Course 2: Renaissance architecture
Italian Renaissance urbanism: 15th–16th Centuries

Renaissance Urbanism:

During the Renaissance, the notion of the ordered, rational city was already addressed by Alberti in his architectural treatise. Beyond this, further theoretical reflection was devoted to the formal elaboration of the "ideal city," as exemplified by the work of Filarete and Piero della Francesca. These urban experiments and projects are regarded as visionary, grounded in the principles of rationality, centrality, proportion, and symmetry.

- The design and realization of the first urban project at Pienza, between 1459 and 1462.
- Filarete proposed the visionary city of Sforzinda, near Milan (1460–1464).
- Around 1480, Piero della Francesca conceived a perspectival view of the ideal city of Urbino. This is a perspectival representation of an urban landscape structured around a central vanishing point, in which the spatial organisation is centred on a temple, with the surrounding buildings arranged around it.
- The urban drawings produced by Leonardo da Vinci represent a major turning point in the study of the city. The plan of the city of Imola is among the earliest topographic maps to provide an accurate survey of its buildings. Leonardo also proposed a circular layout for the planning of the city of Milan.
- In 1593, the first ideal city was realised: Palmanova, designed by Savorgnan and Scamozzi.



Fig. 1: *The Ideal City — panel of Urbino*

I. The Piazza and the Cathedral, Pienza, 1459–1462

Also known as Piazza Pio II, the restructuring of the former Piazza of Pienza was carried out by Bernardo Rossellino. The architect's approach centred on Alberti's principle of perspective "visual pyramid." His governing scheme emphasises the significance of the buildings enclosing the square and their arrangement (the Palazzo Piccolomini, the Palazzo Borgia, and the cathedral).

This design foregrounds the scenography treatment of the cathedral façade and the distant views over the surrounding landscape. The project constitutes the first practical realisation of the humanist "ideal city" concept during the Renaissance, and it subsequently became a reference model for later urban development in Italy and beyond.

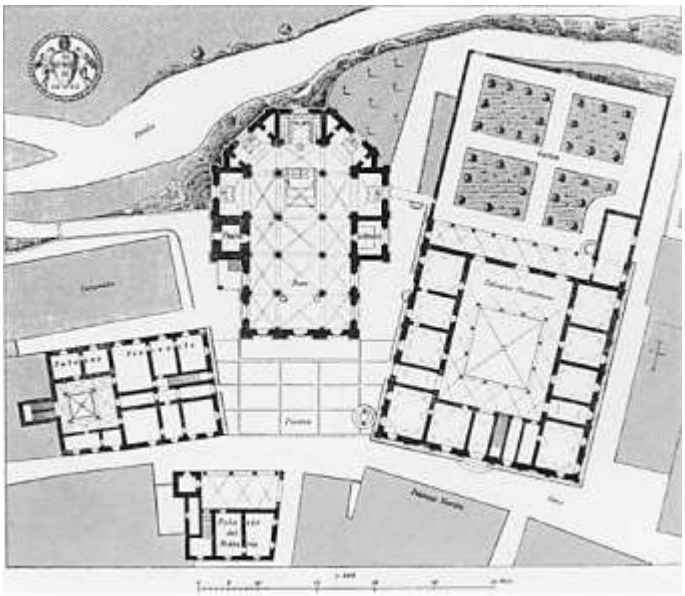


Fig. 2: The square of the cathedral, Pienza

II. The Ideal City of Sforzinda, Milan, 1460–1464

Sforzinda is considered the first experiment in the ideal city conceived by the Renaissance humanists. It is a utopian, visionary city named after Francesco Sforza, Duke of Milan, and was designed by the architect Antonio di Pietro Averlino, known as Filarete.

Its star-shaped plan is based on a network of radiating streets converging on a monumental centre. These axes connect the city's fundamental elements - the church, the palace, the ramparts, and the gates. The buildings envisioned by Filarete are organised according to modern structural principles, founded on the repetition of simple, perfectly proportioned geometric forms.

