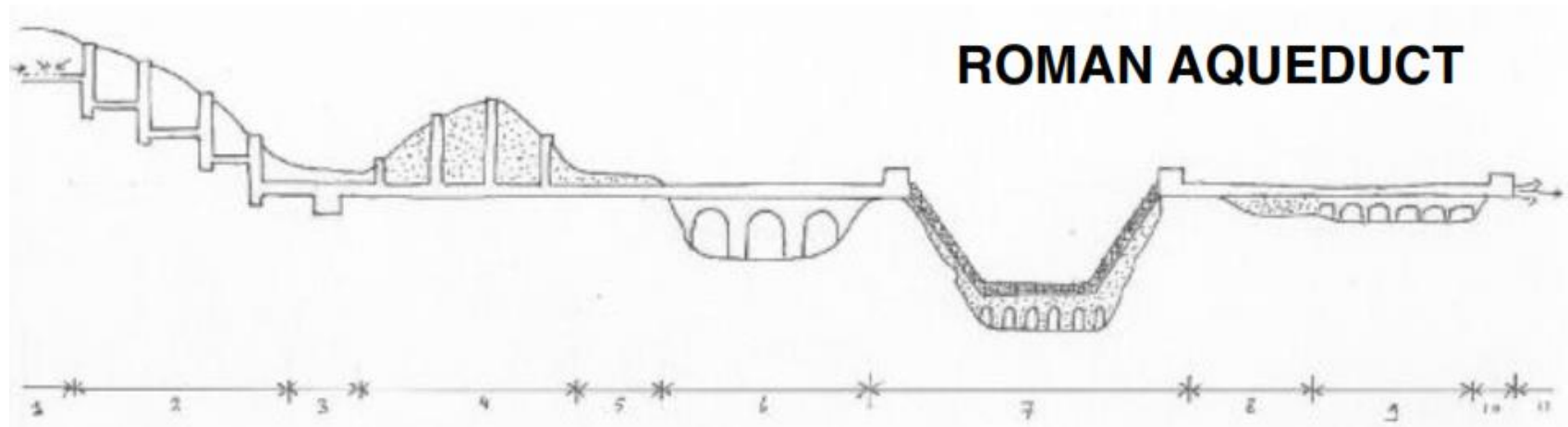




THE ROMAN EMPIRE .. 29 BC – 393 AD

THE ROMAN EMPIRE .. 29 BC – 393 AD

- Heavily dependent on water
- Engineered sewerage, canals, hydraulics



THE ROMAN EMPIRE .. 29 BC – 393 AD

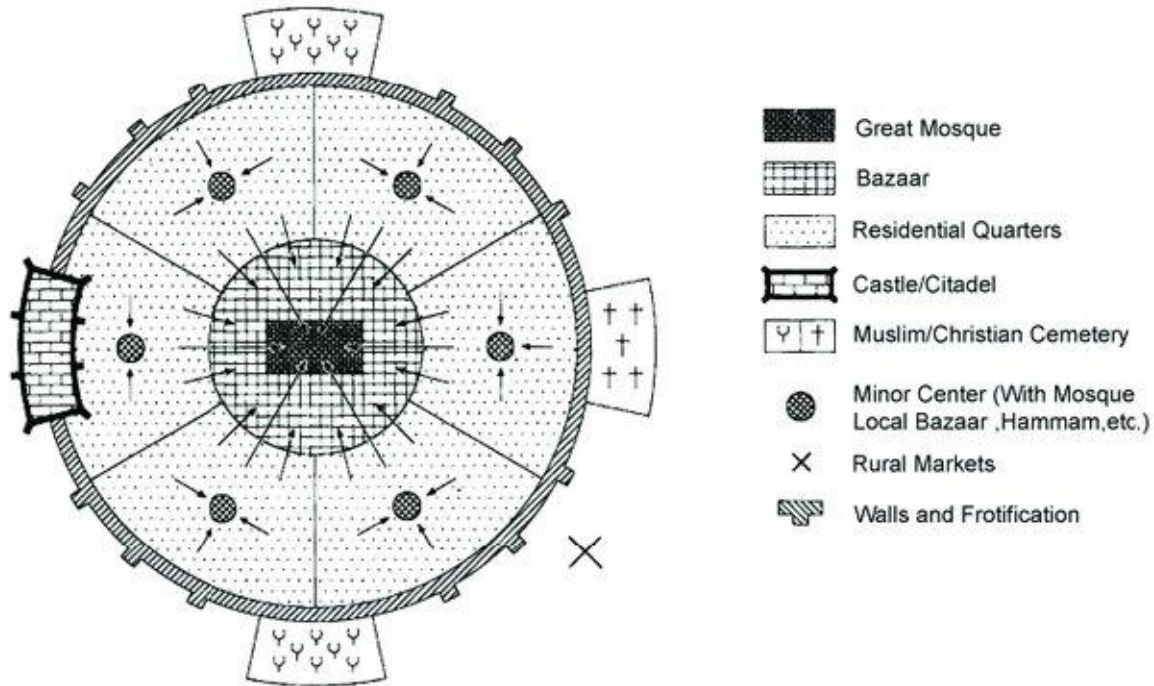
- Socio-political events resulted to religious divisions, absence of **Moral decay led to the fall of Rome**
- military discipline, murder, and citizen unrest
- Vikings destroyed the Aqueduct

