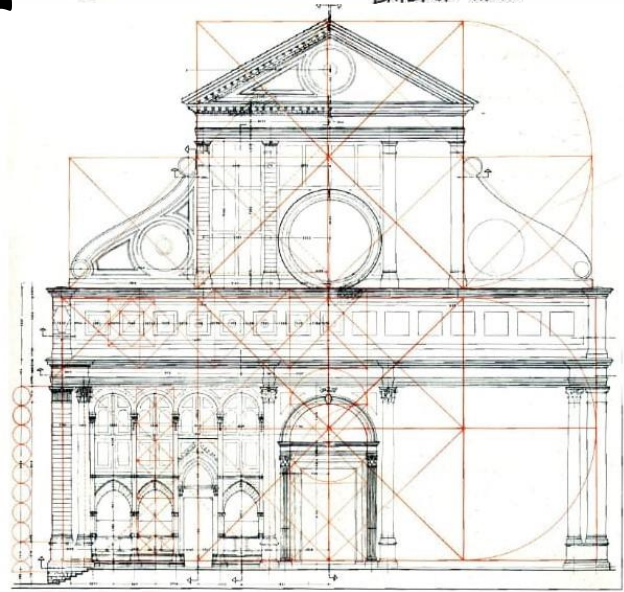
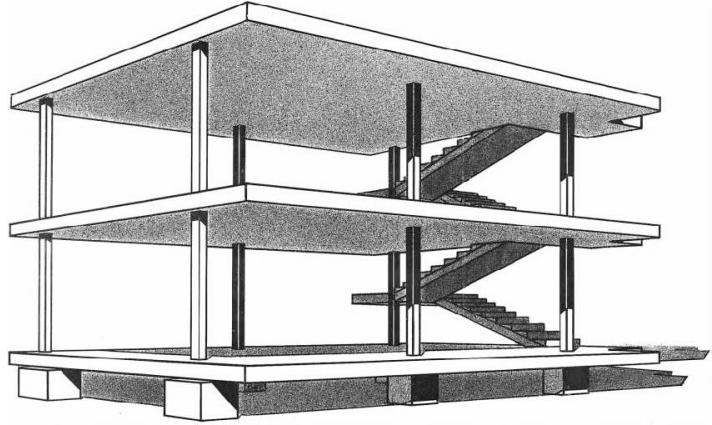
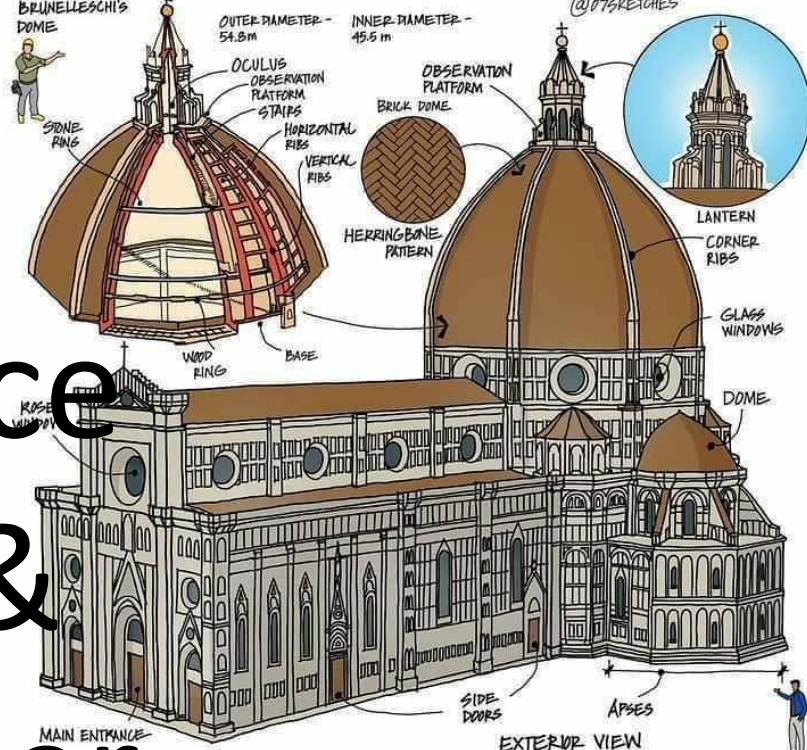
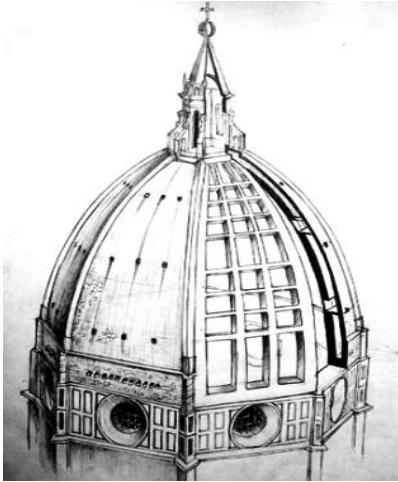


