

*Dominique Badariotti - UTSEUS 2020*

## COURSE 1

# **History of town planning and its models**

## **Introduction: "inventing" the city 7**

**initial centres :**

- The Middle East and Mesopotamia (Jericho, Uruk, Babylon, etc.) ;
- Greece and Crete (Knossos, ...) ;
- Egypt;
- India (Harappa);
- China;
- Central America (Mayas);
- Andean America (Incas).

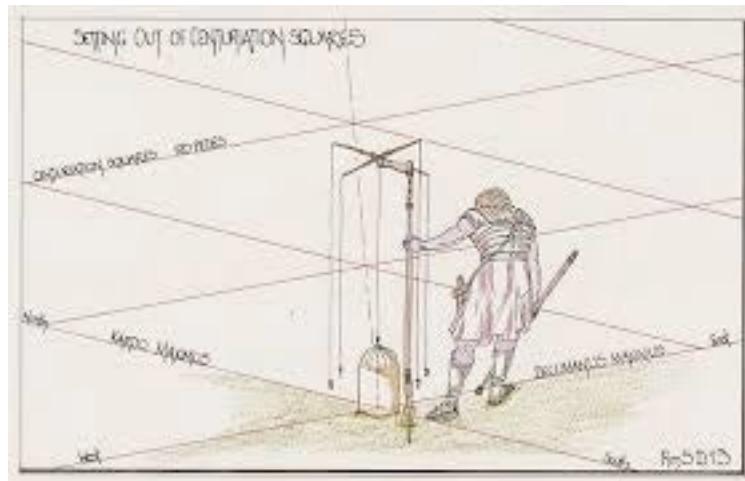
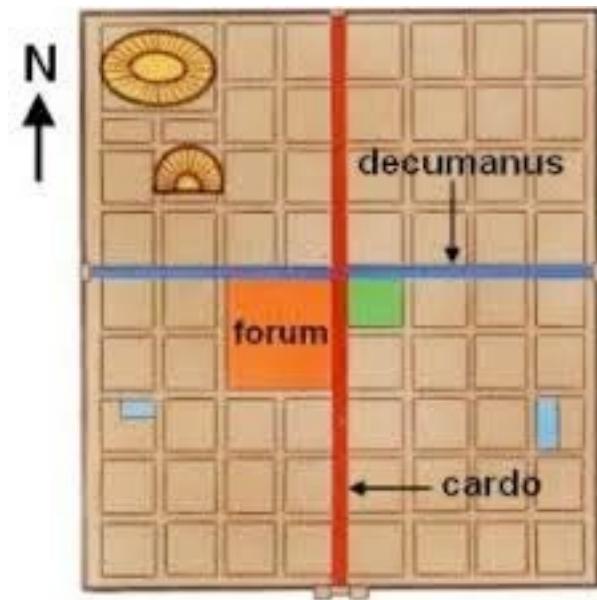
## **1. Greek and Roman models**

### **a/ The Greek cities**

- URBS / POLIS : Hygiene / Protection
- Political principles: monarchy / oligarchy / democracy (Agora)
- Hippodamean plan (Hippodamas of Miletus)

### **b/ Roman towns**

- Orientation: Cardo and Decumanus / Janus
- Prioritised streets (Itinera - News - via)
- Regular islands
- Well-divided plots (centuriation principle - see agrimensorum)
- Tool : Groma
- Houses: domus / insula



**Greek and Roman cities:** Hippodamean plan Cardus maximus and Decumanus maximus

Left: Groma, a tool for defining perpendicular lines



### Greek and Roman cities :

Left: Emerita Augusta, Spain Right:

Timgad, Algeria

## **2. medieval models: gothic town planning and bastides**

- Towns shrink (or even disappear) 3rd - 7th centuries
- Internal redefinition around the 3 powers (religious, political, economic) (archipelago city) 8th - 11th centuries → appearance of the city "archipelago"
- Urban expansion: Gothic towns in the north / bastides in the south 12th - 14th centuries