THE MEDIEVAL PERIOD .. 5TH – 15TH CENTURY AD

- The church and monasticism
- Rise of Islam
- Byzantine empire
- State power
- The Crusades
- Carolingian dynasty

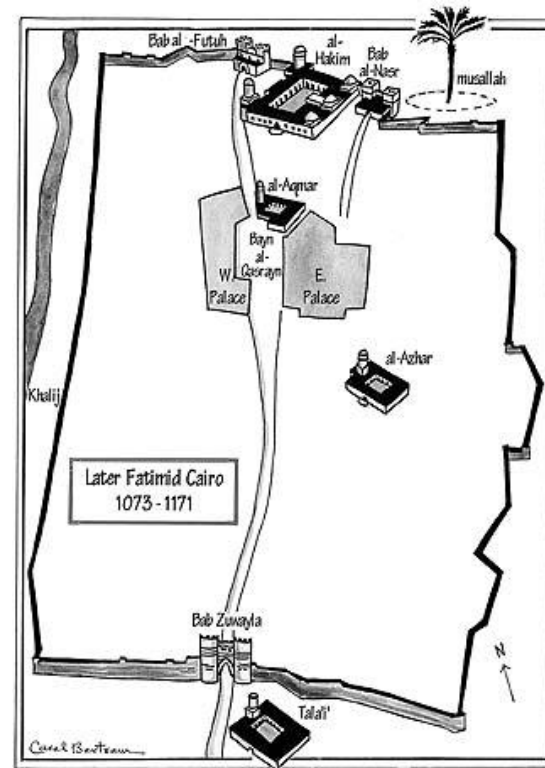
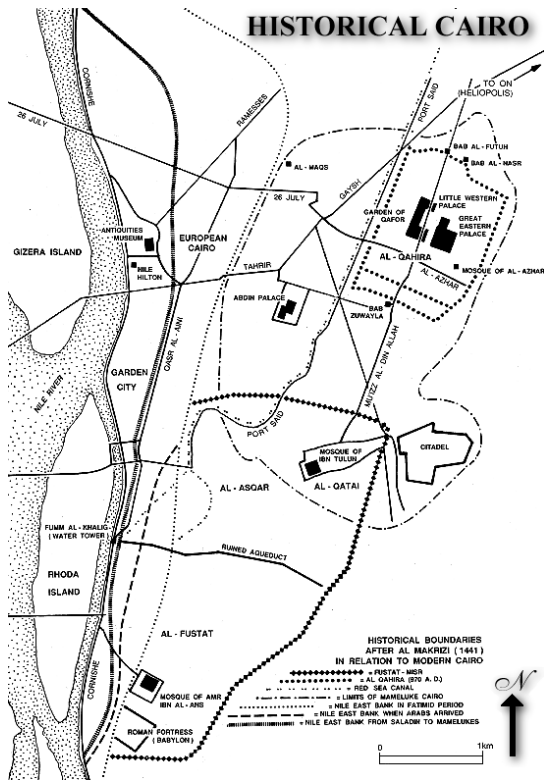