Renaissance : Palladio & Le Corbusier



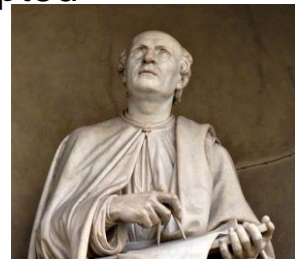
RENAISSANCE- A NEW DAWN: 1400-1600

DUOMO FLORENCE, 1430 AD- BRUNELLESCHI

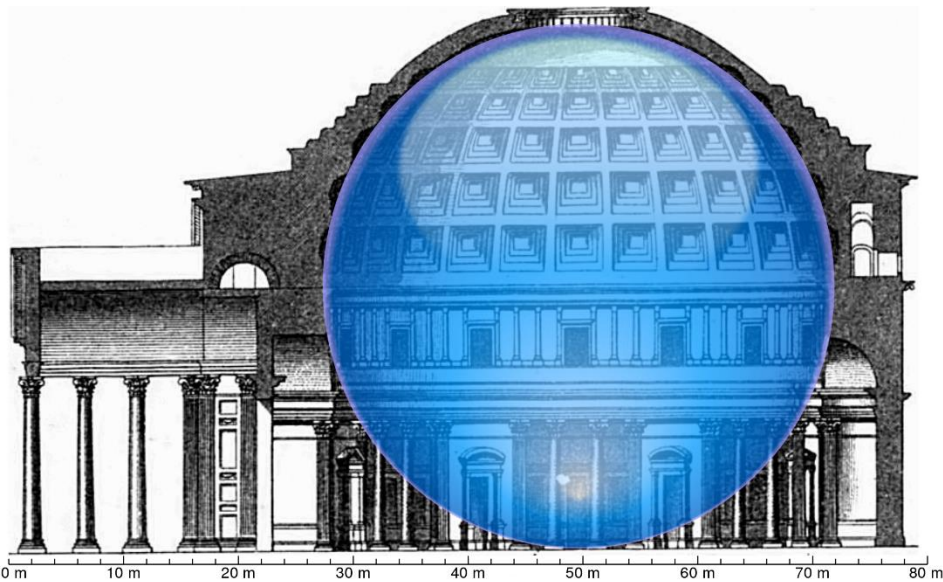


HUMANISM: Renaissance humanists believed that the human body is a microcosm of the universe.

- A period of transition between Middle Ages and Modernity;
- an effort to revive and surpass the ideas and achievements of classical antiquity;
- great social change in art, architecture, politics, literature, exploration and science;
- It began in the Republic of Florence, spread to the rest of Italy and later throughout Europe;
- The Italian term Rinascita ("rebirth") first appeared in *Lives of the Artists'* (c.1550) by Giorgio Vasari, while the corresponding French word Renaissance was adopted into English as the term for this period during the 1830s



PANTHEON, ROME. 27 BC



VITRUVIUS(80 BC-15 BC) – De Architectura.