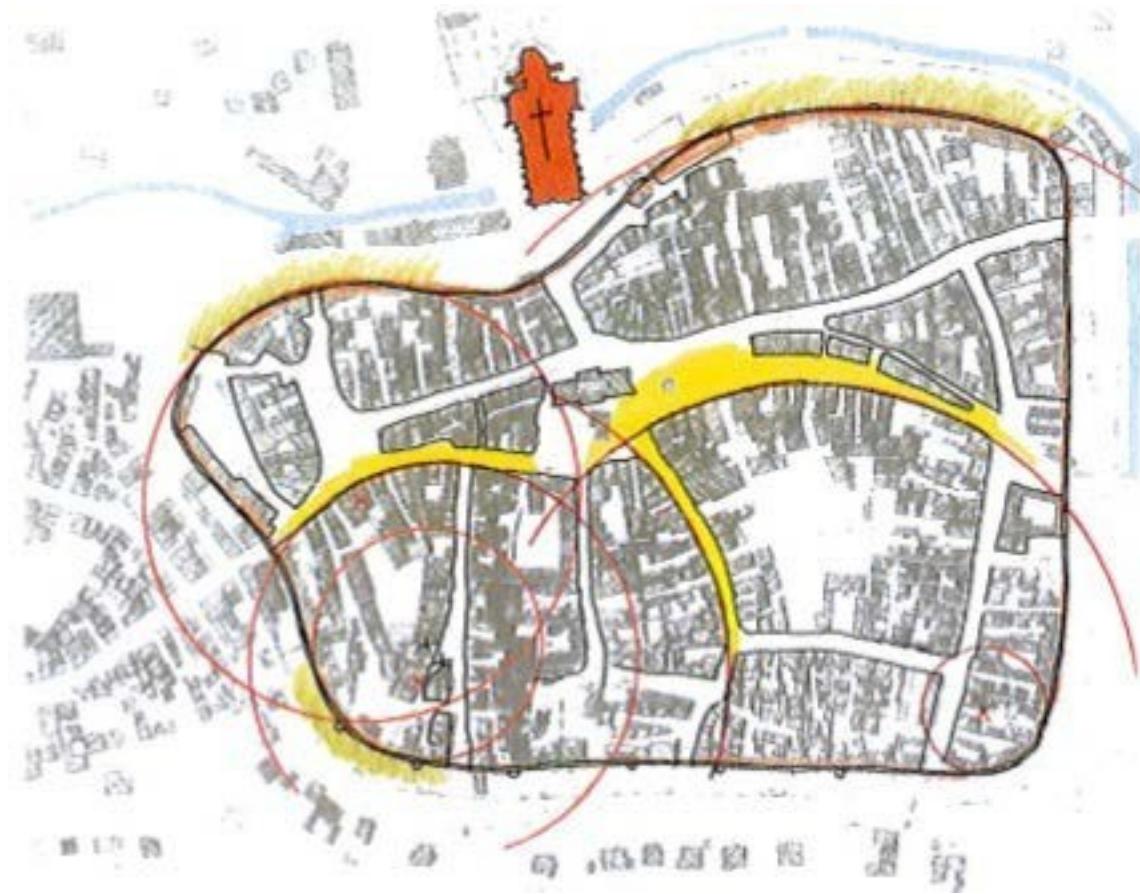


Toulouse



Medieval Paris

**Medieval cities:** "tortuous" layout - multiple centralities around places of religious and civil power (e.g. Toulouse)