Sforzinda thus constitutes a symbolic and geometric representation of the perfect city, consistent with the 15th century humanist ideal in which urban order reflects moral and political harmony.

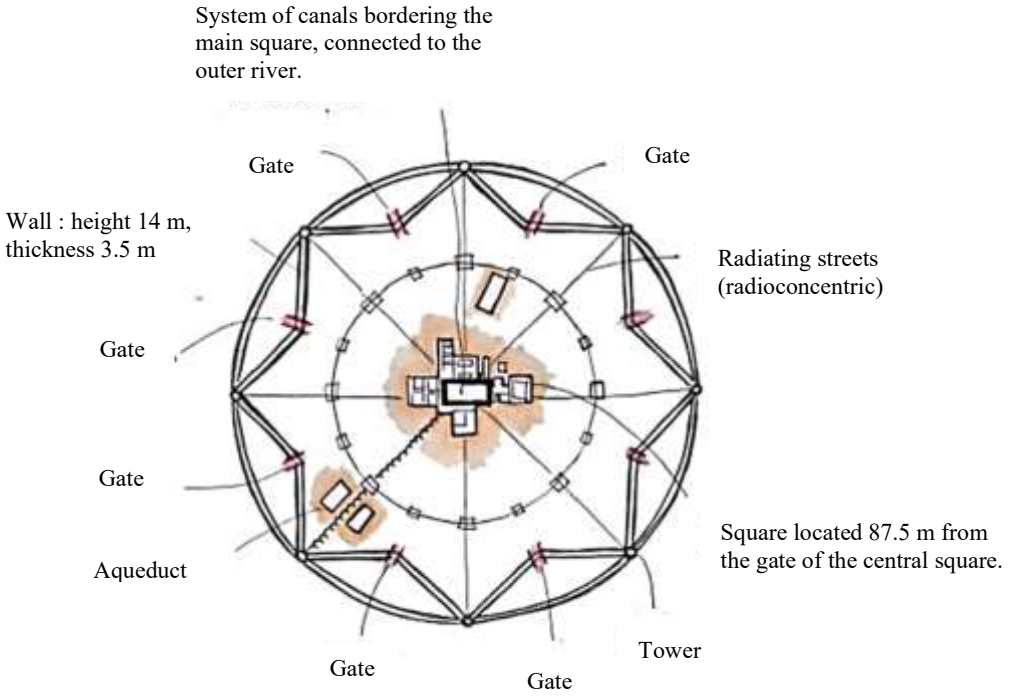


Fig. 3: *The ideal city of Sforzinda*

III. Piazza del Campidoglio, Rome, 1537

Within the broader program of urban renewal and the ambition to reaffirm Rome as the political and moral capital of Christendom, Michelangelo undertook a number of large-scale projects, among which the design of the Piazza del Campidoglio stands as a paradigmatic example. The project was begun in 1537 at the request of Pope Paul III, in order to accommodate the equestrian statue of Marcus Aurelius.

Its design is characterized by a rigorous geometric organization and a controlled management of space, combining Renaissance ideals with an innovative approach to urban design.

The piazza adopts a trapezoidal plan, generating an optical illusion that heightens the perceived spatial depth.

The dynamic expansion of the space is achieved through the asymmetry of the two flanking palazzi, while the third palazzo is emphasised by a monumental staircase and its theatrical disposition.

This dynamism is further reinforced by the star-patterned pavement inscribed within an oval, at the centre of which stands the equestrian statue of Marcus Aurelius, positioned as the ideal axis of the composition.