ISLAMIC CITIES



Typical model of Islamic city associated to the Iranian cities

ISLAMIC CITIES



Historical/ Islamic Cairo Map

CATHEDRAL CITIES

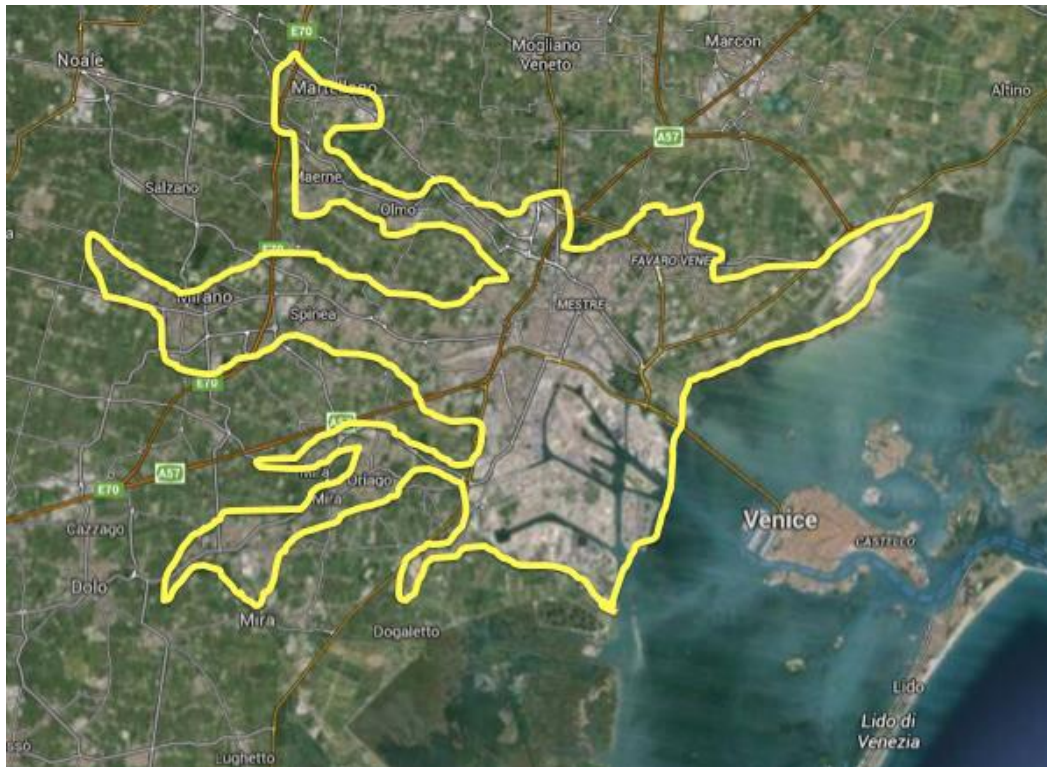
- Cathedral or monument as a focal point of the city
- Radial growth
- Retained the walled city from Roman practice
- Enclosure caused problems such as epidemics and limited resources

RENAISSANCE .. 14TH TO 17TH CENTURY AD

- Commerce as a driving factor
- Called for accessibility and mobility
- Like the Medieval Period, had a radial growth pattern
- Plans began to follow the topography of an area

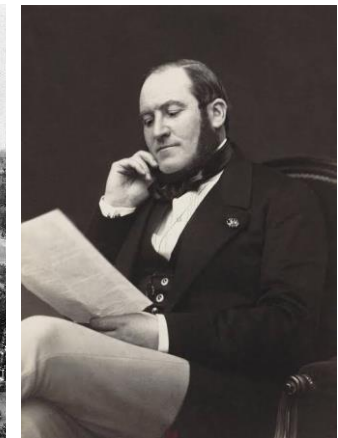
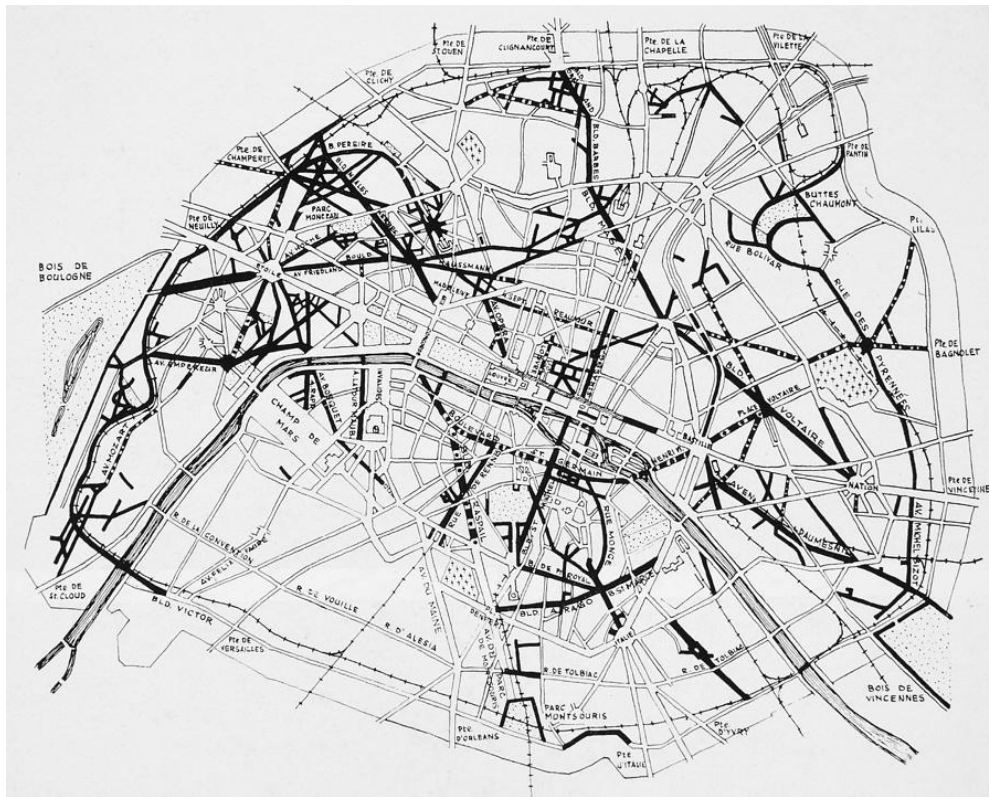