FILIPPO BRUNELLESCHI(1377-1446)- Duomo Florence

LEON ALBERTI(1404-1472)- Della Pittura, De statua, De re Aedificatoria;

BRAMANTE(1444-1514)- Tempietto

ALVISE CORONARO(1464-1566)- Trattato dell'architettura

GIOVANNI FALCONETTO(1468-1535)

MICHELANGELO(1475-1564)- David / Laurentian Library / St. Peter's

SEBASTIAN SERLIO(1475-1554)- Tutte l'opere d'architettura et prospetiva

BALDASSARE PERUZZI(1481-1536)

RAPHAEL(1483-1520)

SANGALLO THE YOUNGER(1484-1546)

GIULIO ROMANO(1499-1546)

VIGNOLA(1507-1573)'- Canon of the Five Orders of Architecture

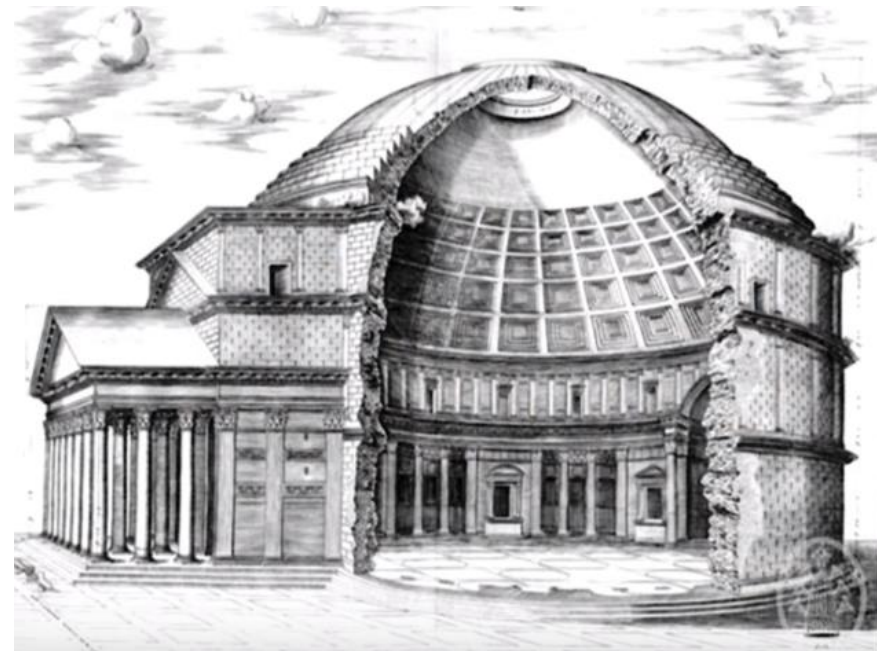
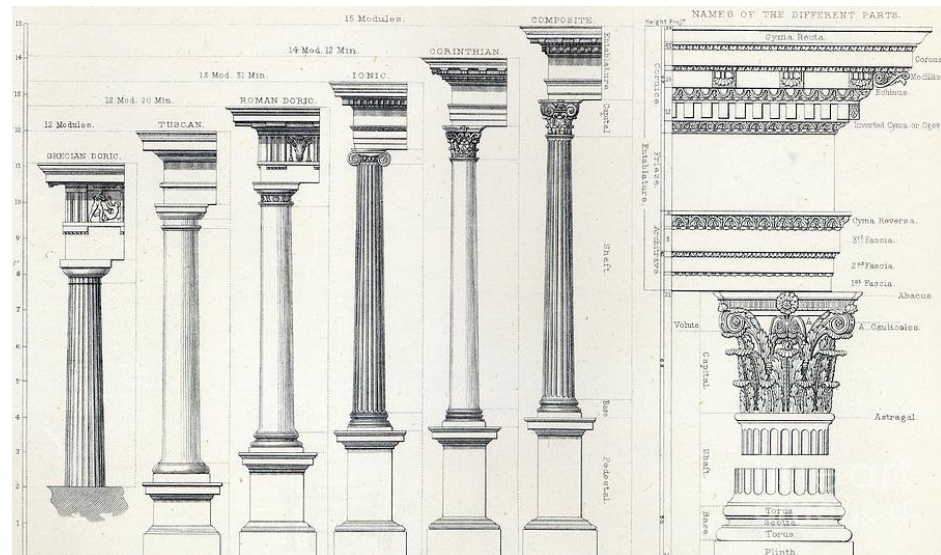
SAN MICELLI(1484-1559)

JACOPO SANSOVINO(1486-1570)