**Medieval towns:** curved routes - Obernai (Alsace)

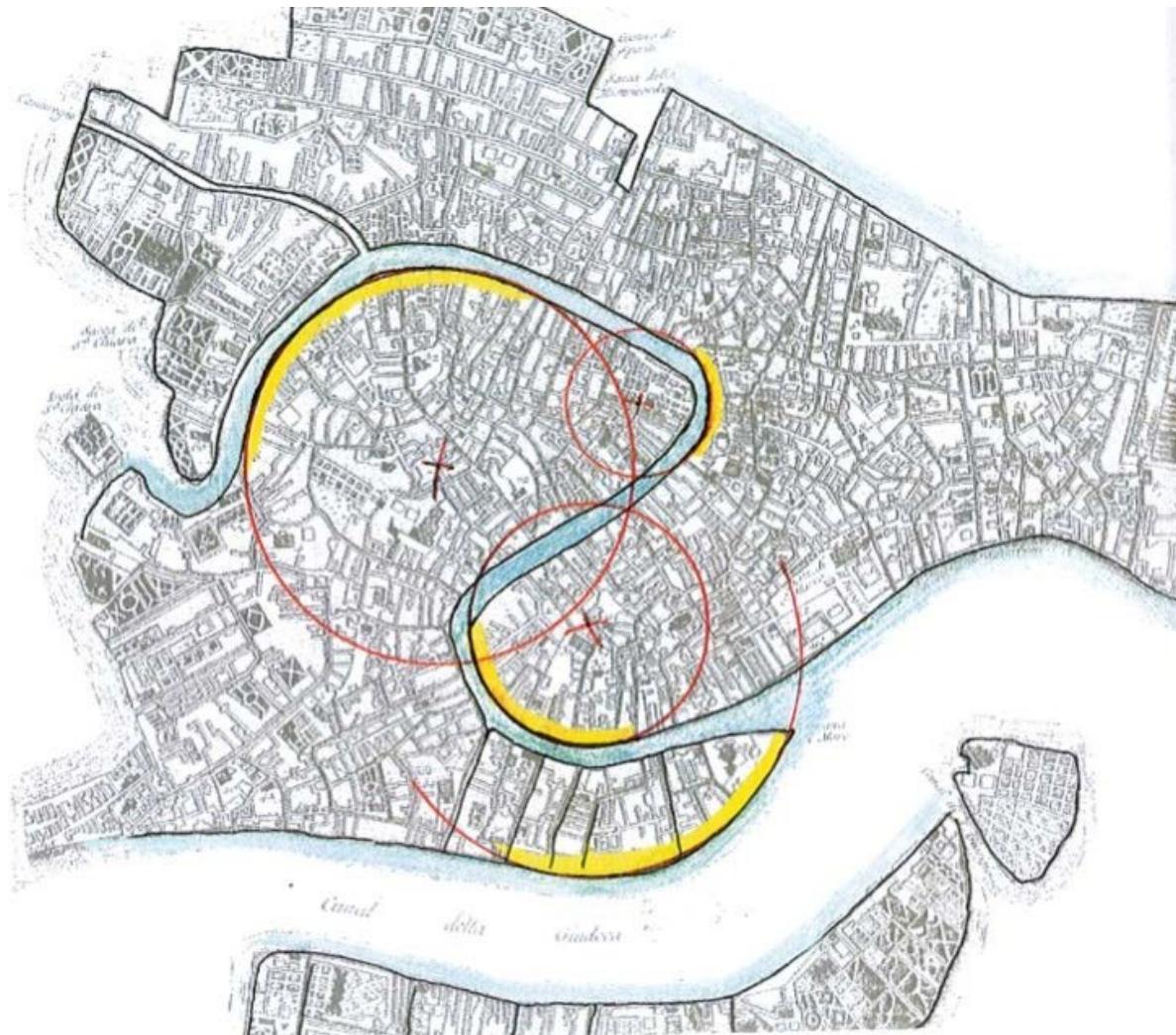
## **a/ Gothic town planning**

Geometric skills: compass, ruler, 13-knot rope

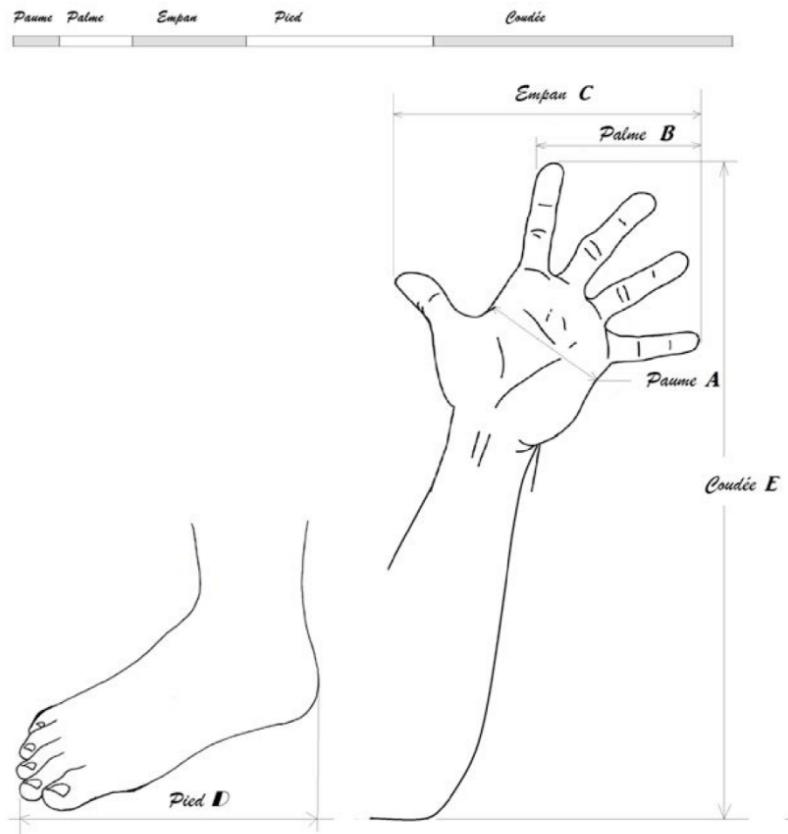
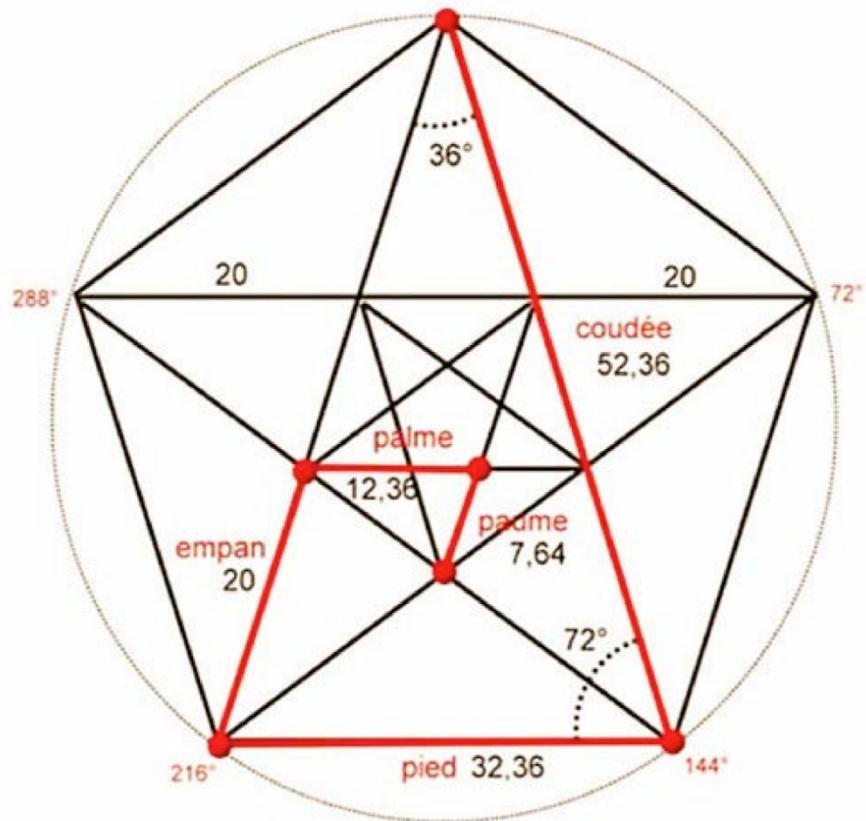
Anthropomorphic and anthropometric approach based on the proportions of the human body