RENAISSANCE .. 14TH TO 17TH CENTURY AD



Growth is characterized by
a **star-shaped** form.
- LEON BATTISTA ALBERTI

GEORGES-EUGENE HAUSSMANN .. 1809-1891

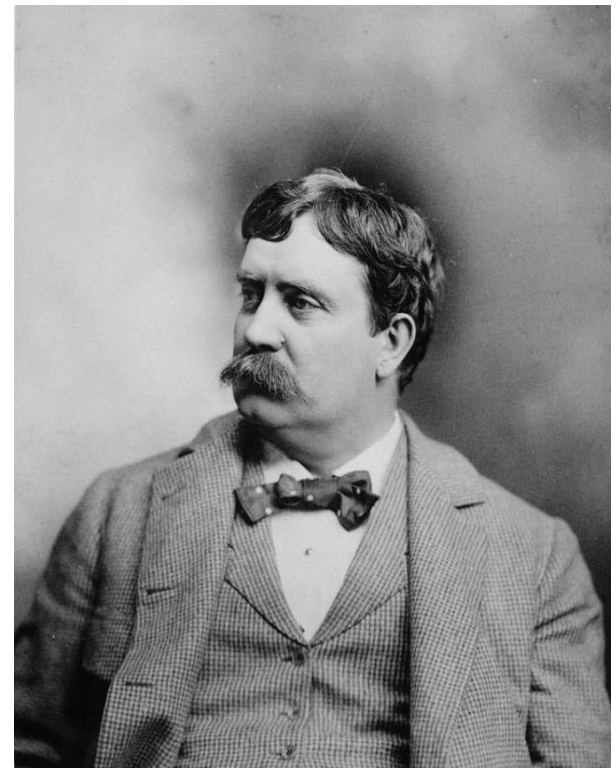


CITY BEAUTIFUL MOVEMENT .. 1800s – 1900s

- Emphasized beauty and aesthetics
- Think monuments, grand buildings, parks, perfect landscapes, lakes, and circular road systems

DANIEL HUDSON BURNHAM .. 1846-1912

- Father of American City Planning
- Together with Frederick Law Olmstead and John Wellborn Root, designed the **World's Columbian Exposition**, the **first** Comprehensive planning document in the US



