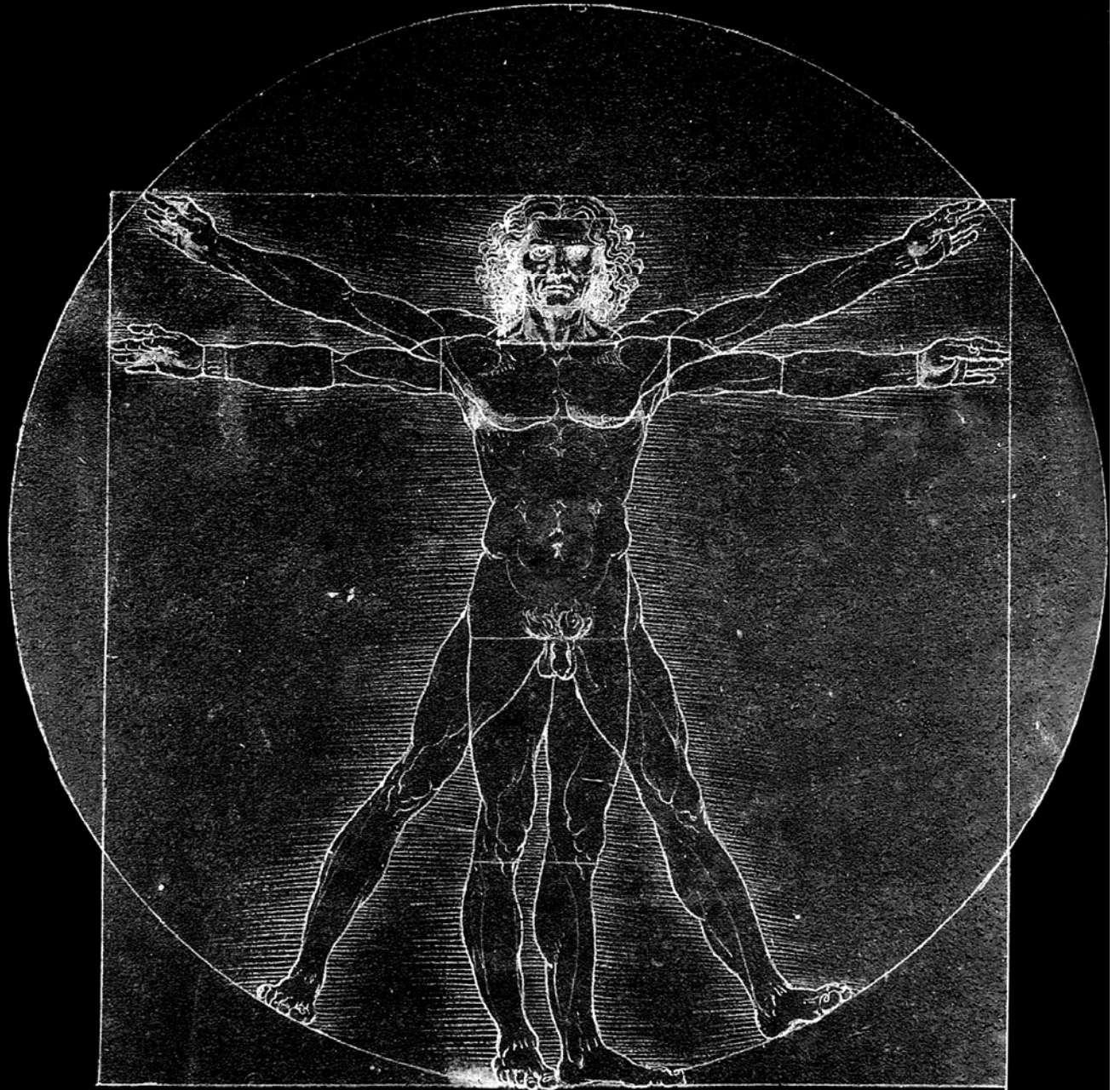


Readings

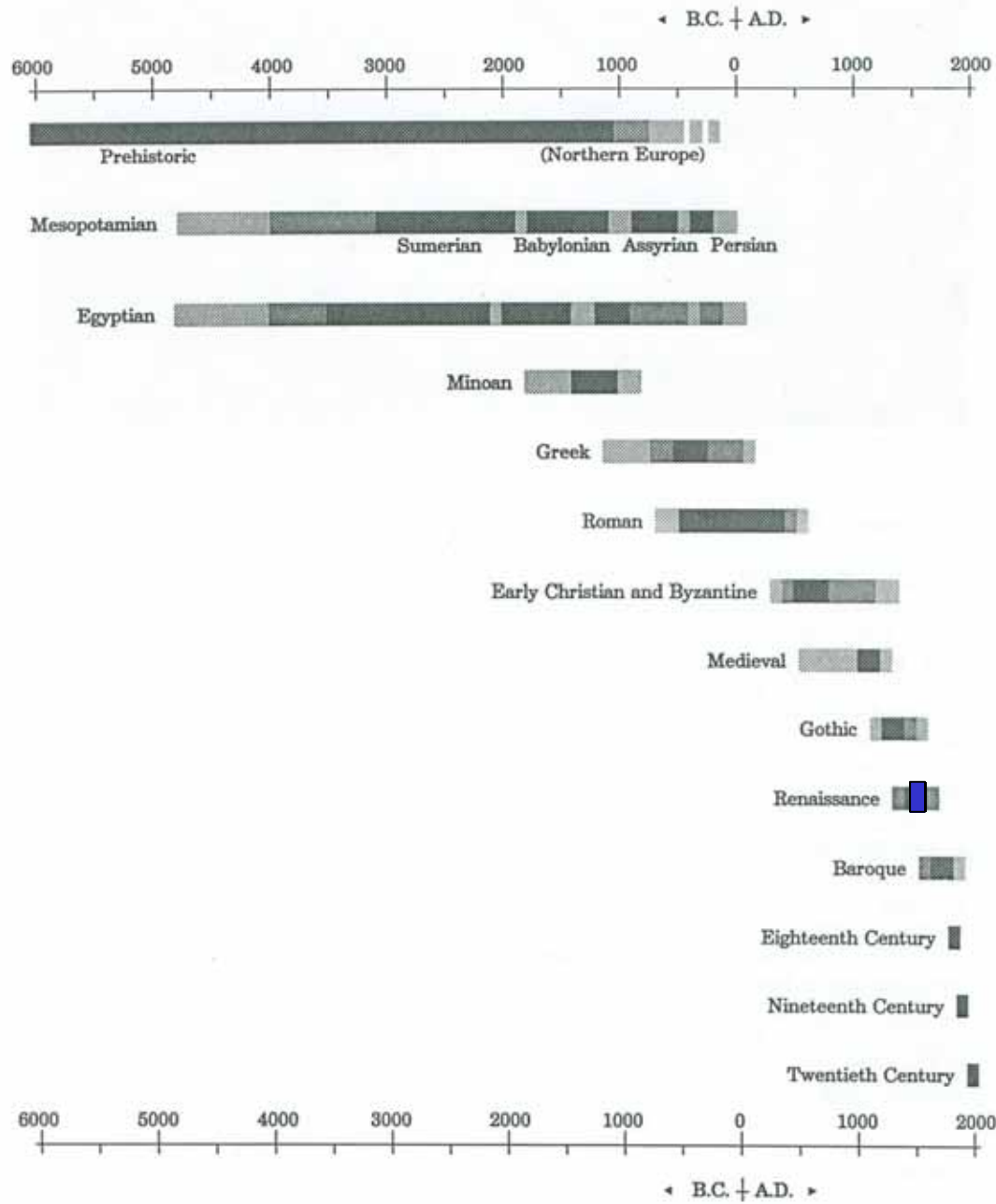
Pages 142-171  
Great Architecture of the World