Golden number -  $\Phi$  (1.618, ratio of the long side to the short side of the golden triangle 3-4-5:  $\Phi/1 = \Phi-1$ ... square of  $\Phi = \Phi+1$ )

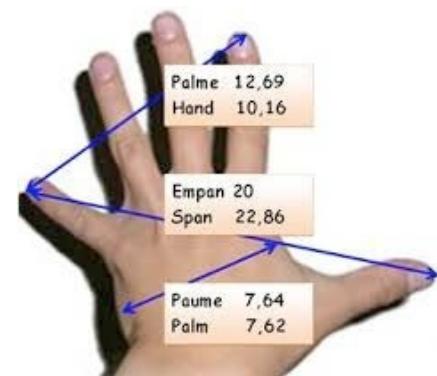
The Quine, the builders' cane, anthropometric standard and 5 units of measurement of the time (palm, palm, empan, foot and royal cubit)



**Medieval towns:** curved routes - Venice



**Medieval towns:** anthropometric measurements and the builders' cane

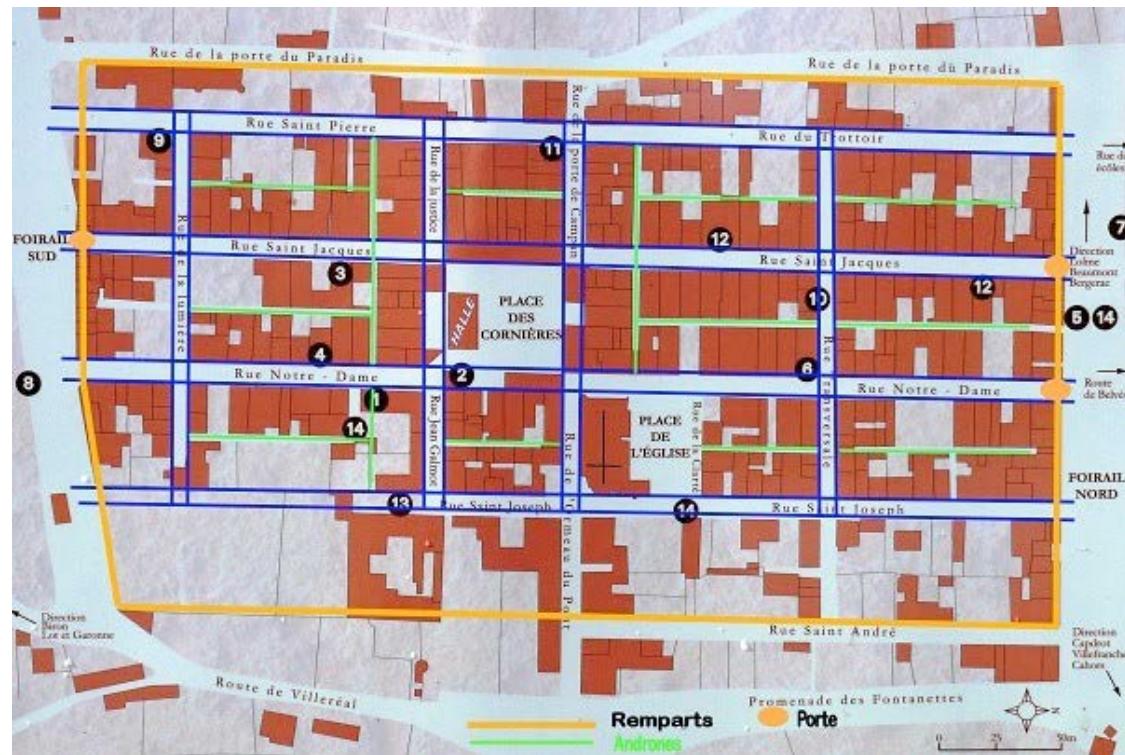


## **b/ Country houses**

New, franchised Hippodamean towns

Created ex-nihilo from the 12th century onwards, during a phase of urban expansion