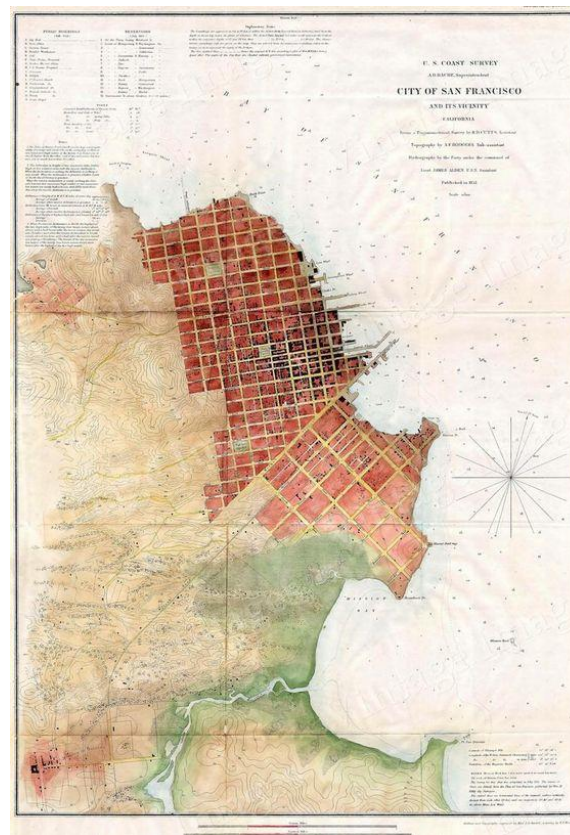
DANIEL HUDSON BURNHAM .. 1846-1912

*“Make **no little plans**; they have no magic to stir men’s blood and probably themselves will not be realized. **Make big plans**; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty.”*

