

RENAISSANCE ARCHITECTURE

ANATOMY OF FORM

Week 7

Renaissance and Mannerism

ROMAN ARCHITECTURE



ROMAN ARCHITECTURE

THE ARCH



Pont du Gard, Aqueduct Nimes, France

Historic recap

- The fourteenth-century poet and classical scholar Petrarch was the first to characterize the period following the fall of the Roman Empire as a 'Dark Age', marked by a decline in culture and learning.
- Instead of viewing the classical era as one of pagan barbarity, he saw great value in its cultural achievements and ascribed considerable importance to the study of its surviving texts.

Historic recap

- While medieval Scholasticism had held that truth was pre-ordained by God, thereby giving the Church great authority and
- instrumentalizing the pursuit of knowledge, Humanist thought, on which Petrarch was highly influential, valued learning for its own sake.

Rinascita

The Renaissance

- A cultural manifestation of which was the return to ancient models of art, architecture and literature - is inextricably linked with the advent and development of Humanism.
- The rinascita (rebirth) of classical learning that, at its core, asserted the primacy of human agency over received doctrines had profound effects, not just in an intellectual sphere but also for social relations and patronage.

Rinascita

The Renaissance

- Classical texts had, of course, not been forgotten during the medieval period, and in Italy in particular antiquity's physical ruins were never far from view.
- Yet the study of such texts was open only to the educated elite; Humanist learning, which encompassed poetry, philosophy and Ciceronian rhetoric, could be read as an important sign of social distinction.

Rinascita

The Renaissance

- Centres of Humanist learning developed in several Italian city- states, and as art and architecture were considered among the 'liberal arts', artists and architects often sat in patron s' inner circles.

Rinascita

The Renaissance

Leon Battista Alberti

- The key figure of the Early Renaissance in Italy was Leon Battista Alberti (1404-72).
- His *Della pittura* (On Painting; 1436) and *De re aedificatoria* (On the Art of Building; 1454) are arguably the Renaissance's most significant treatises on art and architecture respectively.

Rinascita

The Renaissance

Leon Battista Alberti

- Leon Battista Alberti's *Della pittura* is the first modern treatise on the theory of painting.
- Although it appeared at a moment, 1435-36 when the old and the new order in art were still existing side by side in Florence, Italy it broke with the Middle Ages and pointed the way to the modern era.

Rinascita

The Renaissance

Leon Battista Alberti

- In the former, Alberti famously first articulated the principles of linear perspective then being explored by artists such as Masaccio and, a little later, Piero della Francesca .

Linear Perspective

- Usually credited to the architect and goldsmith Filippo Brunelleschi (1377- 1446), its invention allowed artists to create the illusion of depth through the use of orthogonal lines centring on a single vanishing point.
- This almost scientific method was vitally important in establishing painting as an authentic intellectual pursuit ; it also reflected a broad interest in essential Neo platonian forms that came to the fore in Alberti's architectural treatise.