# Renaissance Architecture

## 1420-1600



CHRONOLOGICAL TABLE



# Renaissance 1420 – 1600 Main Characteristics:

Stressed clarity, logic and flat straight lines

Old and New collided

Forward of science and technology

Backward to Ancient Greek and Roman



# Renaissance 1420 - 1600 Main Characteristics:

Gutenberg invents printing press 1450

New Worlds discovered Columbus discovers America 1492

Leonardo da Vinci paints the Last Supper 1495

Copernicus – Sun was the center of the Universe 1543

Shakespeare's Hamlet performed 1600



# Florence

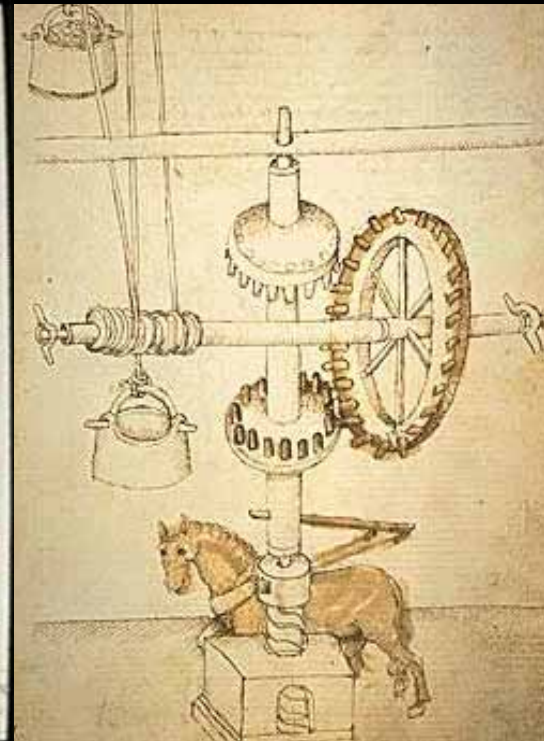
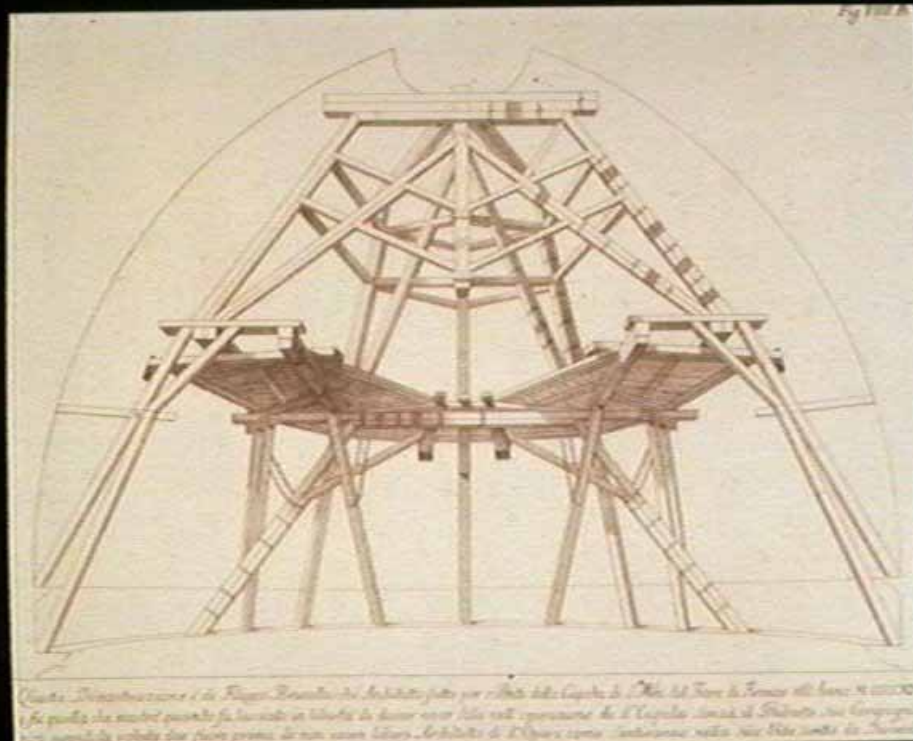
Early Renaissance under the patronage of the Medici family –



# Fillippo Brunelleschi 1377-1446

Began as a goldsmith and sculptor. He was also a clock maker, mathematician, and Latin scholar. He was involved in developing linear perspective.

He designed, built, oversaw construction of his projects. He created a scaffolding system and construction machinery.



# Fillippo Brunelleschi 1377-1446

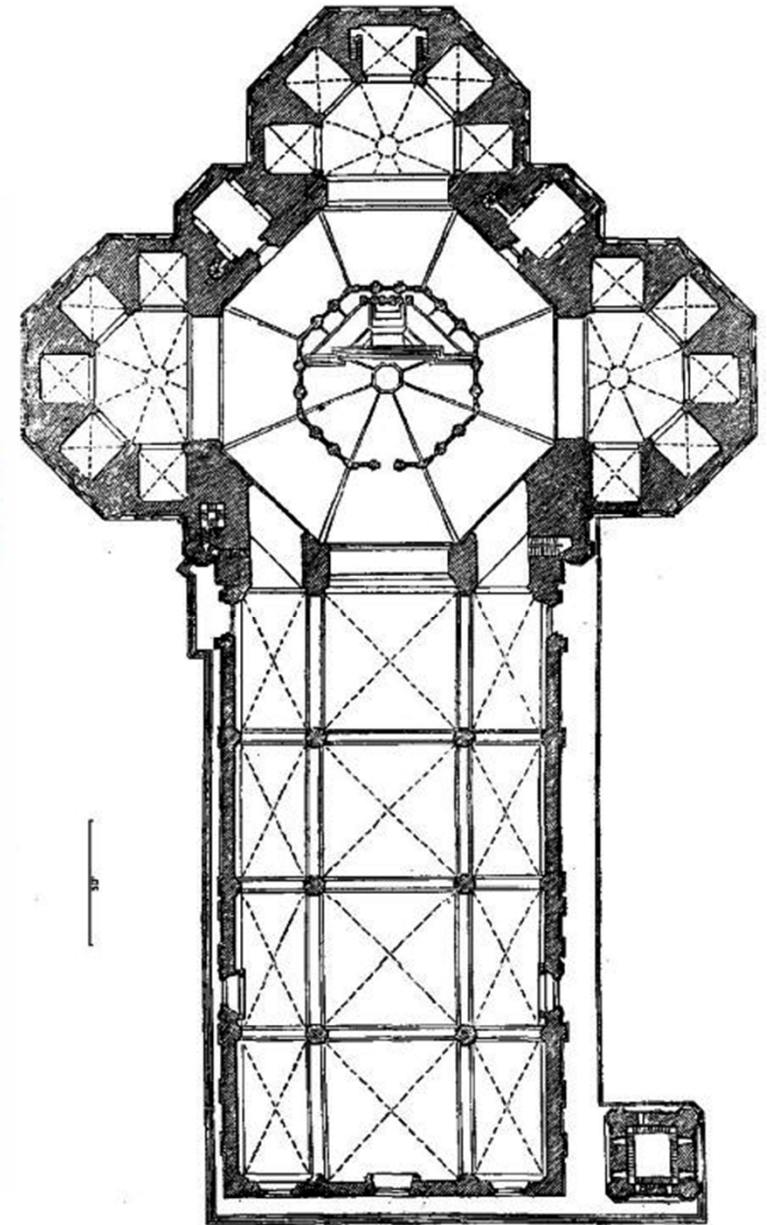
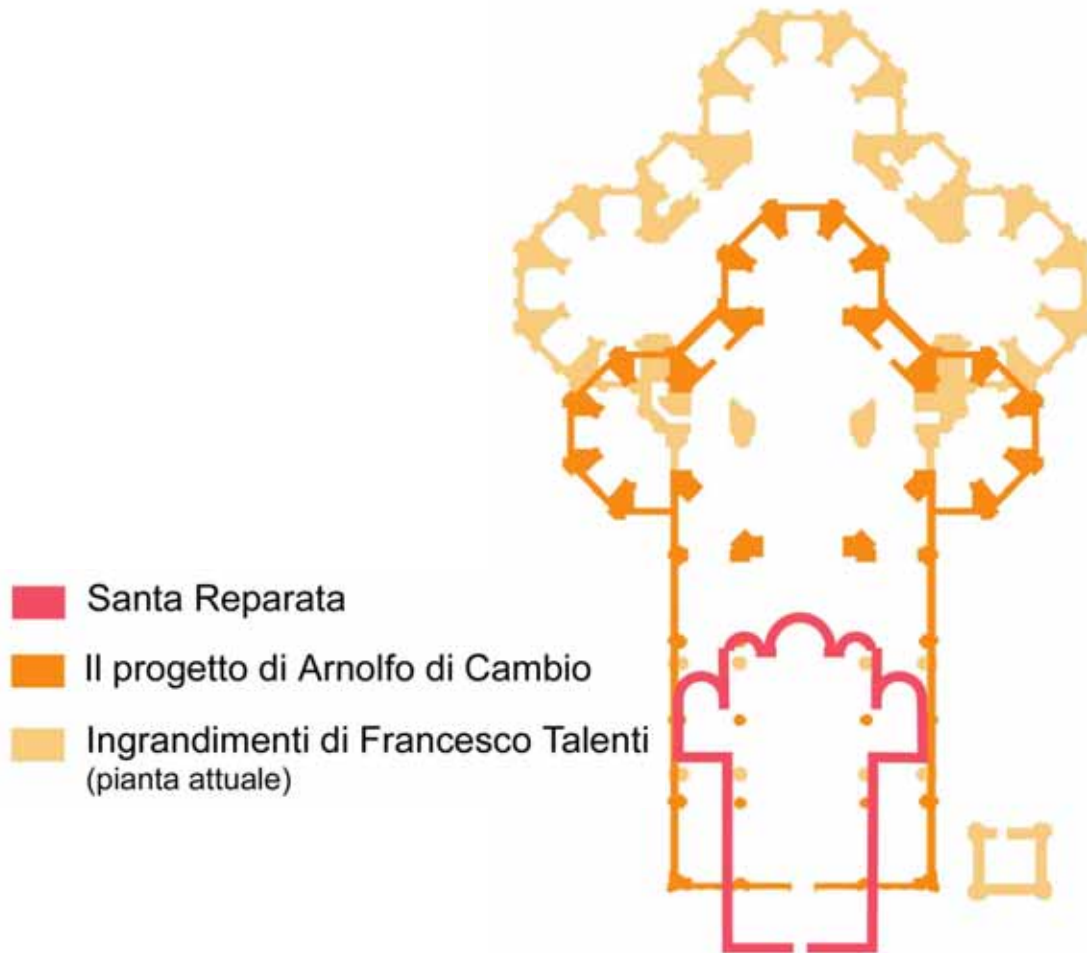
1412 Builder / Architect of the Dome of Florence Cathedral