ANDREAS PALLADIO(1508-1580)- I quattro libri dell'architettura

VINCENZO SCAMOZZI(1548-1616)- L'idea dell'architettura universale

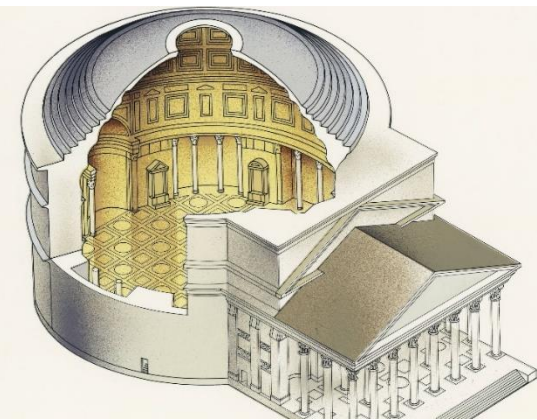
GIORGIO VASARI(1511-1574)- Le Vite de' più eccellenti pittori, scultori, ed architettori



Ref:-

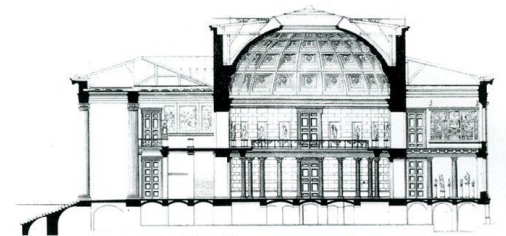
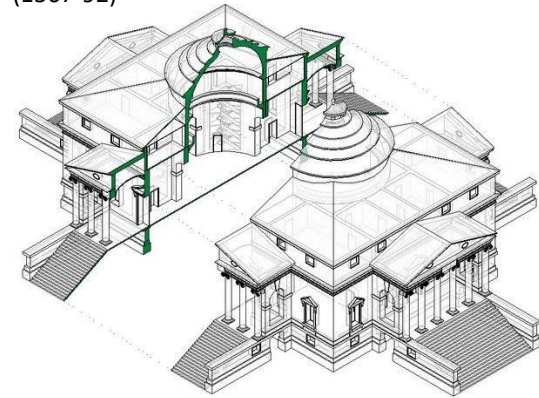
1. Canon of the Five Orders of Architecture- Vignola
2. Classical Language of Architecture- John Summerson

PANTHEON, ROME. 27 BC(126 BC)

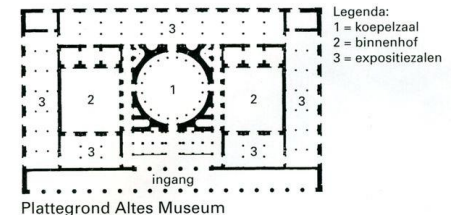


VILLA MADAMA - RAPHAEL, ROME,
(1518-30)

VILLA LA ROTONDA - PALLADIO, VICENZA,
(1567-92)

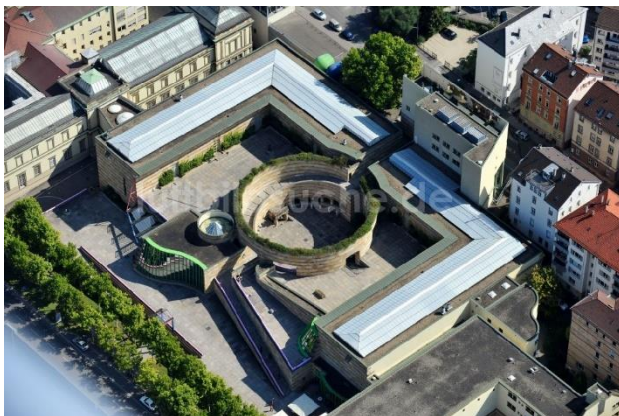


Doorsnede Altes Museum



ALTES MUSEUM, BERLIN – KARL SCHINKEL
(1825-30)

Neu Staatsgalerie, Stuttgart, Germany- James Stirling
(1979–84)