Linear Perspective

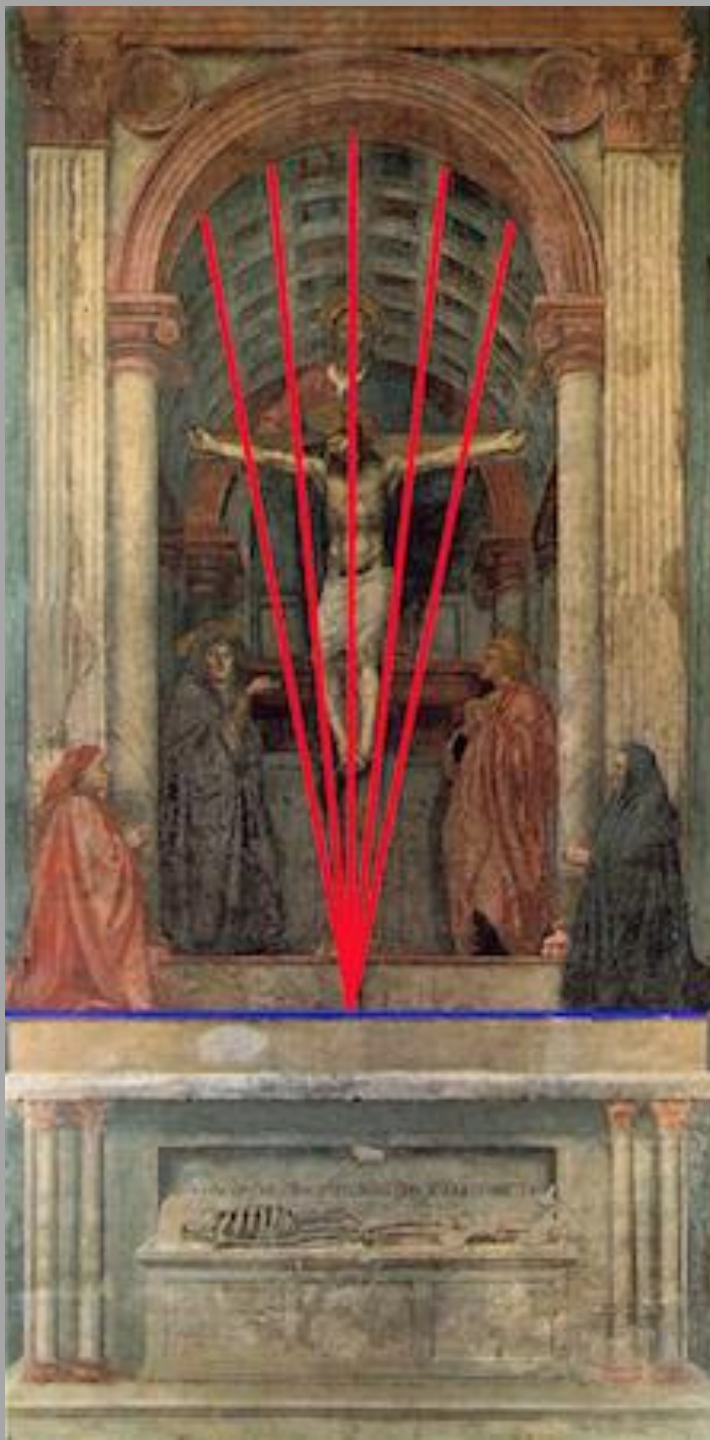


- **Masolino's 'St. Peter Healing a Cripple and the Raising of Tabitha' (1425).**
Note the almost perfect convergence of the vanishing points for receding horizontals from all parts of the composition, from the front of the scene all the way to streets in the far distance. The occasional slips seem attributable to lack of attention rather than lack of understanding of the concept of the vanishing point.





Left: Masaccio, *Holy Trinity*, c. 1427, fresco, 667 x 317 cm, Santa Maria Novella, Florence;
 right: Masaccio's *Holy Trinity* with the figures labelled



The orthogonals can be seen in the edges of the coffers in the ceiling (look for diagonal lines that appear to recede into the distance). Because Masaccio painted it from a low viewpoint, as though looking up at Christ, the orthogonals in the ceiling, if traced down then the vanishing point is on the ledge that the donors kneel on