# Plan of the Cathedral at Florence

Designed in 1296 in the Gothic style  
the project lasted 170 years



<http://en.wikipedia.org/wiki/File:SMDfplan36.gif>

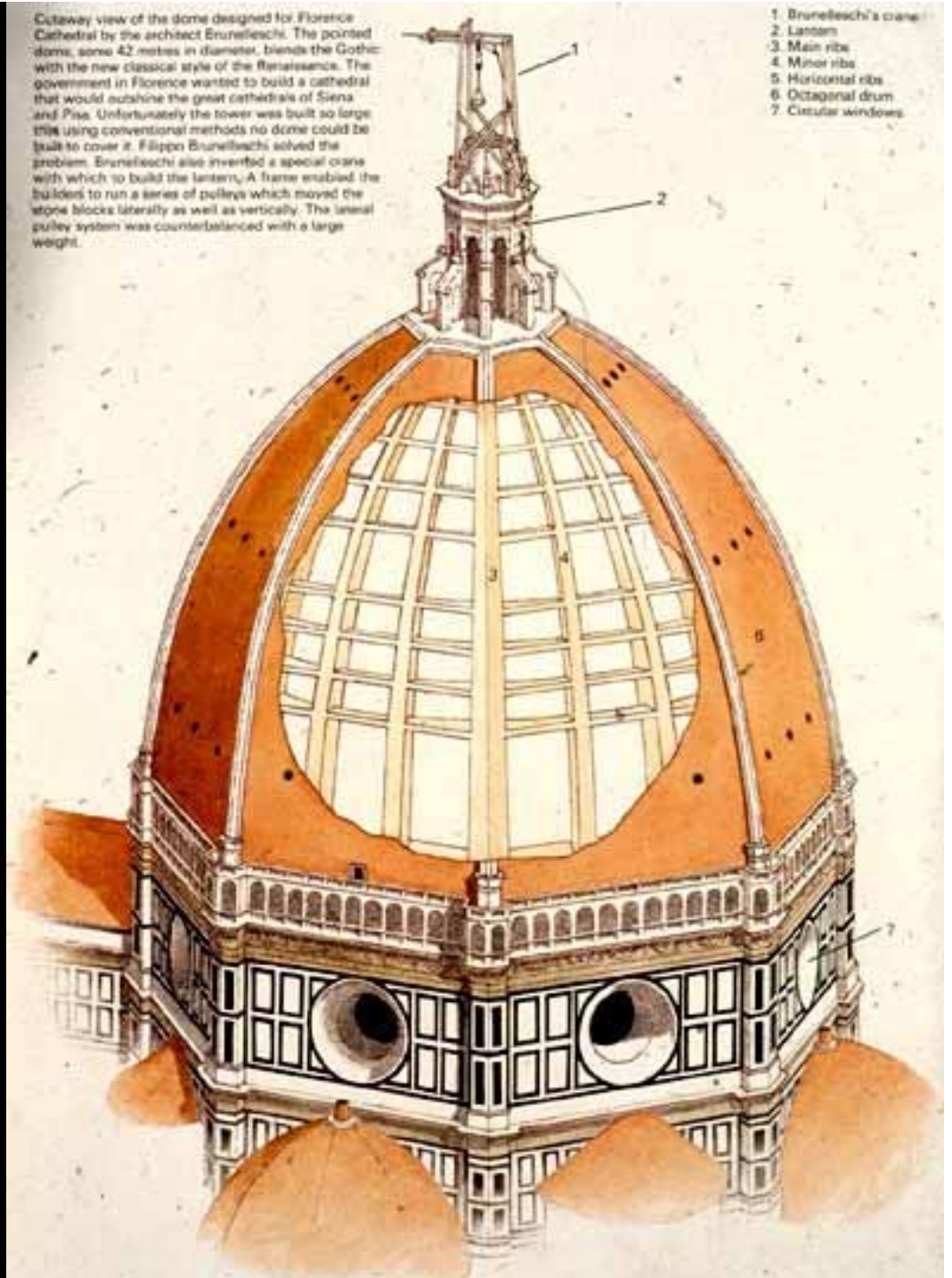
# Dome of Florence Cathedral 1412

Dome is 138' across based on the Roman Pantheon

Built circular course of brick-tapering at top, each course supports the next

A double shell covered in brick, reinforced by ribs and metal bands

Lantern acts as a capstone to hold the dome together and prevent spread