Rational layout, similar to the layout of the ancient city



## Monpazier (1284)

## **Medieval towns: bastides**



## Monflanquin (Agennais - 1253)

### **3. Models from the Renaissance and modern times**

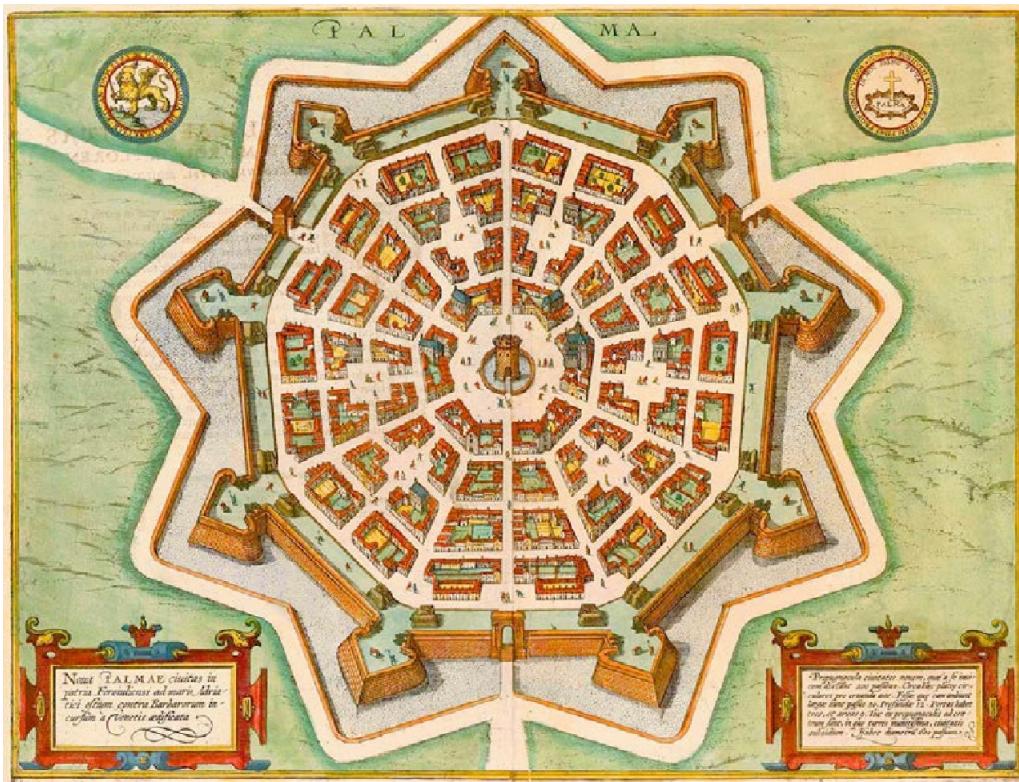
Reflections on the political and geometric organisation of the city :

=> invention - and creation - of new towns, on the plan  
"perfect' and incorporating new defensive systems

=> (Re-) discovery of the **Monumental Perspective**  
which consists in binding together an indivisible whole:  
• la rue droite (perspective)  
• and its terminal building (monument)

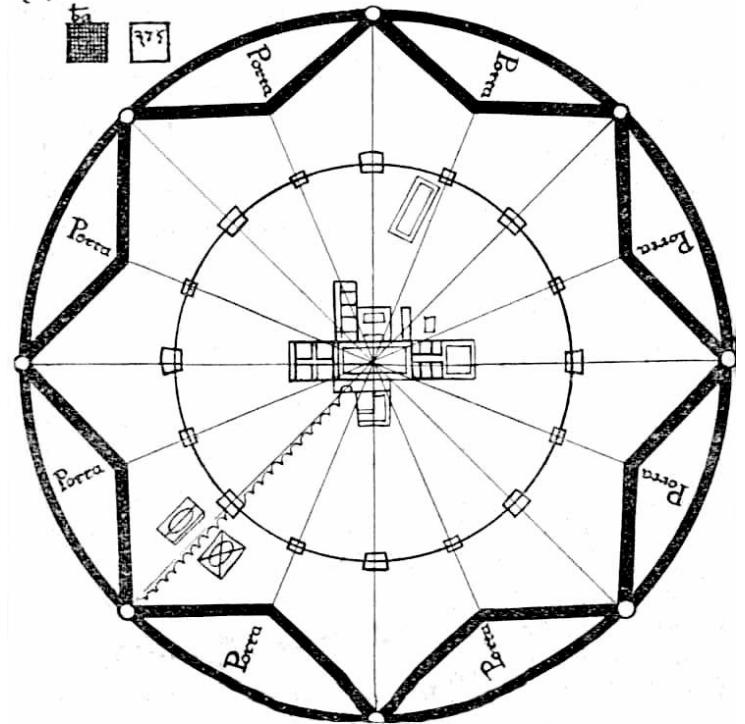
=> Homogenisation of facades according to fashionable styles:

- **Baroque style:** Italy, Austria, Poland, Czech Republic
- **the "classic" style:** France - Place des Vosges in Paris



Palma nova (1593)

Sforzinda, Questa quadrona sono assai uno studio d'quale siadico e  
375 braccia circa.



Sforzinda (c. 1464)

## Renaissance cities



**The ideal Renaissance city: rediscovering the ancient city and perspective**



The ideal city of the modern / classical era: the city of Richelieu (1631)



### Classic style

(place des Vosges in 17th century Paris)

The ideal city of the modern / classical era

### Italian Baroque style

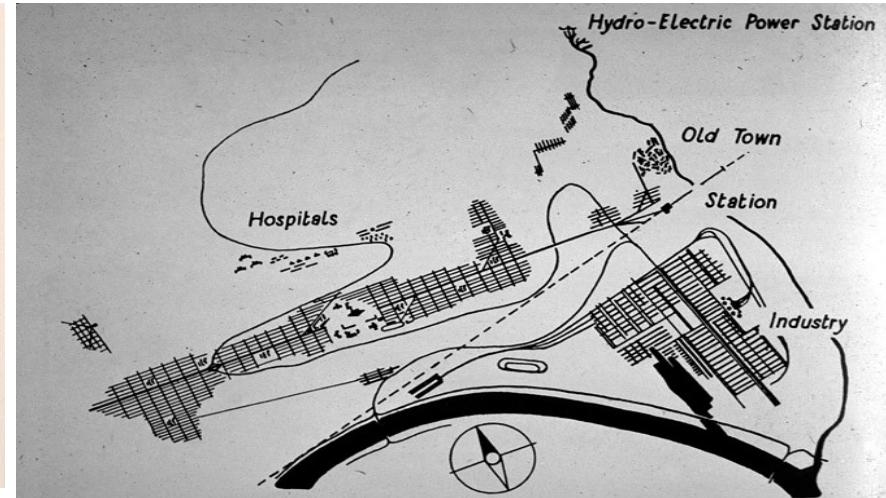
(several 18th century facades)