Corinthian
capital

The squares are
coffers and
the whole ceiling is
called a coffered
barrel vault

Ionic
capital

Attached
column

Vertical ridges
called fluting on
the **pilaster**

The Architecture

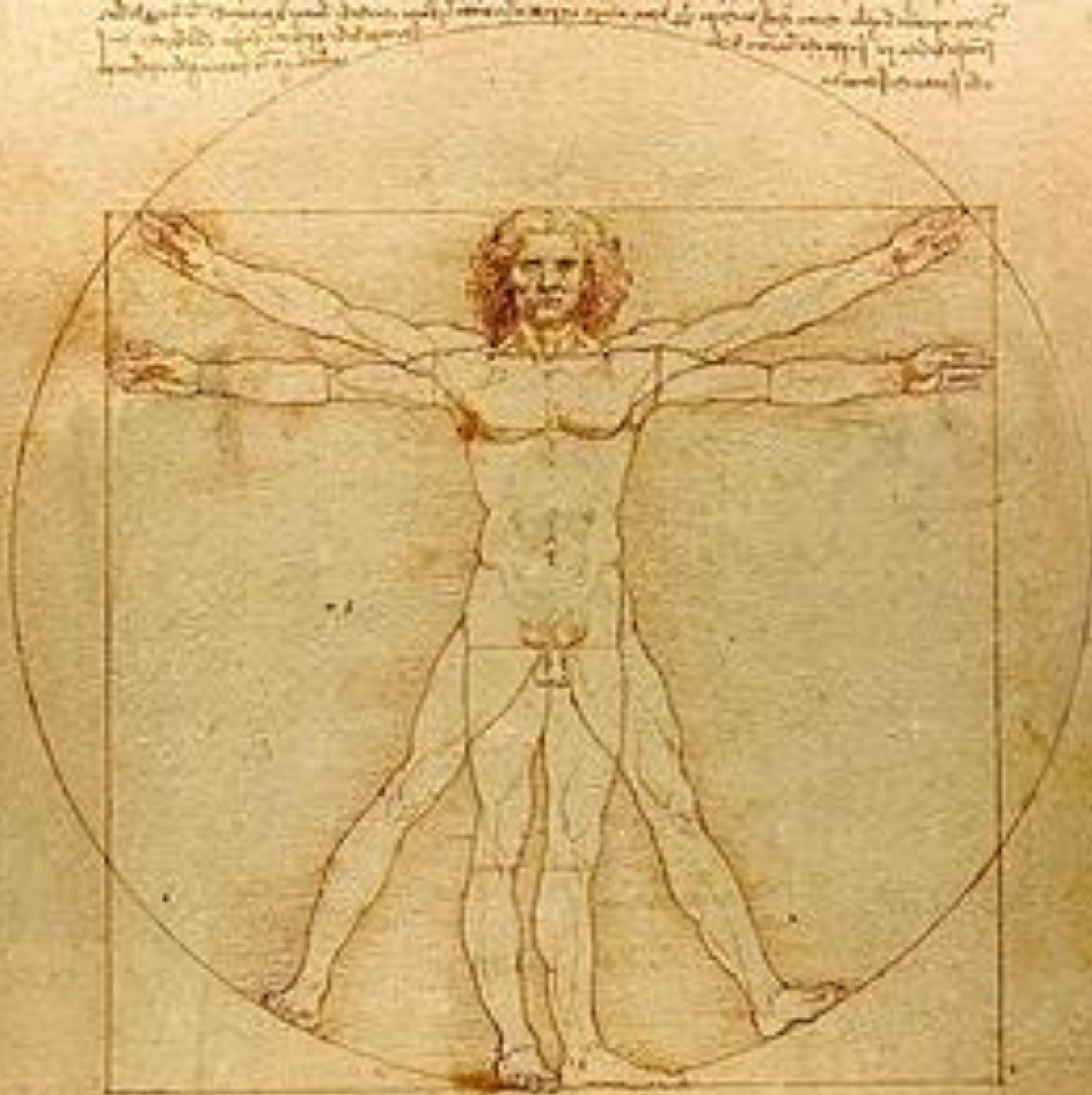
- One of the other remarkable things about this fresco is the use of the forms of classical architecture (from ancient Greece and Rome). Masaccio borrowed much of what we see from ancient Roman architecture, and may have been helped by the great Renaissance architect Brunelleschi.
- **Coffers** - the indented squares on the ceiling
- **Column** - a round, supporting element in architecture. In this fresco by Masaccio we see an attached column
- **Pilasters** - a shallow, flattened out column attached to a wall—it is only decorative, and has no supporting function
- **Barrel Vault** - vault means ceiling, and a barrel vault is a ceiling in the shape of a round arch
- **Ionic and Corinthian Capitals** - a capital is the decorated top of a column or pilaster. An ionic capital has a scroll shape (like the ones on the attached columns in the painting), and a Corinthian capital has leaf shapes.
- **Fluting** - the vertical, indented lines or grooves that decorated the pilasters in the painting—fluting can also be applied to a column

The Architecture

- Alberti consciously modelled *De re aedificatoria* on the then recently rediscovered *De architectura* a treatise of ten books by the Roman architect Vitruvius (active 46-30 BCE).
- Alberti's explication of the orders focused on their role within an overall proportional system, and he argued that architecture, like painting, had a fundamental basis in geometry.

The Architecture

- Alberti 's ideal form was the circle, which he regarded as deriving from nature - an idea illustrated famously in Leonardo da Vinci's Vitruvian Man (ca. 1490).



