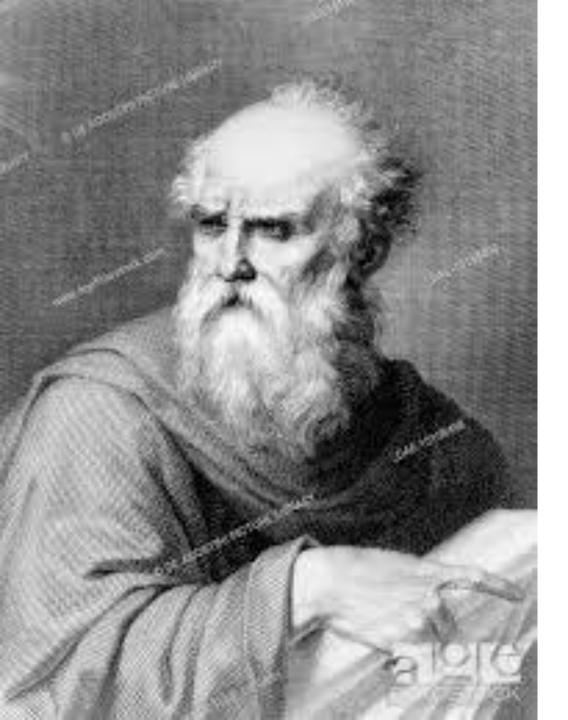
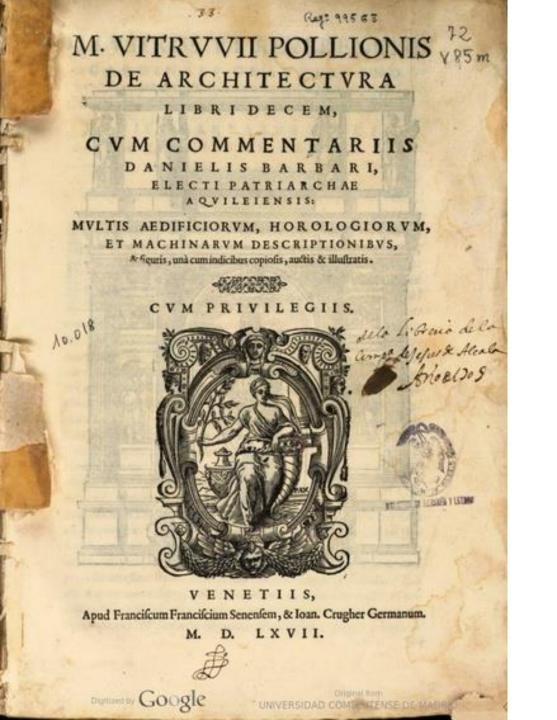
Hum 201: Philosophy

Architecture in Roman Period Vitruvius & Architectural Theory in Antiquity



Vitruvius & Architectural Philosphy in Antiquity



Ten Books on Architecture

Marcus Vitruvius Pollio

Contents of the 10 books are as follow:

- **Book 1:** The education of the architect, basic aesthetic and technical principles, subdivisions of architecture-buildings, horology, mechanics, public edifices and domestic architecture, town planning
- **Book 2:** The evolution of architecture, building materials
- Book 3: Temple construction
- Book 4: Types of temple, the Orders, the theory of proportion
- **Book 5:** Communal buildings, with special reference to theatres
- **Book 6:** The private house
- Book 7: The use of Building materials, wall painting and colors
- Book 8: Water and the Provision of water supply
- Book 9: The Solar system, sundials and water-clocks
- **Book 10:** The construction of machinery and mechanics

Issues discussed in the **preface** of the book:

- 1. Vitruvius as a person
- 2. The function of the treatise
- 3. Problems of architecture in general

The composition of the books were dedicated to emperor Agustus as a token of gratitude for the pension awarded to him which ensured a carefree old age for him. He started working on his architectural treatise at the age of 51 just as he was entering retirement.



The architect must be a master of fabrica(craft) and ratiocination(theory)

Architecture must satisfy three distinct requirements:

Firmitas (strength) _the field of statics, construction and materials

Utilitas(utility)_the use of buildings and the guarantee of successful functioning

Venustas(beauty)_all aesthetics requirements, proportion above all

These (public facilities) must be built in such a way as to take account of strength, utility and beauty. The demands of strength will be met when the foundations are sunk to bedrock, and the building materials, whatever they are, are carefully chosen without trying to save money; those of utility when the layout of the sites is faultless and does not make their use difficult, and when their arrangement is convenient and in each case suited to its particular situation; and those of beauty when the work has an elegant and pleasing appearance and the relative proportions of the individual parts have been calculated with true symmetry.

the basic category of Venustas is divided into six basic concepts:

- Ordinatio (ordination)
- Dispositio (disposition)
- Eurythmia (rhythmic)
- Symmetria (symmetry)
- Décor (ornament)
- *Distributio* (distribution)

Ordinatio

- Detailed proportioning of each separate part of a building.
- Working out of the general proportions with regard to symmetria, achieved by means of quantitas.
- Quantitas is the taking of units of measure from the building and the creation of a harmonious whole from individual parts.

Dispositio

- Fitting arrangement of parts and the elegant effect of the building achieved through qualitas
- The various types of diapositio are:
 - Ichnographia_ competent use of rules and compasses
 - Orthographia _ representation of the front elevation of the building
 - Scaenographia delineation of the façade and the receding sides of the building
- These three spring from Cogitatio(reflection) and Inventio(invention)

Eurythmia

- Result of proportion applied to a building the effect of such proportion on the beholder
- Corresponds more or less to the conception of harmony

Symmetria

- The harmony of the parts in relation to the whole within the total design, as measured by a module (proportion)
- In the case of sacred building, symmetry is calculated either from the thickness of columns, or triglyph, or module
- Ordinatio is principle, symmetria is the result, eurythmia is the effect

Decor

- Correct appearance of a building, composed according to precedent from approved elements.
- Achieved by following convention, or common usage or nature
- Concerns the appropriateness of form and content, not of applied embellishment
- The use of orders comes under this heading: Doric temples are to be built to Minerva, Mars and Hercules

Distributio

- Advantageous management of materials and site , along the consideration of building costs
- Must be designed to suit their occupants
- The relationship between buildings and occupants anticipates a concept 'architecture parlante' according to which architecture should be the expression of its function or the status of its occupants

Vitruvias's six fundamental concepts fall into three groups:

- Ordinatio, eurythmia and symmetria denote the various aspects of the proportions of a building
- **Dispositio** refers to the artistic design, for which cogitation and invention is necessary
- **Décor and distribution** concern the appropriate use of the Orders and the relationship between house and occupant.