DANIEL HUDSON BURNHAM .. 1846-1912

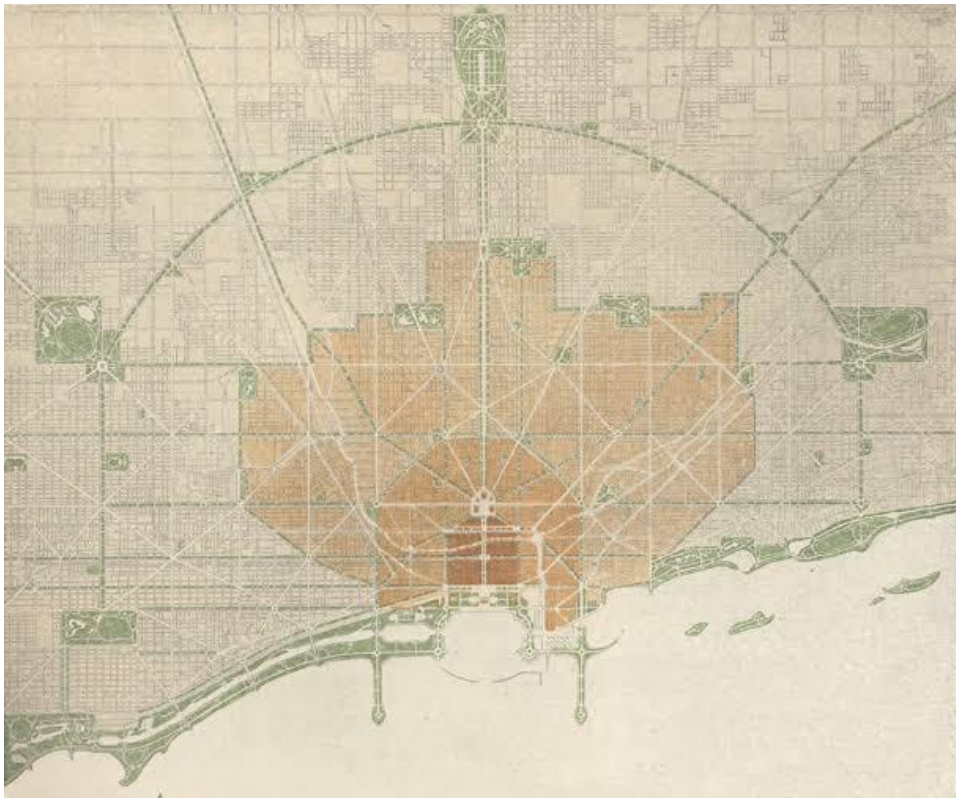


AE 1361 TOWN PLANNING I, SPRING 2019



San Francisco

DANIEL HUDSON BURNHAM .. 1846-1912



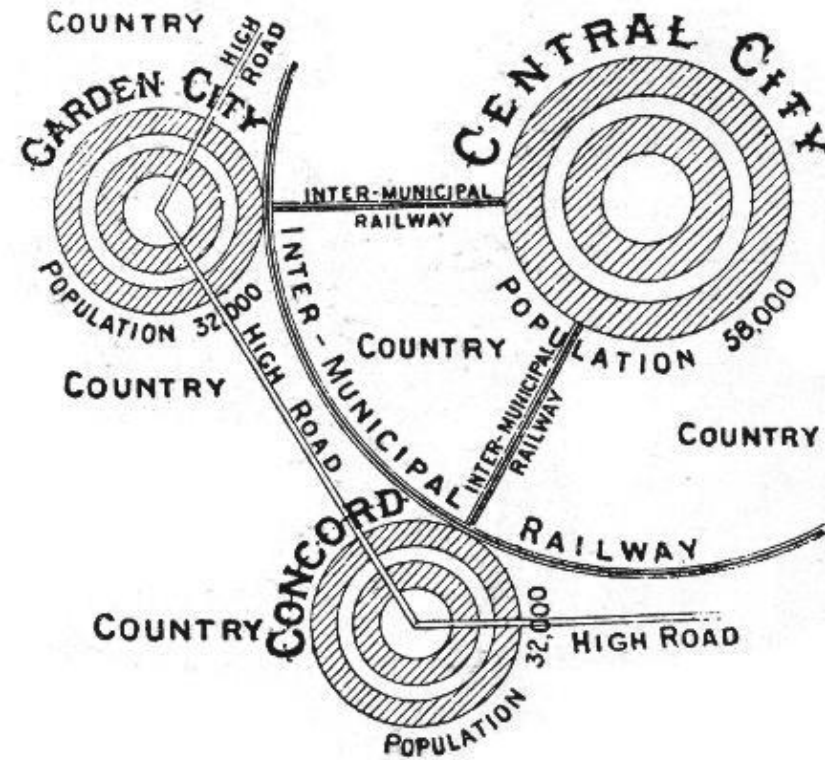
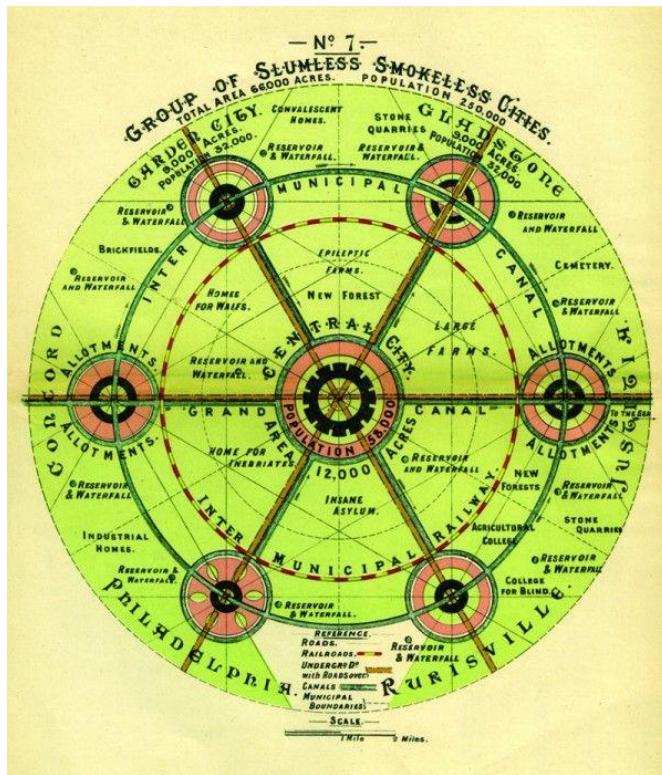
Chicago

SIR EBENEZER HOWARD ..1850 - 1928

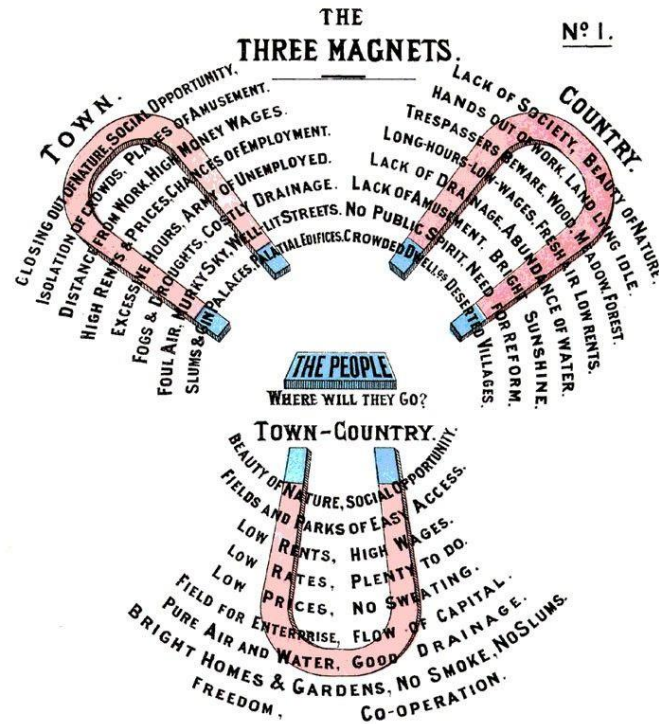
- Wrote the book **Garden Cities of Tomorrow**
- Addressed population and pollution that came about by the industrial revolution by creating **garden cities**