Leonardo da Vinci's Vitruvian Man (ca. 1490).

The Architecture

- The geometric basis of architecture, Alberti argued , was manifested in the centralized plan, which embodied his idea of beauty as 'a harmony and concord of all the parts achieved in such a manner that nothing could be added or taken away or altered except for the worse'.

The Architecture

- Of Alberti's built works the one that came closest to realizing his ideals was S. Sebastiano in Mantua, Italy.
- Yet, the design also reflects the need to reconcile Renaissance idealism with ecclesiastical requirements an ongoing concern for Renaissance architects.

The Architecture

- Indeed, as the Renaissance progressed, architectural principles were increasingly codified, and architects soon began to manipulate them, thus heralding what is now known as Mannerism;
- meanwhile, as Renaissance ideas were dispersed, notably to northern Europe, they were adapted to reflect local contexts and traditions.

The Architecture



S. Sebastiano in Mantua, Italy 1460CE

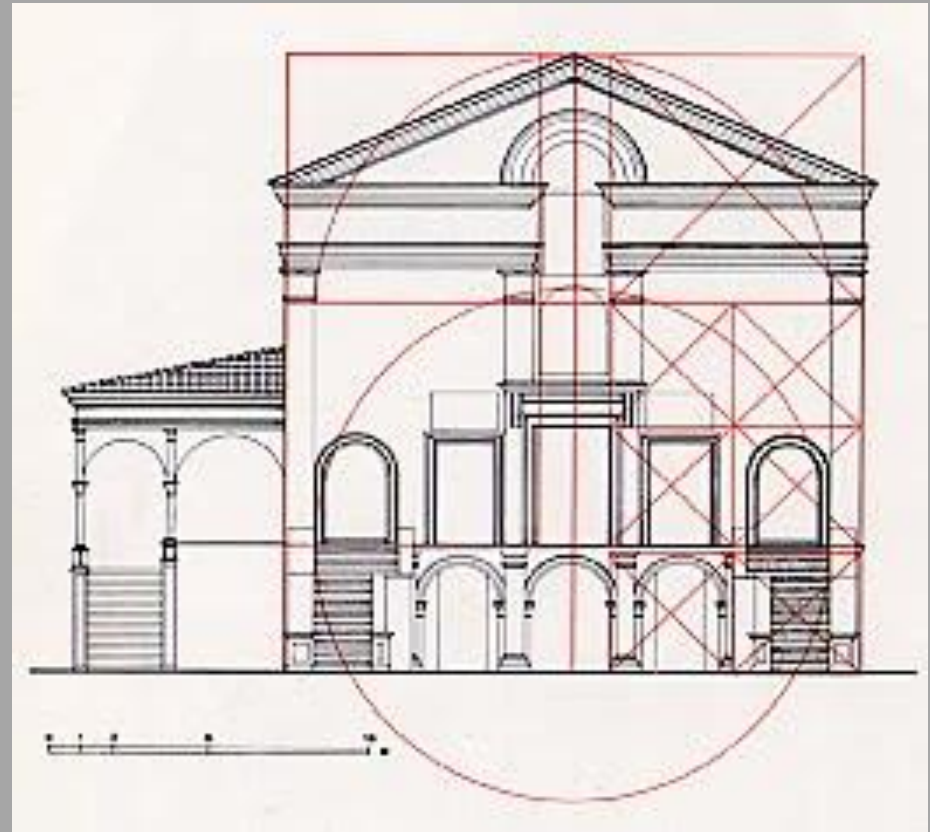
Early Renaissance Architecture

Proportional facade

The coherent proportional system of Alberti's Palazzo Rucellai emerges from its arrangement of the orders. Doric pilasters at ground level, Ionic on the first floor and Corinthian above frame the repeating series of windows to give the whole façade a sense of order, a principle Alberti also deployed in the facade of S. Maria Novella in Florence.