# Dome of Florence Cathedral 1412

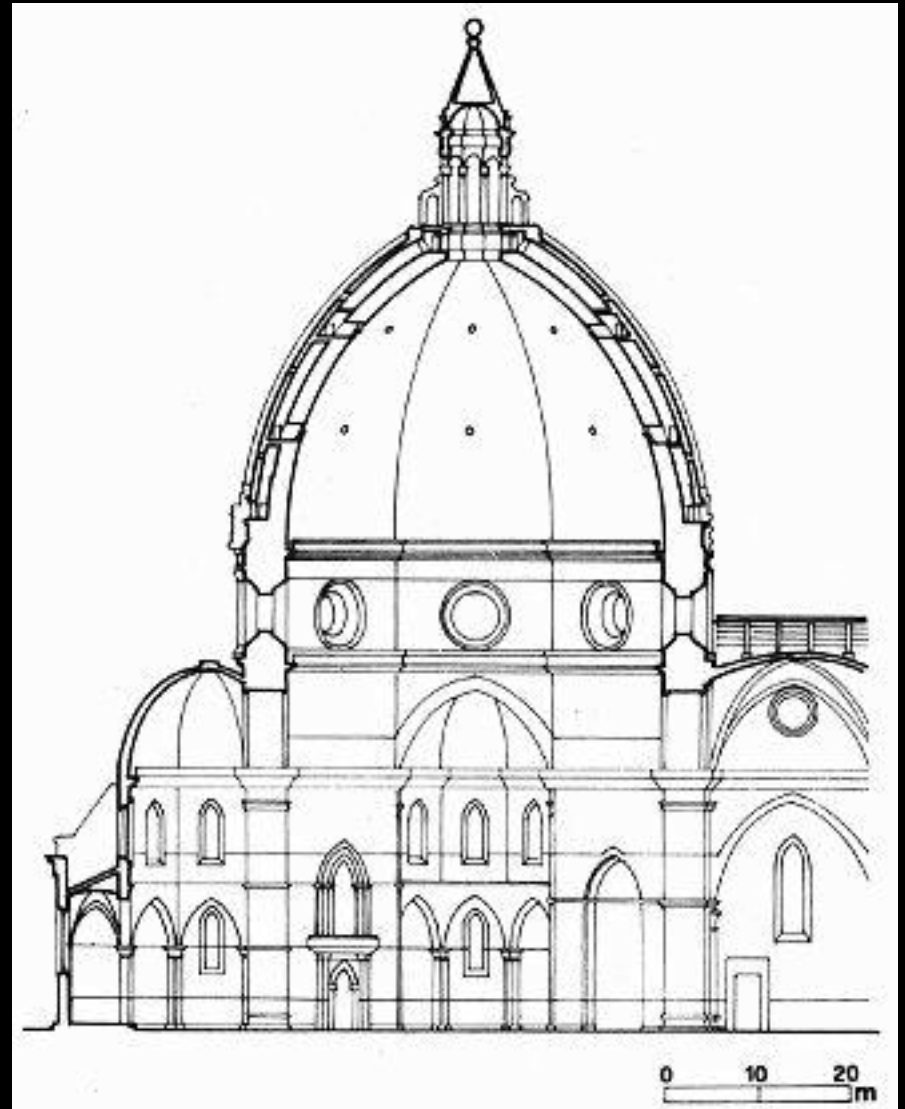


www.flickr.com by Frank K



# Dome of Florence Cathedral 1412

weighs 37,000 tons and  
contains over 4 million bricks



Brunelleschi studied the Pantheon built in Rome 118- 128 CE to solve the problem of creating a dome spanning 138 feet. The dome of the Florence Cathedral was built using the following architectural elements



Gardener & Trachtenberg/Hyman



Form

# Exterior

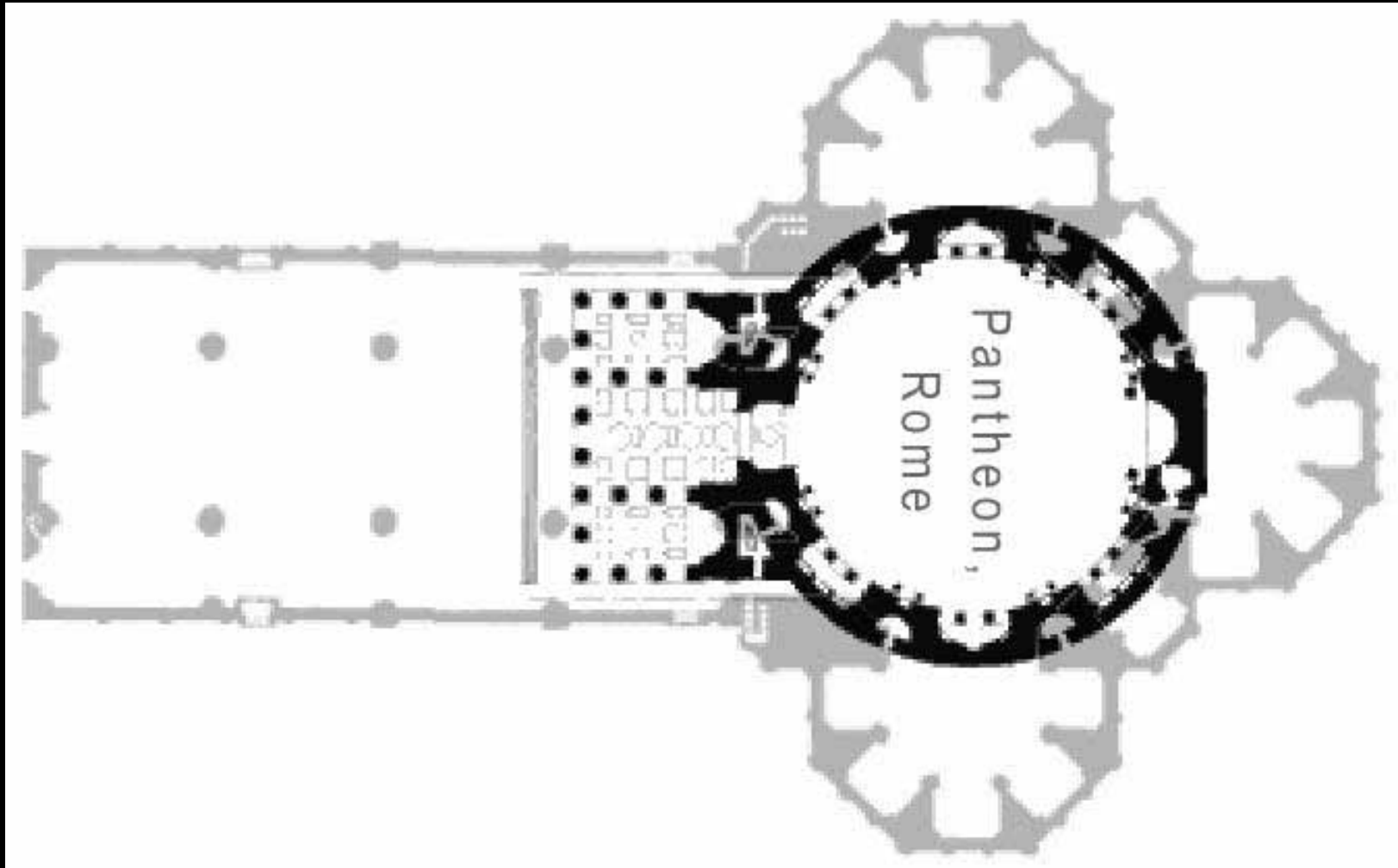


[www. Harpy.ucc.edu](http://www.Harpy.ucc.edu)