## **4. Urban planning models of the 19th and 20th centuries**

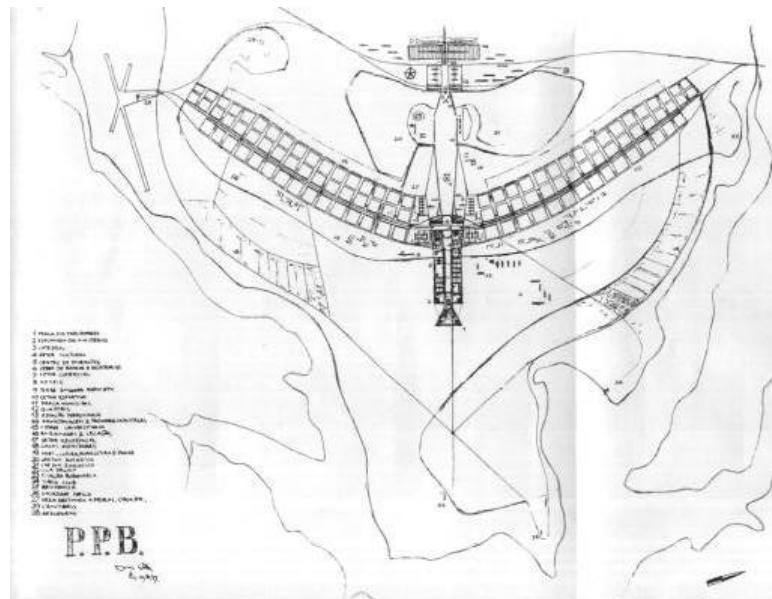
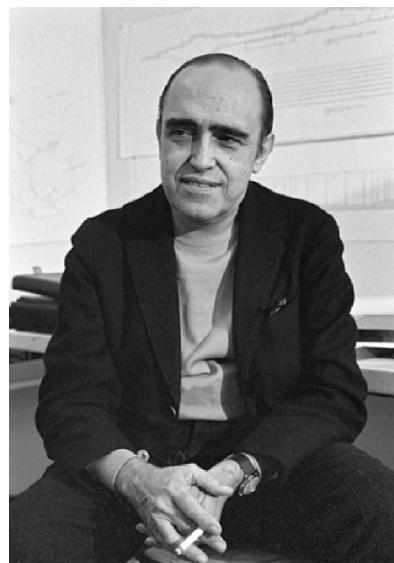
### **a/ The progressive or functionalist trend**

- Pre-progressive: (Haussman, Cerdà)
- Another pre-progressive (or pre-functional) before his time:  
Pierre Charles L'Enfant
- Progressive : Tony Garnier, Le Corbusier, Jean Niemans, Eugène Baudouin, ... Oscar Niemeyer  
*Auguste Perret, MAM (modern architecture movement), Charter of Athens...)*

Tony Garnier - Industrial City 1917



Oscar Niemeyer  
Brasilia 1956



Functionalist town planning



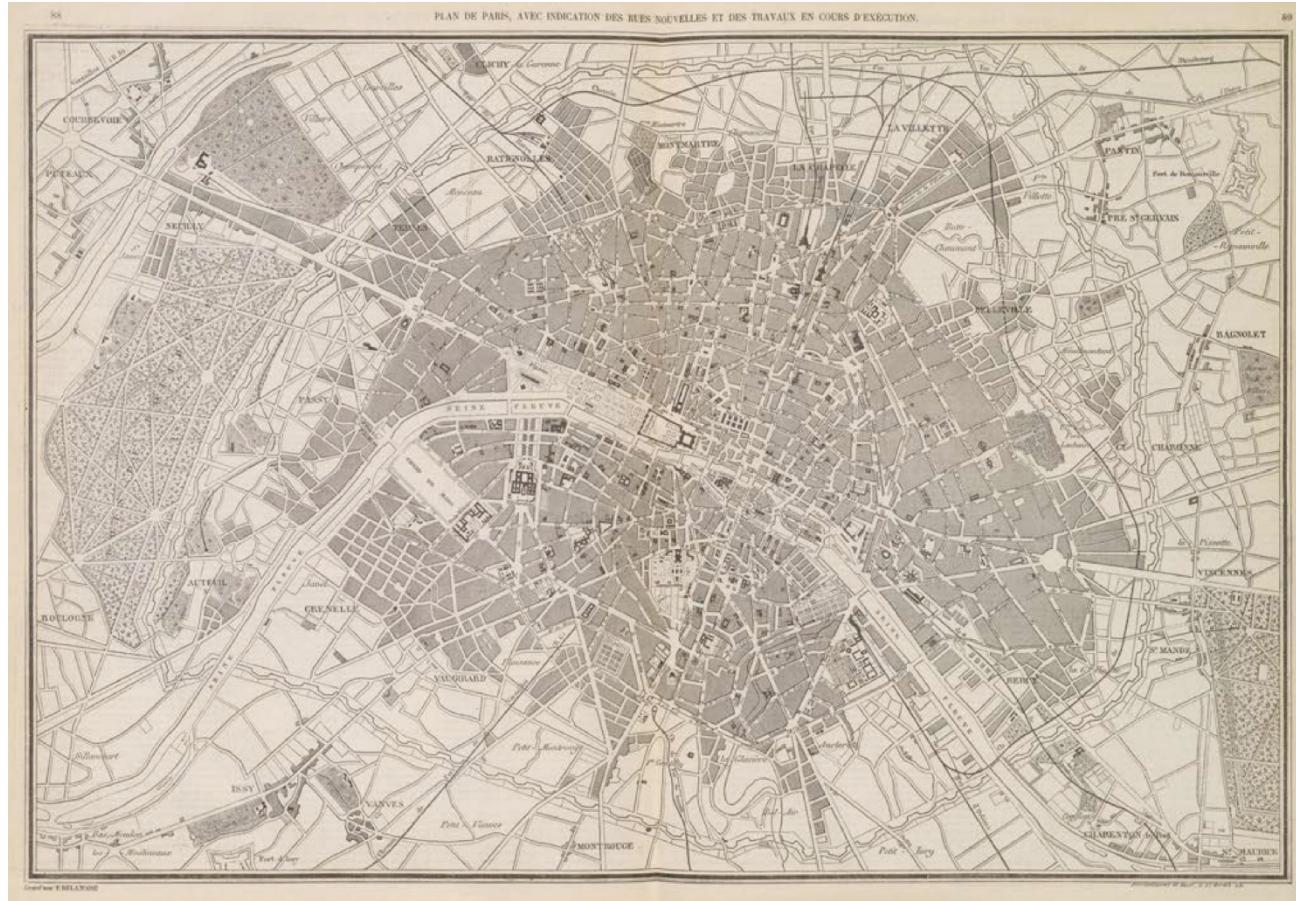
Lat. Capital 38. 45. N.  
Long. 77. 0. W.