S. Sebastiano in Mantua, Italy 1460CE

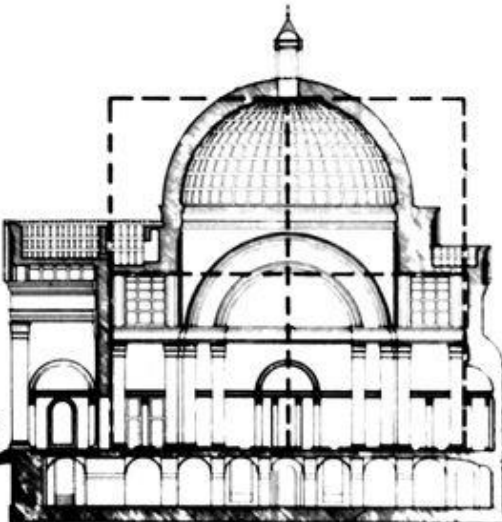
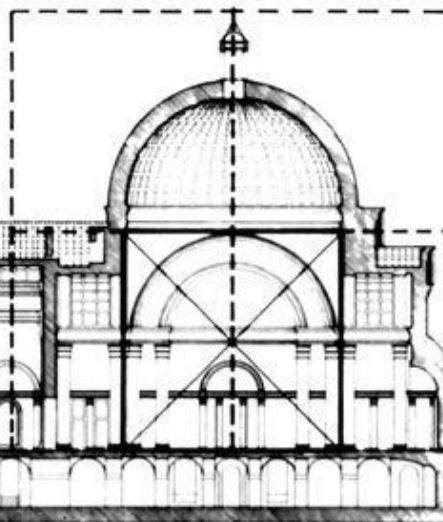
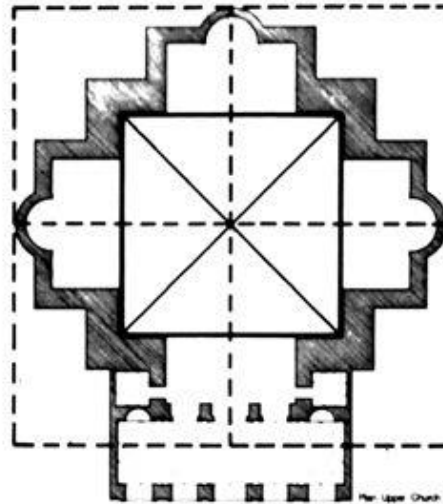
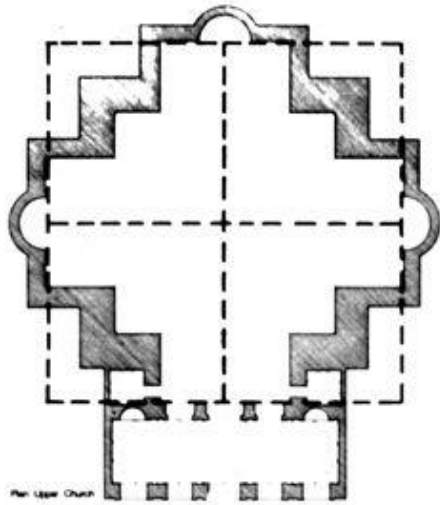


Early Renaissance Architecture



Early Renaissance Architecture

S SEBASTIANO



27 "Braccia" lower module squares: plan and cross-section

27 Upper module squares: plan and cross-section

Centralized plan

The Early Renaissance saw the first experiments with the Neoplatonic ideal of the centralized plan. Brunelleschi's S. Maria degli Angeli was begun in 1434, but left incomplete. Michelozzo's east end of SS. Annunziata, Florence, begun in 1444, is a complete example, but Giuliano da Sangallo the Elder's S. Maria delle Carceri is the most perfect of the early iterations.

ARCHITECTURE OF THE RENAISSANCE

- <https://www.youtube.com/watch?v=1ek1Sl1oAwU>

Early Renaissance Architecture



- Giuliano da Sangallo the E-S. Maria della Carceri, Prato 1485-95 CE

Early Renaissance Architecture



Giuliano da Sangallo *the* E -S. Maria della Carceri, Prato 1485-95 CE

Early Renaissance Architecture



Emulation of the Antique

In his incomplete Tempio Malatestiano in Rimini, Alberti attempted to employ the Roman triumphal arch motif in church architecture. He succeeded in doing so at the slightly later S. Andrea, Mantua, in which he used various Roman features, notably the coffered barrel vault, to reconcile its essentially longitudinal space with his preferred centralized ideal.