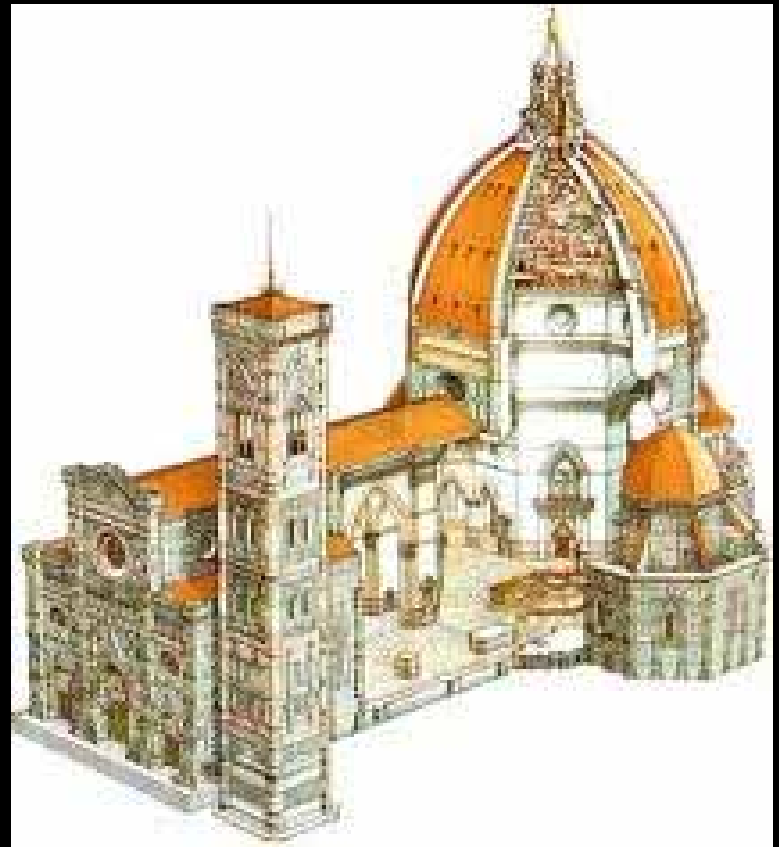
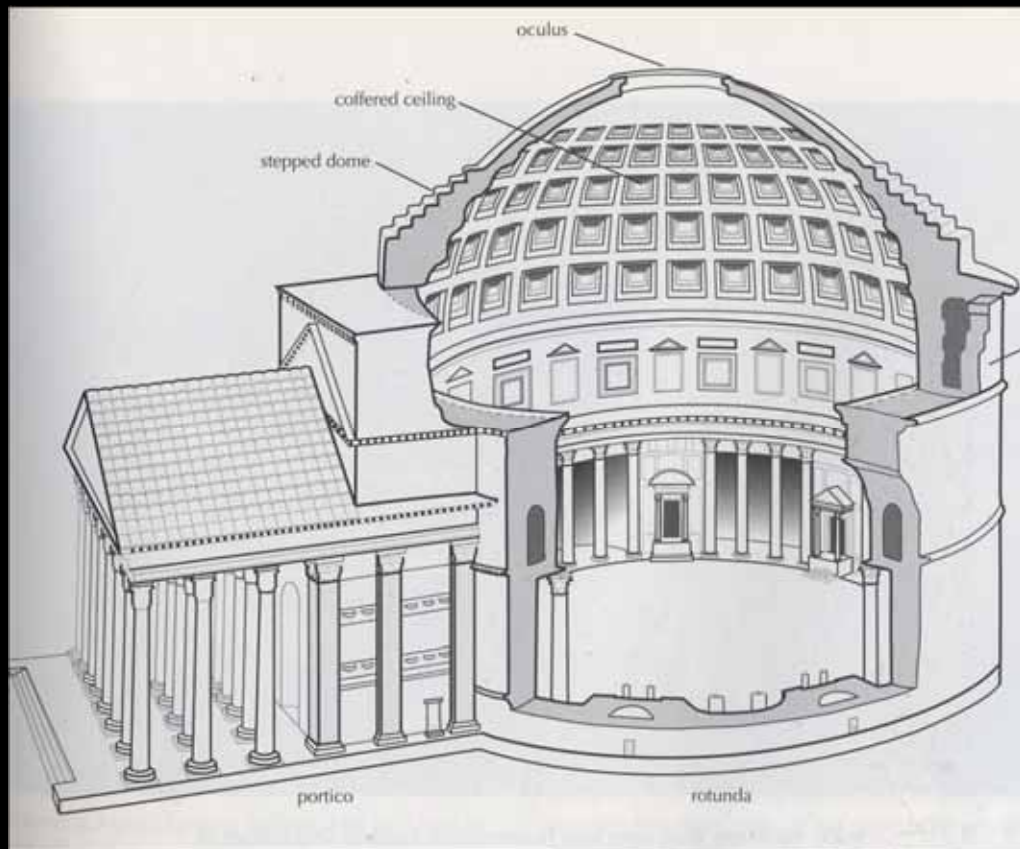
[panoramio.com](http://panoramio.com)

# Plan





# Isometric/ section





By féileacán [www.flickr.com](http://www.flickr.com)



3-b-s.in

# Interior

# Interior of dome



By féileacán [www.flickr.com](http://www.flickr.com)



[www.flickr.com](http://www.flickr.com) by marybethcarroll

# Foundling Hospital 1419-24 Brunelleschi

1<sup>st</sup> true Renaissance building

Horizontal emphasis & clear mathematical proportions



# Foundling Hospital 1419-24 Brunelleschi

Columns of Loggia (porch created by arcade) are spaced as far apart as they are tall

Arch is half as tall as column – dome forms cube



# Foundling Hospital 1419-24 Brunelleschi

Rational modules and classicalism



# Leon Battista Alberti 1404-1472

Painter, mathematician and scientist, studied Greek, Latin and law

Designed buildings and left the construction to others

Wrote the 10 books of Architecture - 1452

An example of a Renaissance man

“that reasoned harmony of all parts achieved in such a manner that nothing could be taken away or altered except for the worse.”