Pierre Charles L'Enfant  
Washington 1791

Pre-functional town planning

Eugène Haussmann

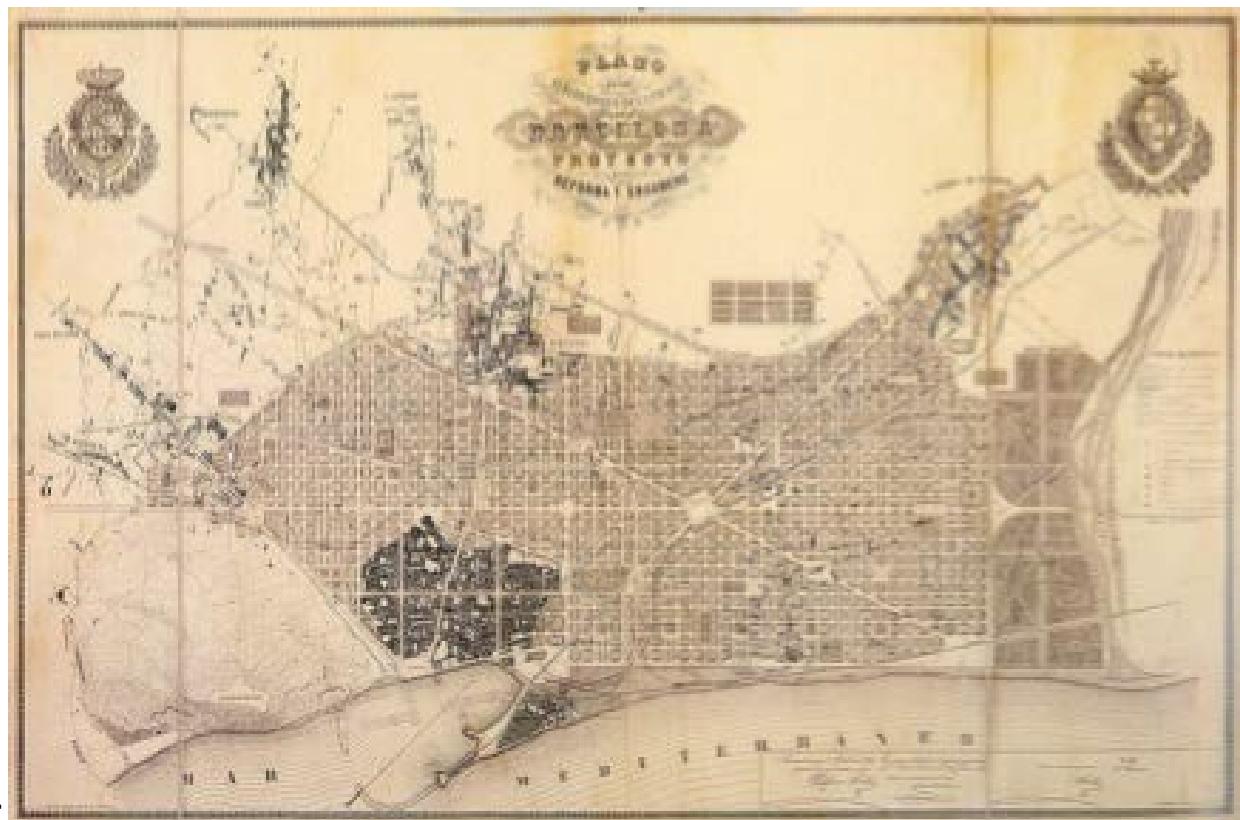
Paris 1853



Functionalist town planning

Idelfonso Cerda

Barcelona 1860

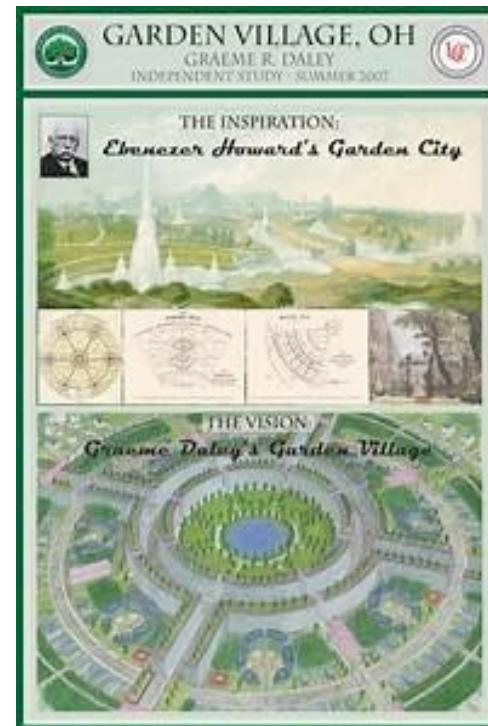
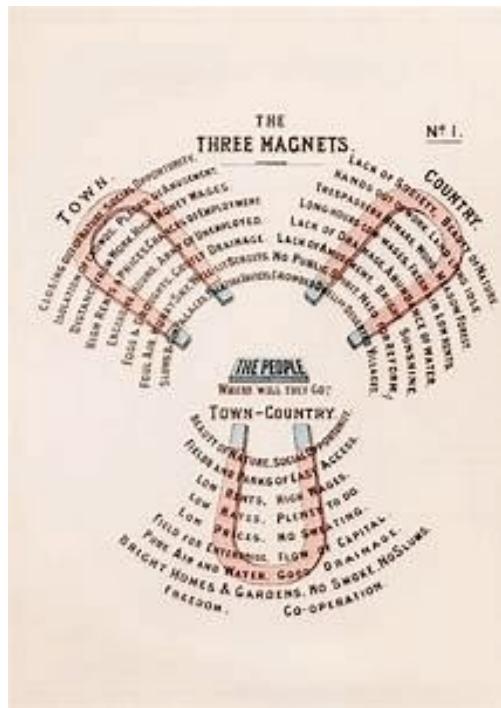


Functionalist town planning

## **b/ The culturalist trend**

John Ruskin and William Morris / Camillo Sitte, Gustavo Giovannoni

Ebenezer Howard: the garden city



## Ebenezer Howard - Garden city

## Cultural urbanism



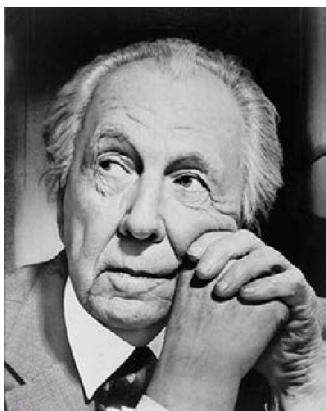
## c/ The naturalist movement

Franck Lloyd Wright