SIR EBENEZER HOWARD ..1850 - 1928



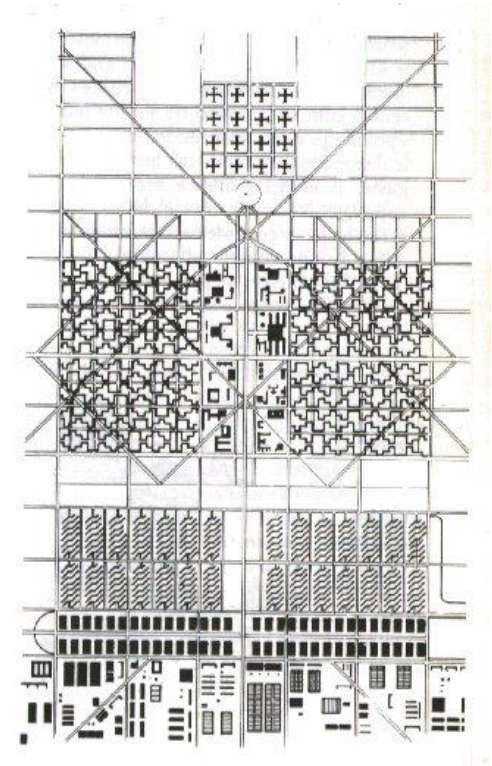
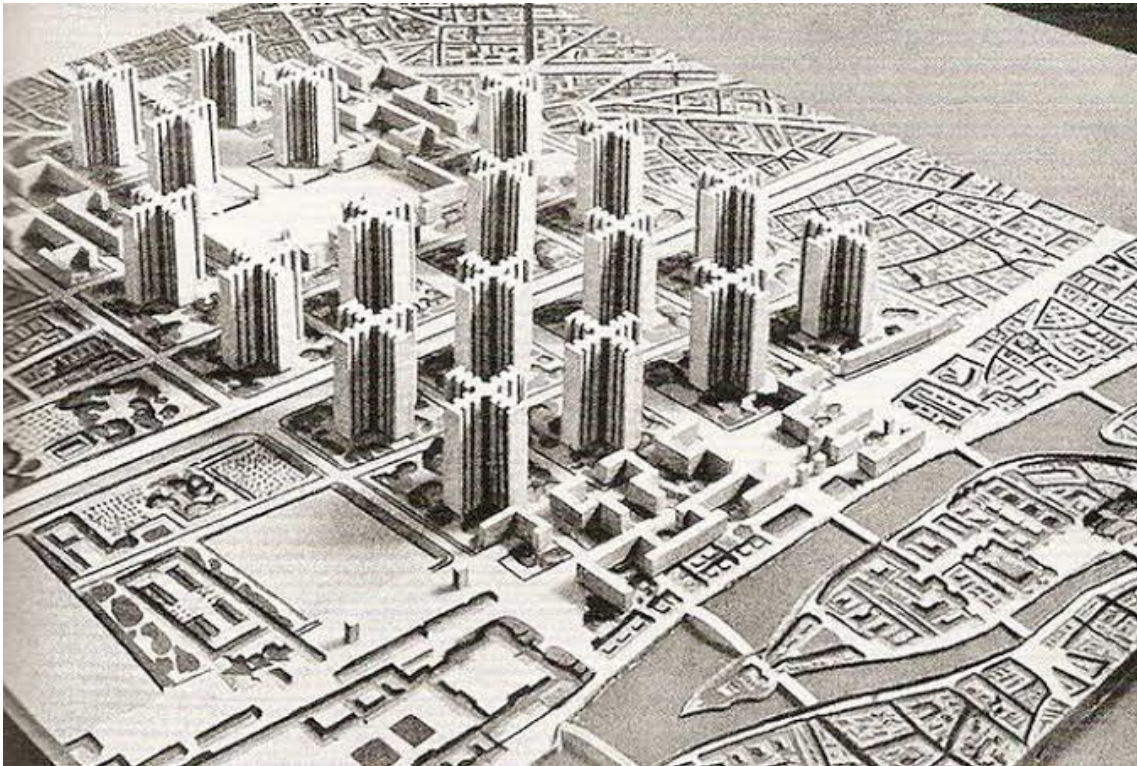
SIR EBENEZER HOWARD .. 1850 - 1928