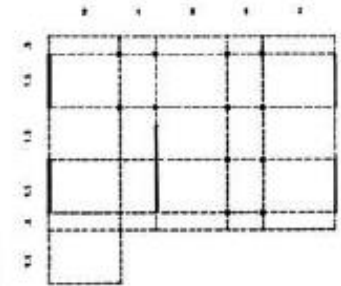
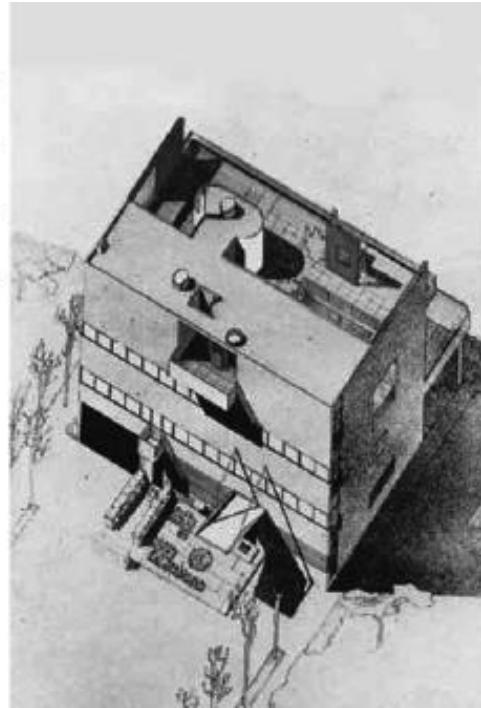
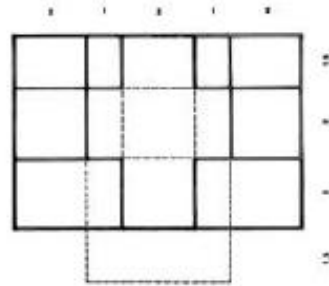
Palace of Assembly(Chandigarh)-Le Corbusier
(1952–61)

Ref:-

1. Paper Palaces: The Rise of the Renaissance Architectural Treatise – Vaughan Hart
2. Palladio's Rome – A Translation of Andrea Palladio's Two Guidebooks to Rome- Vaughan Hart

PALLADIO : LE CORBUSIER

VILLA FOSCARI : VILLA STEIN

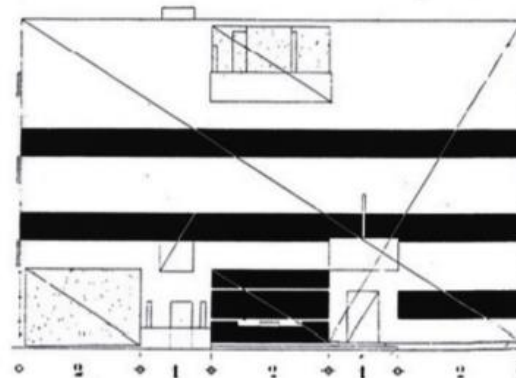
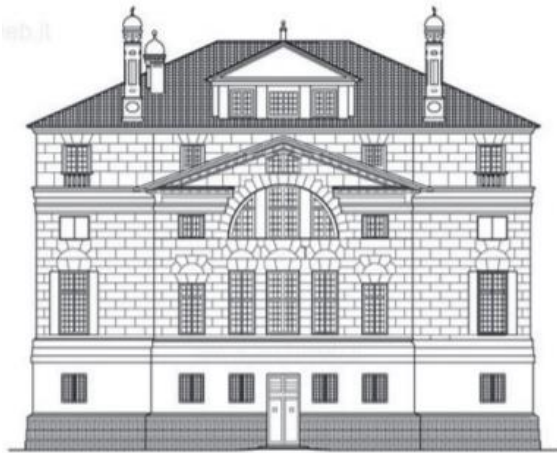
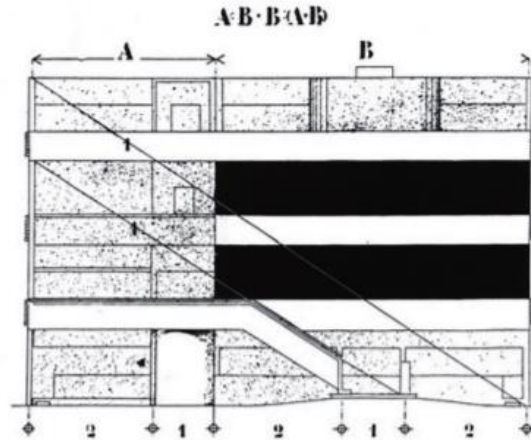
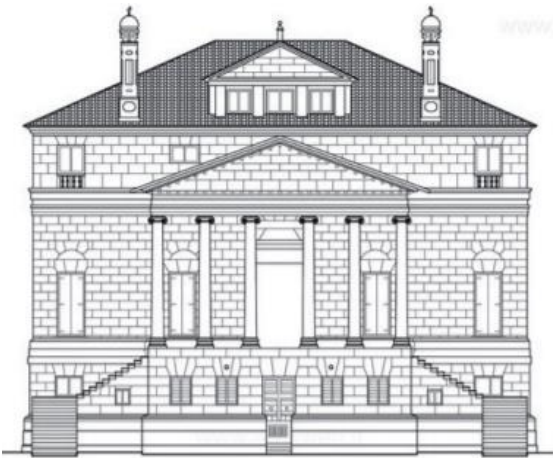