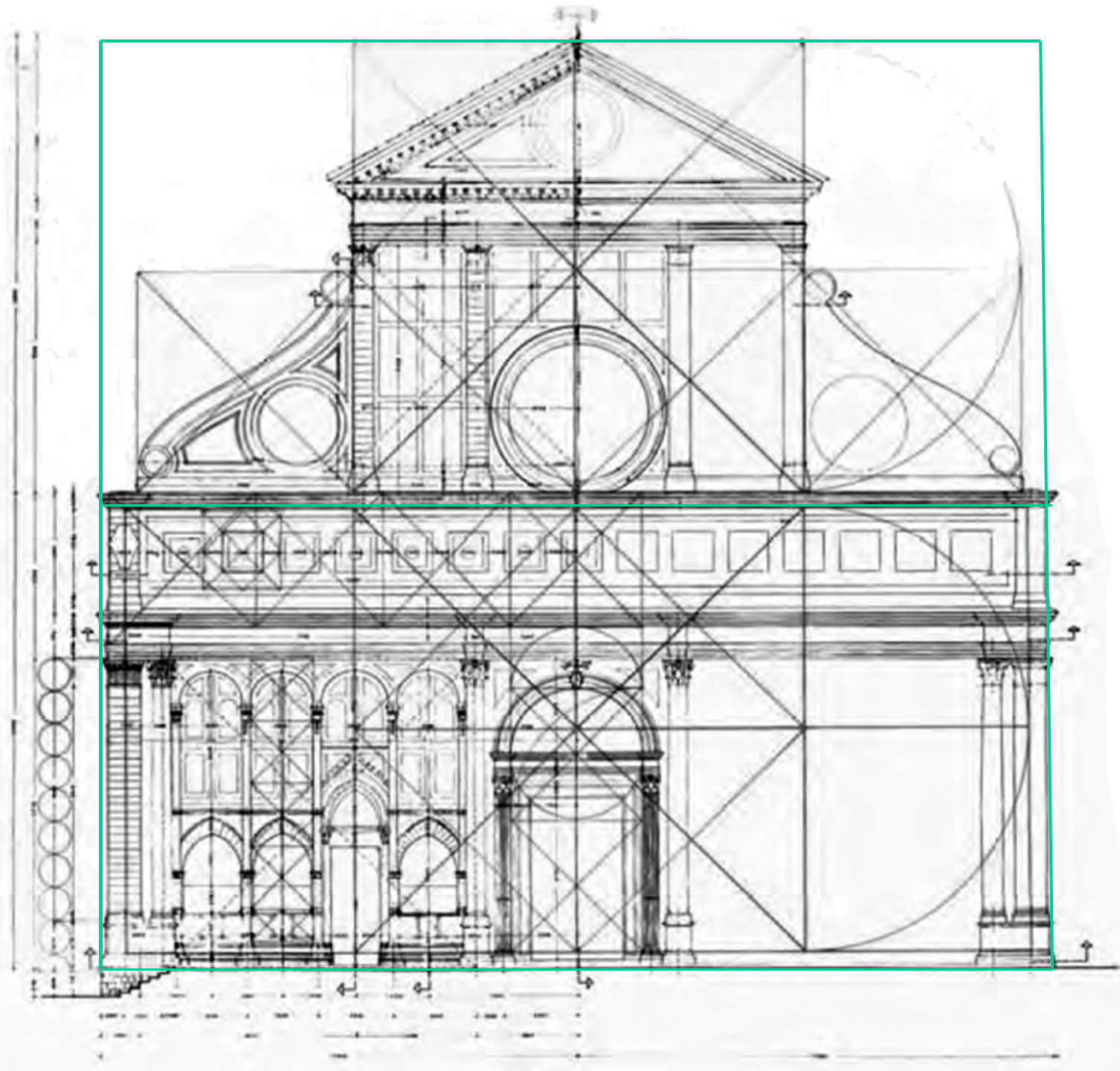


# Santa Maria 1458 Leon Battista Alberti

Based on geometric shapes







# Palatial Homes

Private homes for the rich and noble



# Palazzo Rucellai, 1452-60 Leon Battista Alberti

Built around an inner courtyard surrounded by arched arcades

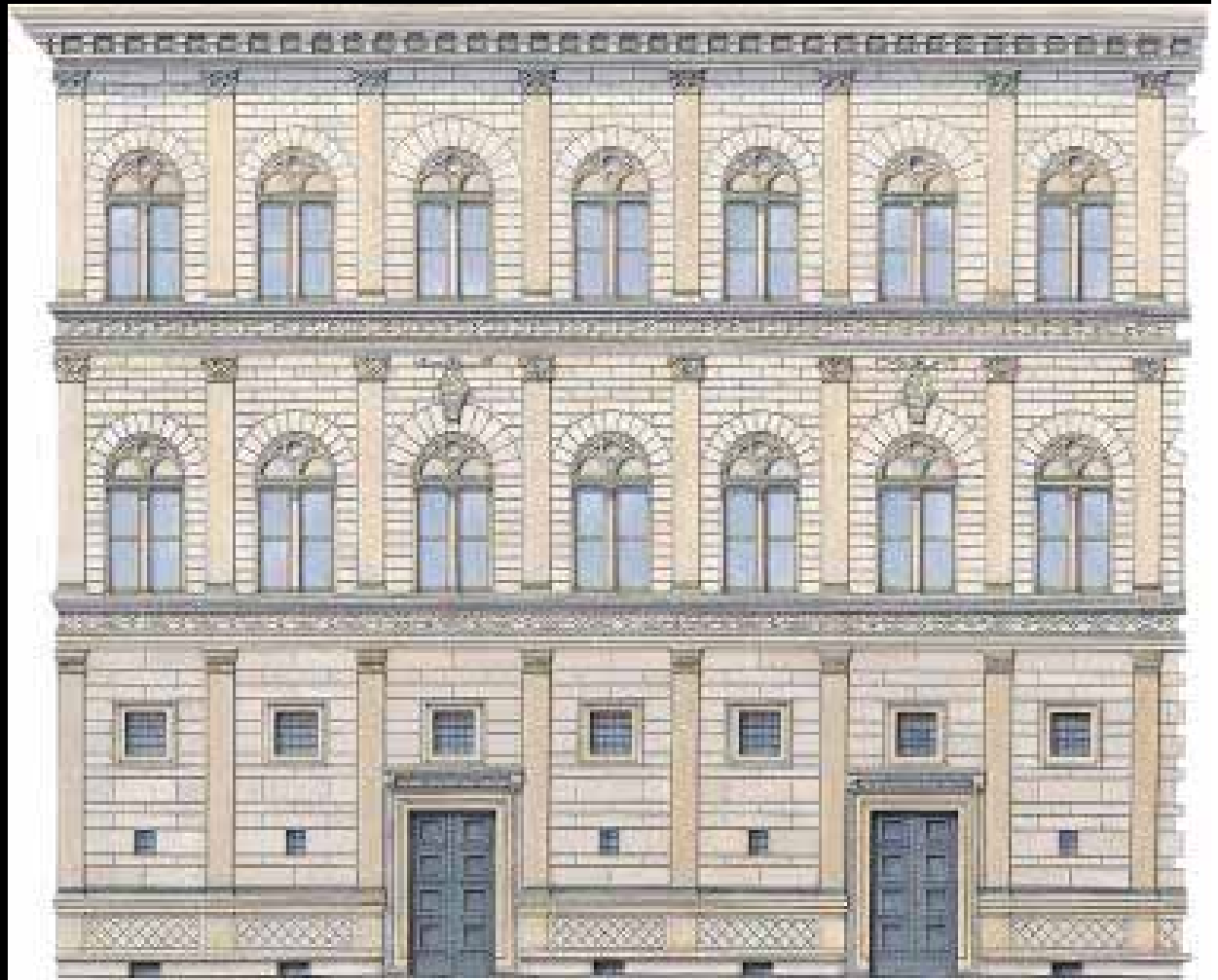
Service shops on ground floor, 2<sup>nd</sup> = family, 3<sup>rd</sup> = servants



# Palazzo Rucellai, 1452-60 Leon Battista Alberti

3 superimposed orders of Pilasters on each floor on the façade

Became basic form for urban blocks throughout Europe



After 1500 the movement of the Renaissance went to **Rome**

The city was in ruins due to many invasions

Rome's revival was due to Pope Julius II (1503-13)

