10.1 Humanist Italy // Early Renaissance // Public Spaces // Private Palaces — 1350-1500

- 1) Early Renaissance in Italy 14th C. and 15th C. led by humanist culture
 - Humanist philosophy was an advancement over the narrow pedantry
 of medieval scholasticism whereby a humanist culture was
 created/encouraged that modeled (for citizens) a more educated
 culture though history, poetry, philosophy, rhetoric, grammar...
 - Use of all'antica details from Greek and Roman culture. All'antica literally means, "of or relating to a style based on antique or classical forms," or.... "using the methods and style of the ancients."
 - Discovery of perspective the underlying geometry of nature, that, when understood, could be replicated and used for design purposes
 - · These two principles lead to the imagining of an Ideal City
 - · Cities become: uniform scale / geometric order / social order / political order
 - · Revival of a social and political order based on aesthetic order

Humanist Florence

- The Humanists established the intellectual culture of Florence based on the secular study of Science, Language, Art, and History
- Medici Library
- Vitruvius text: Ten Books of Architecture from 25 BC and dedicated to Augustus.
 Full name: Marcus Vitruvius Pollio.
- Brought to Florence by Poggio Bracciolini in 1414 in manuscript form retrieved from a medieval monastery in Switzerland or Germany
- In Book I, Chapter 3, Paragraph 2 Vitruvius states the requirements of architecture as: *Durability - Convenience - Beauty*
- · Other texts translate as:

Firmness - Commodity - Delight

Today, we might think of these requirements as:

Structure - Program - Beauty (of design)

- 2) Ponte Vecchio in Florence early classical structure by Neri di Fioravanti
 - · Bridge rebuilt about 1340 after a big flood.
 - Segmental Arches at bridge. Because they are shallower than a half-round arch, the number of spans could be reduced to three spans. Their shallowness caused greater lateral forces, which had to be resisted with large buttresses or piers at the foundation level
 - Perfectly square Public Space in center of bridge, which otherwise, was full of shops (markets).
 - · Sixty-feet wide
- 3) Duomo at Florence Santa Maria del Fiore begun 1296
 - · Santa Maria del Fiore begun by Arnolfo di Cambio and completed by Francesco Talenti
 - Black Death comes to Europe in 1348 and wipes out huge portion of population halting construction for a while
 - · Campanile was designed by the artist Giotto di Bondone about 1334 complete 1359
 - Baptistery of San Giovanni begun 1059-1128 Florentine Romanesque
 - South doors by Andrea Pisano // North and East doors by Lorenzo Ghiberti
 - Neri di Fioravanti outlined the parameters for the dome in 1367
 - The commune of Florence started to take the land around the church by eminent domain about 1380
 - Filippo Brunelleschi (1377-1446) won the competition in 1418 to build Santa Maria's dome, having competed against Lorenzo Ghiberti. Work began in 1420.
 - Filippo Brunelleschi had lost the competition for the Baptistery Doors at Santa Maria del Fiore (Baptistery of San Giovanni) to Lorenzo Ghiberti in 1401.
 - Dome had to be 148 feet in diameter. Dome springs at 180 feet and rises another 170 feet to the marble Lantern at the top.
 - · Ingenious solution for the dome of the cathedral. Octagonal drum supported by tribunes

- placed at the 45s formed the base of an eight-sided masonry (brick) dome that rose to an apex
- Drum of dome resembles an egg shape (read Vasari's short biography of Brunelleschi)
- Two egg-shaped shells of self-supporting masonry rising without scaffolding based on radiuses drawn through a centerline. Herringbone courses introduced which brought vertical forces downward. Walls grew thinner as they rose higher.
- · Lantern completed after his death by his colleague Michelozzo (1396-1472)
- Great masterpiece of the Renaissance :: https://www.youtube.com/watch?v=_IOPIGPQPuM
- 4) Brunelleschi's other works
 - Pazzi Chapel credited to Brunelleschi completed 1443 (sculptures by Luca della Robbia).
 Perfect geometric proportions, half-round arches, classical loggia, central space.
 - · Pazzi Chapel completed by Michelozzo in 1460s
 - · Pazzi Chapel attached to the Franciscan Basilica of Santa Croce in the first cloister of the grounds.
 - · Santa Croce initially designed by Arnolfo di Cambio and begun 1296 as Italian Gothic
 - · Santa Croce is known as the Temple of Italian Glories as many great people are interred there
 - Foundling Hospital (aka Ospedale degli Innocenti) begun 1419
 (sculptures by della Robbia). Half round arches on raised loggia. Compare rhythm of arches and window placement to Ponte Vecchio
 - Basilica of San Lorenzo was begun as the redesign of a Romanesque church in 1419 by Brunelleschi. A Renaissance masterpiece which later had added to it Michelangelo's Laurentian Library and Tomb of the Medici.
 - · San Lorenzo finished by Michelozzo di Bartolomeo when Brunelleschi died.
 - Harmonic classical space. Half round arches. Each corinthian column is capped by a small piece of
 entablature, which which the arch springs. Flat, coffered ceiling. Pilasters at side aisles reflect the
 columns at the nave. Pietra Serena (serene gray sandstone) in this Basilica. Vasari pointed out that
 it might have been better if columns raised on pedestals.
- 5) The Palazzo The palace typology classical a.k.a. the square doughnut. The Private Palace.
 - Central courtyard or atrium, circumscribed by a loggia or arcade.
 Rooms circumscribed central core in the enfilade fashion.
 - Concept of magnificenza: some wealthy Florentines considered it a civic duty to build these elaborate mansions for themselves as a way of improving the culture. As a political strategy, magnificenza, tied up the resources of competing rich families.
 - · Palazzo Medici (c. 1440s) designed by Michelozzo di Bartolomeo for the wealthy Medici family
 - · Rusticated base, middle section, very refined upper section
 - · Biforium windows, deep classical cornice (a.k.a. crown).
 - · Filippo Strozzi his Palazzo designed by Giuliano da Sangallo