- 8 x 5.5 x 5. / ALT. DOUBLE-SINGLE BAYS. / COMPARABLE TRIPARTITE DISTRIBUTION OF SUPPORT GRID / 1.5 GRID FOR THE EXTRUDED TERRACE OR PORTICO;
- AREA OF INTEREST EITHER CONCENTRATED OR DISPERSED;
- DESIGN PROGRAMME DECIDES THE STRUCTURE FOR PALLADIO, WHEREAS IN CASE OF LE CORBUSIER, THE STRUCTURE INFLUENCES THE PROGRAMME;
- LE CORBUSIER'S CONCEPT OF FREE-FLOWING HORIZONTAL SPACE COMES TO A SUDDEN HALT WHEN JUXTAPOSED AGAINST RIGID OUTER WALLS. IN ORDER TO CREATE A CONFLICT, CORBUSIER THEN CREATES ROOF-GARDENS, CUT-OUTS, TERRACE ETC, AND THUS CONFRONTING AN EXPLOSIVE SITUATION WITH AN IMPLOSIVE ONE.

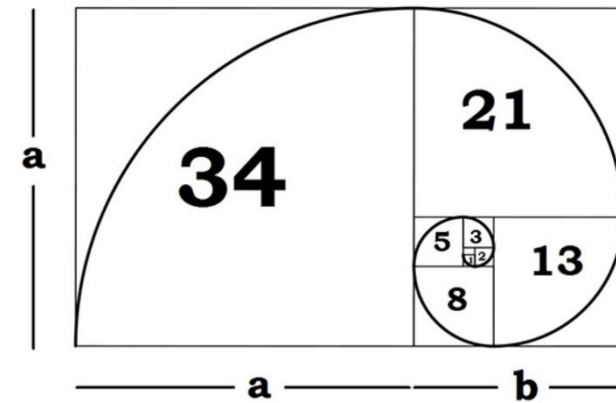
Ref:- 1. The Mathematics of the Ideal Villa and Other Essays- Prof. Colin Rowe

2. I quattro libri dell'architettura (The Four Books of Architecture) – Andreas Palladio

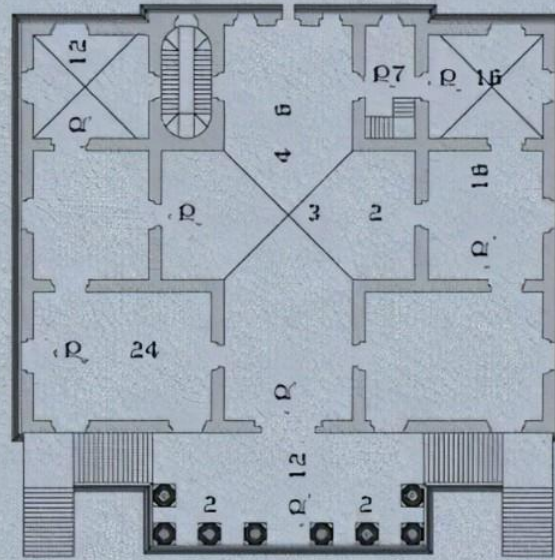
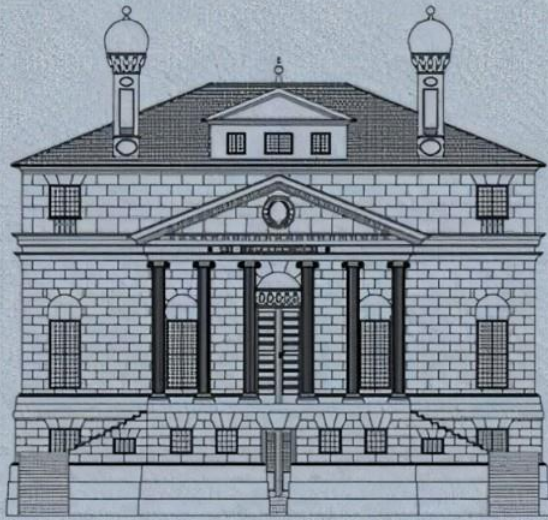
PALLADIO : LE CORBUSIER