**Donato Bramante** 1444-1514

Trained as an artist



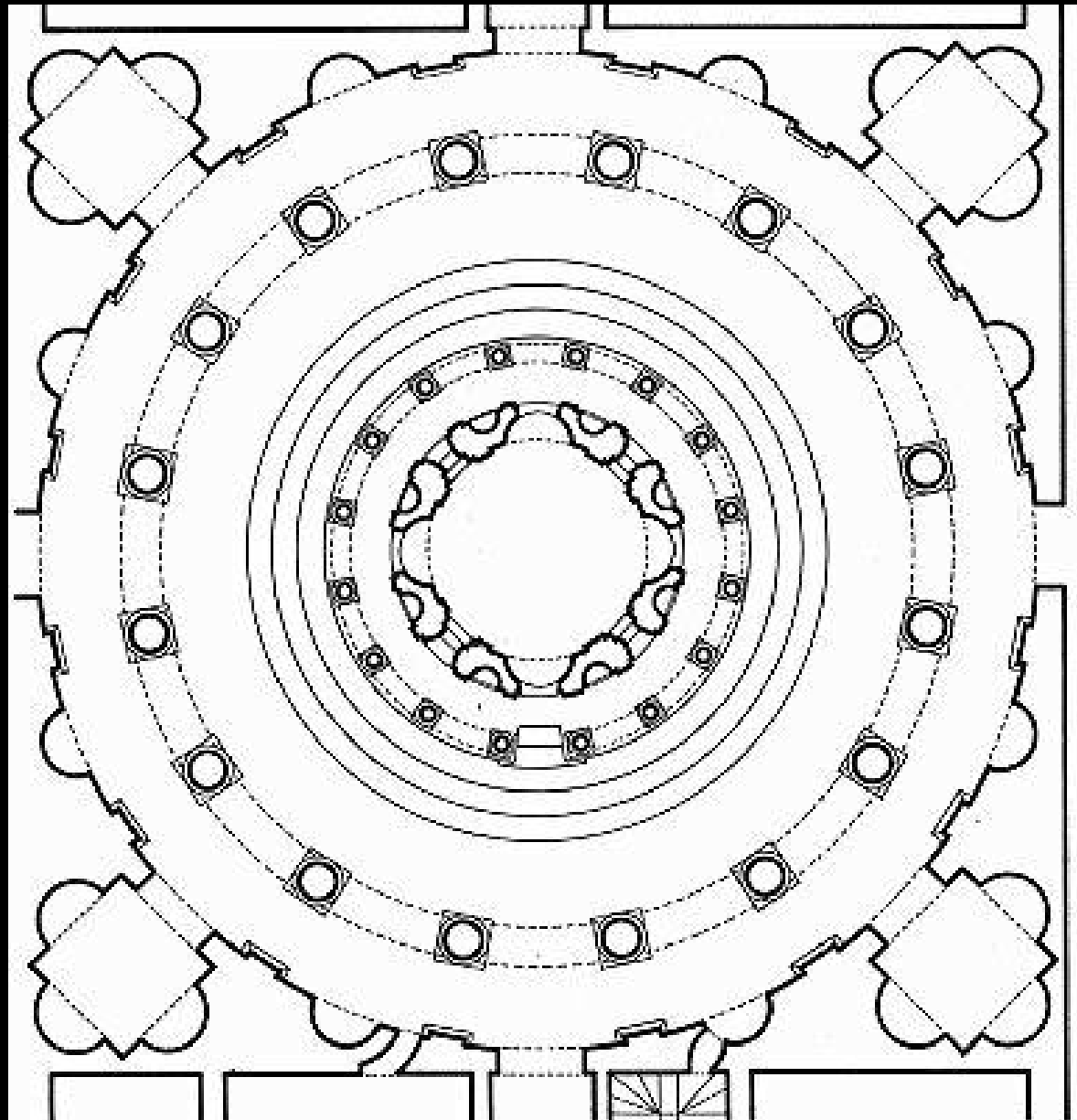
# Tempietto, Rome 1502 Donato Bramante

Doric peristyle and  
steps surrounding a  
cylinder

15' diameter

Height = width

Strict geometry of  
Greek prototype





# Tempietto, Rome 1502

Donato Bramante



[commons.wikimedia.org](https://commons.wikimedia.org)





# Buonarroti Michelangelo

1475-1564

Sculptor and painter who became an architect at the age of 70

He approached architecture as an ensemble of buildings and as a mass of sculptural solids and voids



Designed in the Mannerism style: protested the sterile rationalism and classical order

# Buonarroti Michelangelo 1475-1564



[entertainment.howstuffworks.com](http://entertainment.howstuffworks.com)

David



[gardenofpraise.com](http://gardenofpraise.com)

La Pieta



marialiberati.com



futurmuseum.com



Sistine Chapel

# Laurentian Library, 1524 Buonarroti Michelangelo

Disregards renaissance ideas of balance and proportion

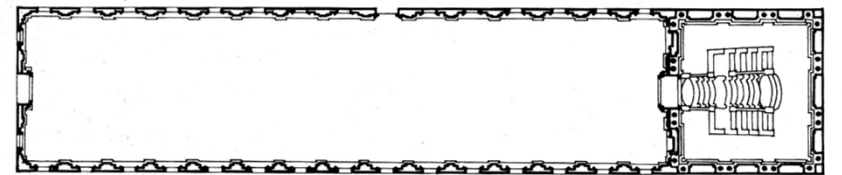
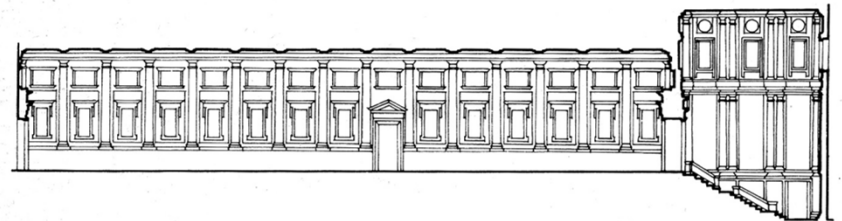
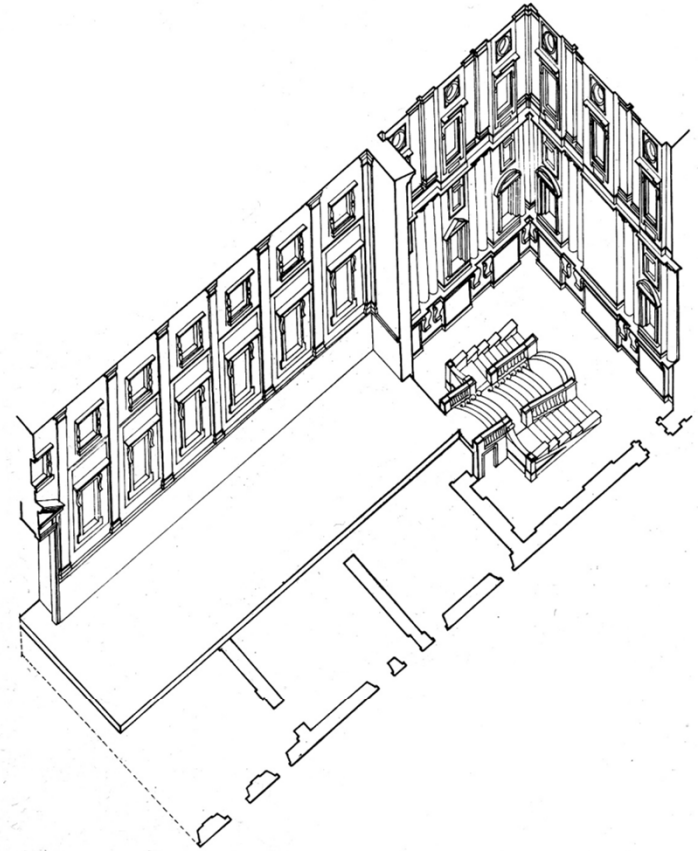
Treated walls as motion

Triple staircase occupying most of the room



# Laurentian Library, 1524

ARTstor - The Hartill Archive of Architecture and Allied Arts



Murray - Renaissance Architecture 0 5 m

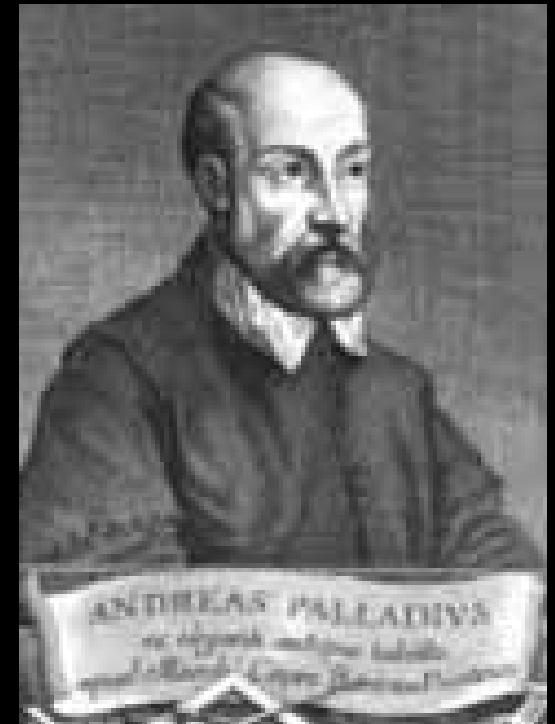
# Andrea Palladio 1508-1580

Trained as a stone mason

Went to Rome to measure ruins, study math, music and Latin

Wrote the Four Books of Architecture

His architecture was used as the universal prototype throughout Europe and America



# Villa Barbaro, Maser 1557-1558 Andrea Palladio



commons.wikimedia.org by Marcok



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# Villa Rotunda, 1560 Andrea Palladio