LE CORBUSIER ..1887-1965

- Created the Radiant City
- Modernist, futuristic, and orderly
- But socially disadvantageous and unrealistic for settlements
- Criticized because he tried to solve congestion with more congestion
- Wrote the books “Urbanisme and The City of Tomorrow and Its Planning”

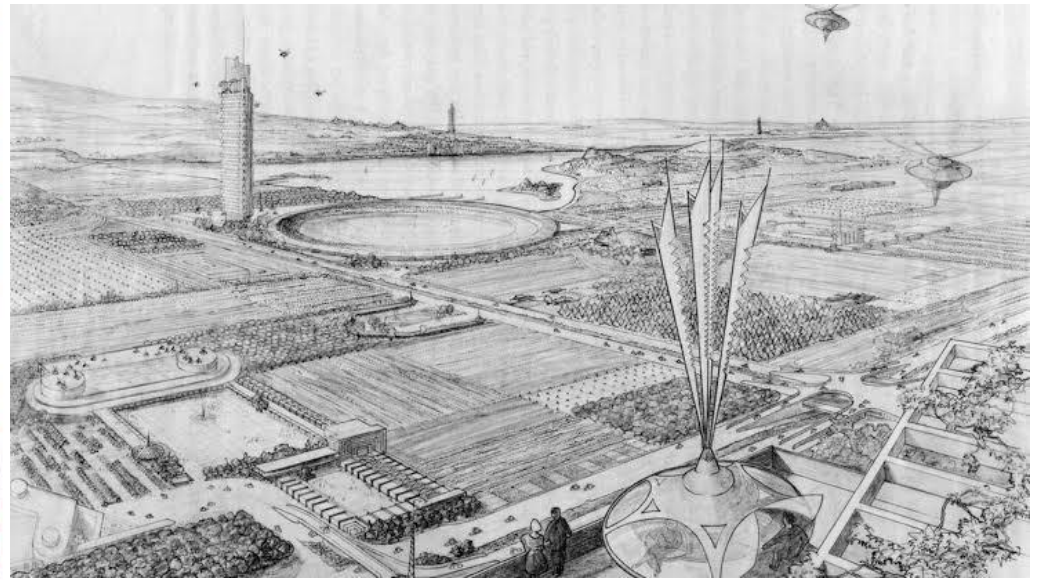
LE CORBUSIER ..1887-1965



FRANK LLOYD WRIGHT .. 1867-1959

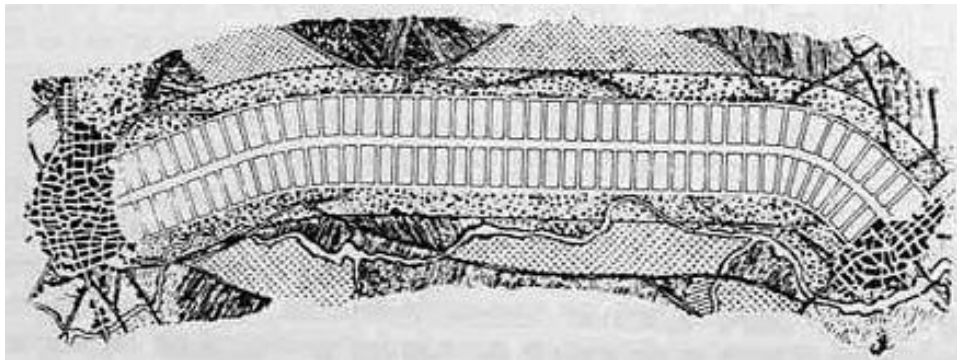
- Champion and proponent of **urban decentralisation**
- Involved communities
- Designed the 1,000-hectare **Broadacre City** included social services in the forms of schools, trains, and museums, as well as employment in the forms of markets, offices, nearby farms, and industrial areas
- Plan included a *helicopter, which was criticized*

FRANK LLOYD WRIGHT .. 1867-1959



DON ARTURO SORIAL Y MATA .. 1844-1920

- Made the concept **Linear City**, which has many parallel and specialized functions.
- The linear city gears away from the usual centric urban forms. The lines help control the expansion of a city.



DON ARTURO SORIA Y MATA .. 1844-1920





THANK YOU

NEXT LECTURE: URBAN PLANNING PROCESS