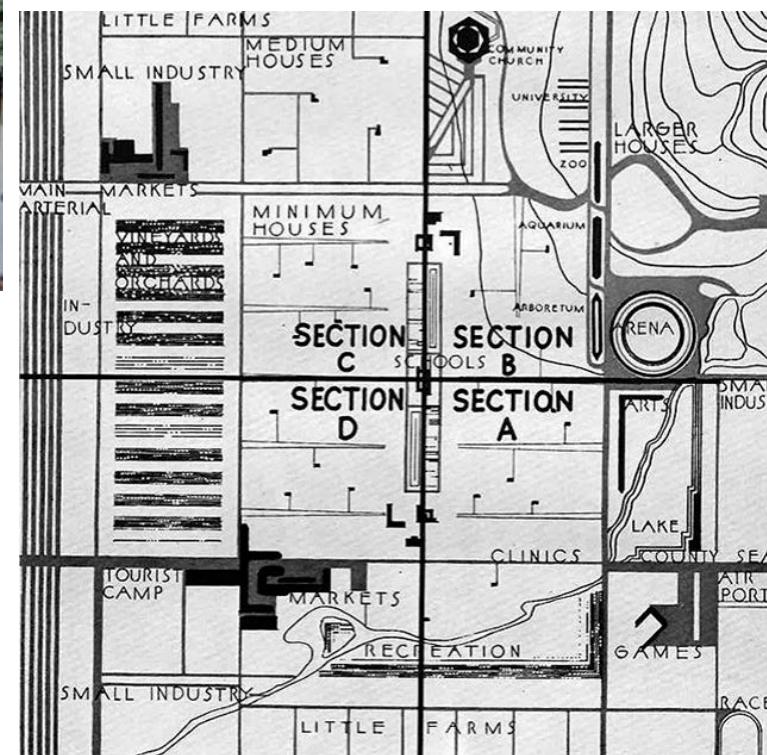
The "desapearing city",

A city that "disappears" into the surrounding countryside, leaving :

- a central business district
- and urban motorways, expressways and bypasses  
(parways, freeways, etc.)



Franck Lloyd Wright



## **And in the 21st century? Major trends ...**

1. Bigger, more numerous and closer to home
2. More complex cities with growing economic, social, cultural and ethnic diversity.
3. More polluted cities, due to population concentration and human activity.
4. Different cities, thanks to new technologies and their use in the city.