Top of hill with views from all rooms – Site Planning





# Villa Rotunda, 1560 Andrea Palladio

Top of hill with views from all rooms – Site Planning

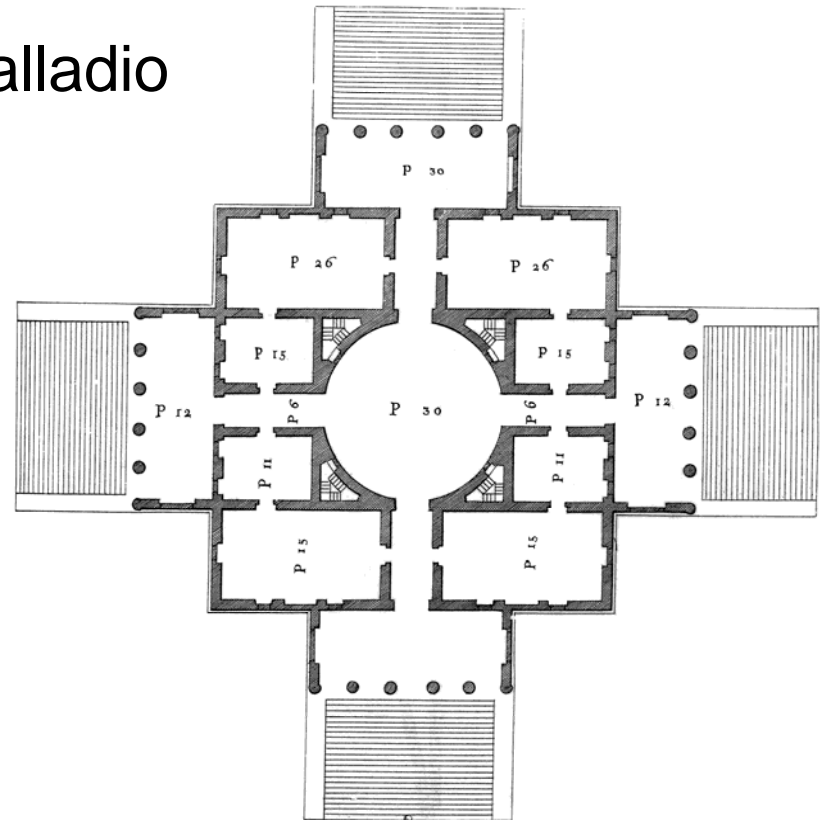


# Villa Rotunda, 1560 Andrea Palladio

Identical temple porticos face all 4 sides of the building

Principal room is the center – lit by dome

Symmetry, Clarity and Proportions

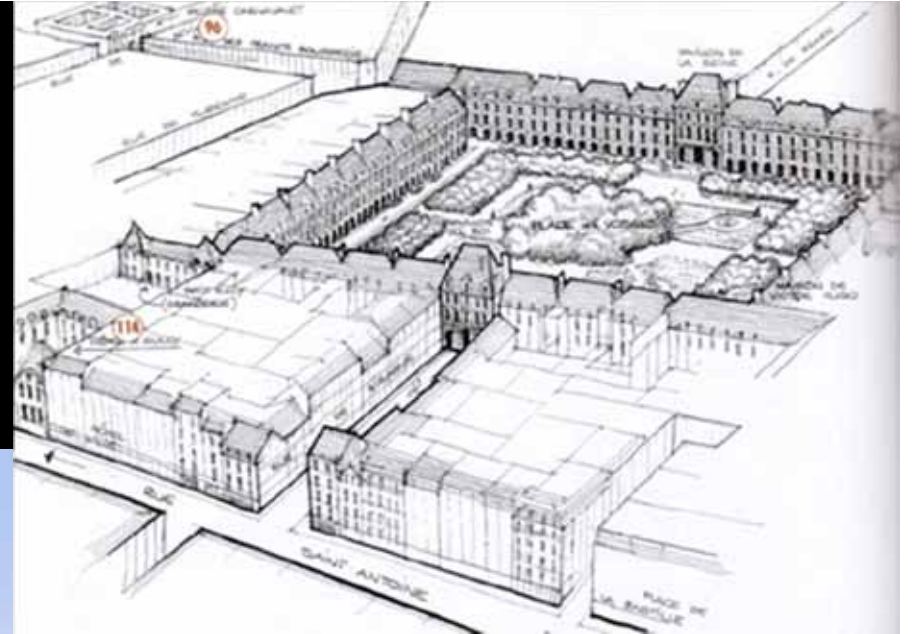


# Villa Rotunda, 1560 Andrea Palladio

Principal room is the center –  
lit by dome



# Place Royale (Place des Vosges), Paris, 1605-12



web by Michael Poisson

Wikipedia Commons by Beckstet

# Place Royale (Place des Vosges), Paris, 1605-12



Wikipedia Commons by Gryffindor

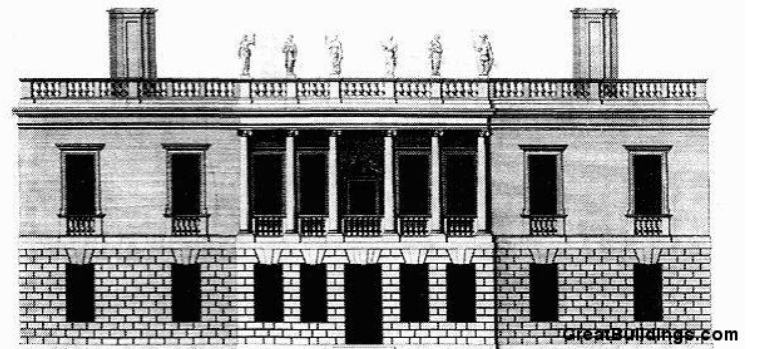
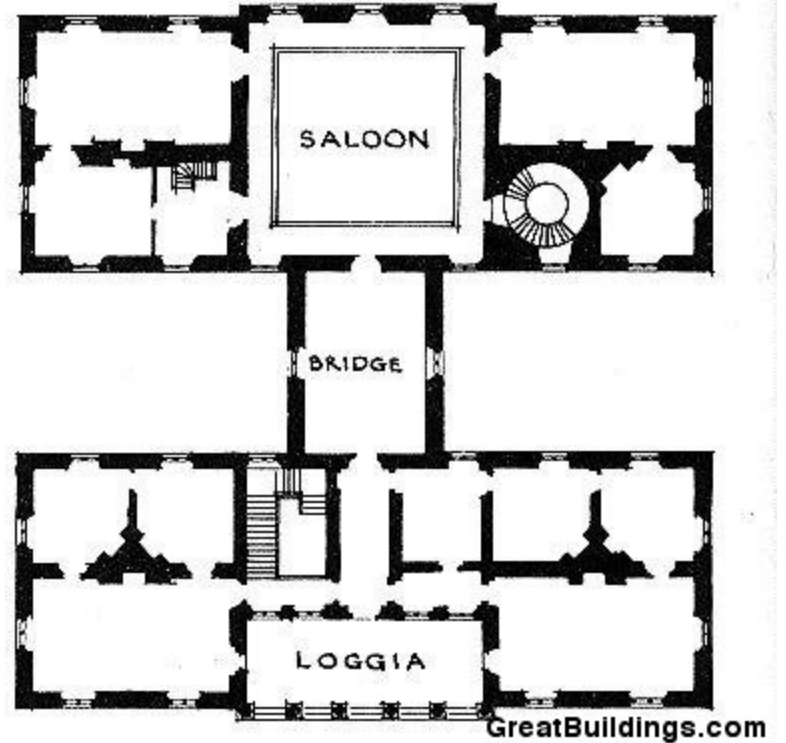


Wikipedia Commons by Thierry Bézecourt

# Queen's House, Greenwich; 1616- by Inigo Jones



# Queen's House, Greenwich; 1616- by Inigo Jones





Pietro Perugino, fresco, in Sistine Chapel, Rome: (1481–82)