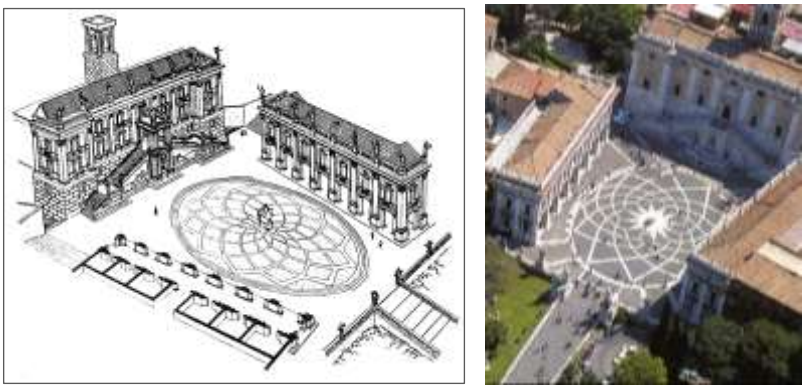


Fig. 4: *Piazza del Campidoglio, Rome*

IV. The Italian Renaissance Garden

The Italian garden emerged in the 15th century within the leisure villas, particularly those of Rome and Florence. It draws on classical Roman models, characterised by a harmonious geometry and a naturalistic scenography.

From the 16th century onward, this space was enriched with water features, fountains, sculptures, and grottoes. Among the most opulent examples are those attributed to Bramante, Vignola, Vicino Orsini, and Buontalenti.

The Garden of Villa Lante, Lazio, Italy (1566)

Begun in 1566 under Vignola, its design is based on an ordered geometric layout comprising an extensive park, water features, fountains, watercourse, and terraces.

The Boboli Gardens, Florence, 1550

The Boboli Gardens are among the earliest and most celebrated examples of the Italian garden, designed by Bernardo Buontalenti. Conceived as an extension of the Palazzo Pitti[1], the garden is organised around a central axis and combines avenues, terraces, and staircases within a scenographic composition. Through its play of perspective, topography, and ornament, sculptures, fountains, and grottoes , it creates a harmonious and theatrical space, emblematic of Renaissance aesthetics.

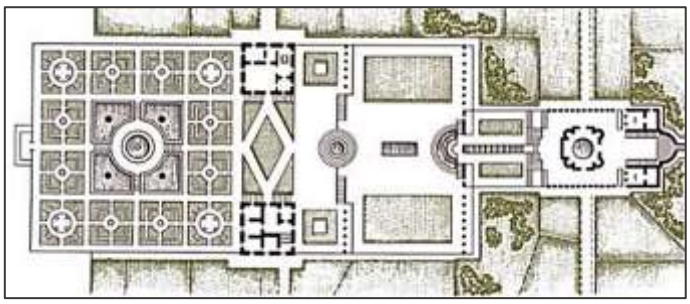


Fig. 5: *Garden of Villa Lante*



Fig. 6: *Boboli Gardens*

[1] A Renaissance-style palazzo located in Florence, designed by Filippo Brunelleschi.

V-Guiding principles of the ideal city in the Italian Renaissance:

-Geometry and symmetry: Ideal cities and squares are designed according to rigorous plans, often centered or orthogonal (squares, circles, stars).

-Monumental perspective: Streets and façades are aligned to create unified, theatrical visual perspectives that highlight public or religious buildings.

-Rationalization: The aim is less to destroy medieval cities than to modernize and harmonize the existing urban fabric by inserting large axes and regular squares.

-Public embellishment: the construction of monumental arches, fountains, symmetrical squares and town halls was stepped up to emphasis the city's grandeur.

-Social Hierarchy: Architecture reinforced class divisions, with central plazas and palaces for the elite.

VI- Characteristics of Italian Renaissance gardens:

-The garden is designed in continuity with the Renaissance villa.
-Views are oriented toward remarkable features of the landscape.
-Composition based on regular geometric forms.
-One or more main axes.
-Use of successive terraces, especially on sloping terrain.
-Fountains, basins, cascades, canals, and water features
-Vegetation used to delimit spaces and structure perspectives.
-Statues, columns, balustrades, staircases, and pavilions.
-Artificial grottoes, rockwork, and rustic decor.