- LE CORBUSIER'S FACADES ARE THE PRIMARY DEMONSTRATION OF THE VIRTUES OF MATHEMATICS, USING GOLDEN RATIOS.
- HE CALCULATED UPON HIS PERCEPTUAL FAÇADE, WHICH IS FREED UP THANKS TO THE ADOPTED STRUCTURAL SYSTEM.
- LE CORBUSIER ALWAYS CAREFULLY WORKED OUT THE CALCULATIONS BY A SYSTEM OF REGULATING LINES & FIGURES & BY PLACING ON THE DRAWINGS OF HIS ELEVATIONS, THE GOLDEN RATIO $A : B = B : (A + B)$.



PALLADIO : LE CORBUSIER

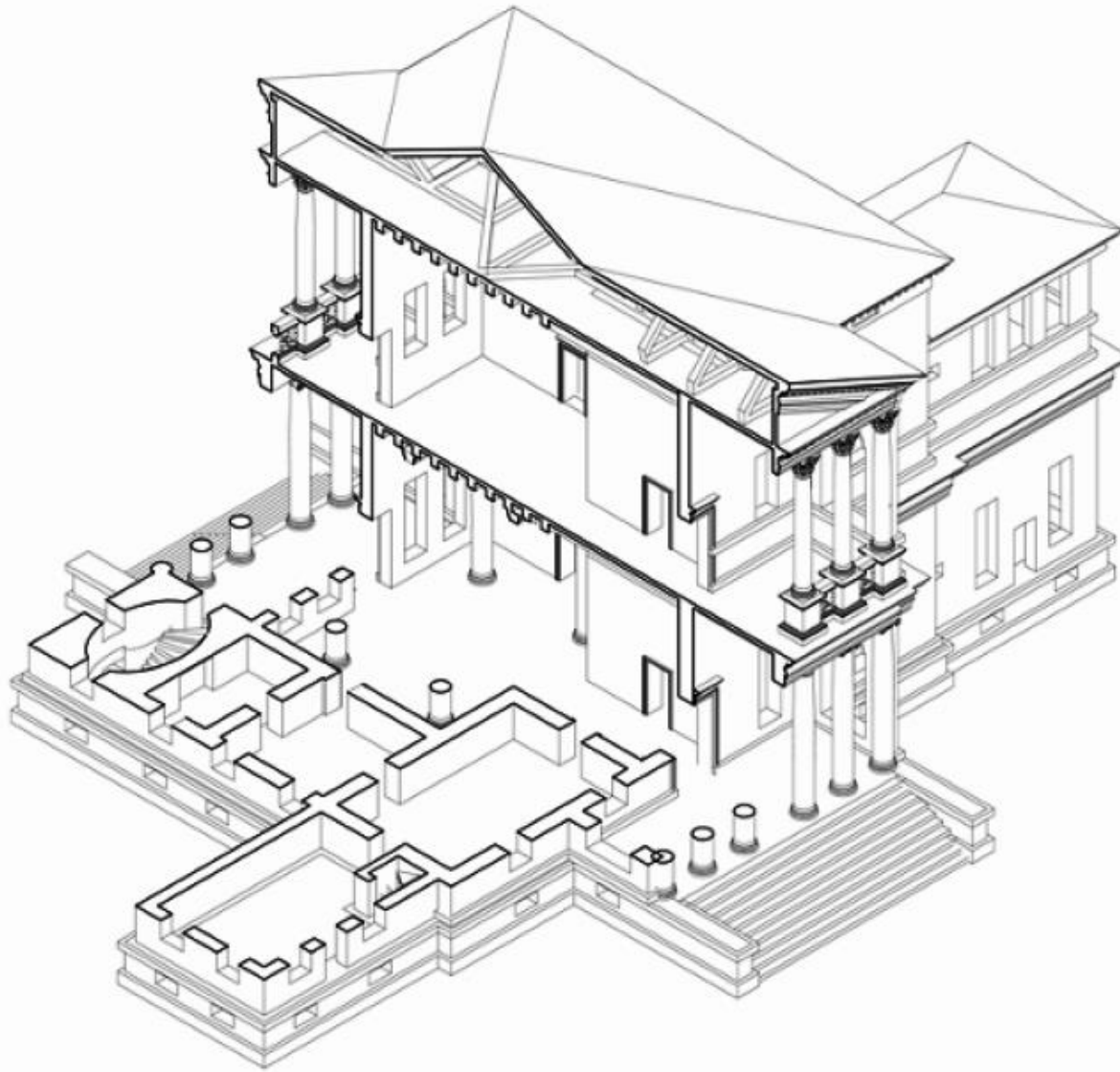


Andrea Palladio Villa Foscari > La Malcontenta

- FOR PALLADIO, THE ULTIMATE PROOF OF HIS THEORY LIES IN THE PLAN.
- HIS CALCULATION OF DESIGN IS BASED ON THE PLAN.
- PALLADIO CONTROLLED HIS PLAN BY THE CENTRAL AXIS AND HIS DESIGN PROGRAM LAID OUT SYMMETRICALLY ON EITHER SIDE.

Copyright:- J. Eckhardt 2004

PALLADIO : LE CORBUSIER

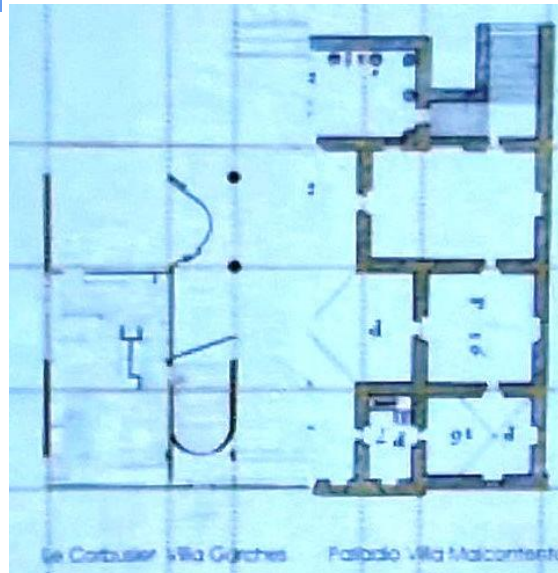
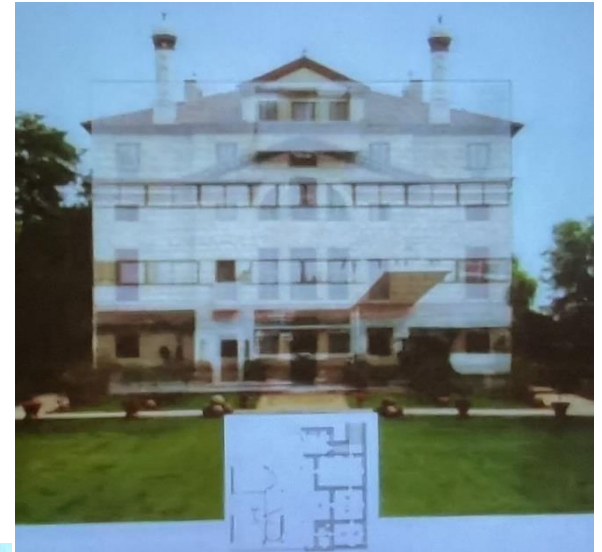
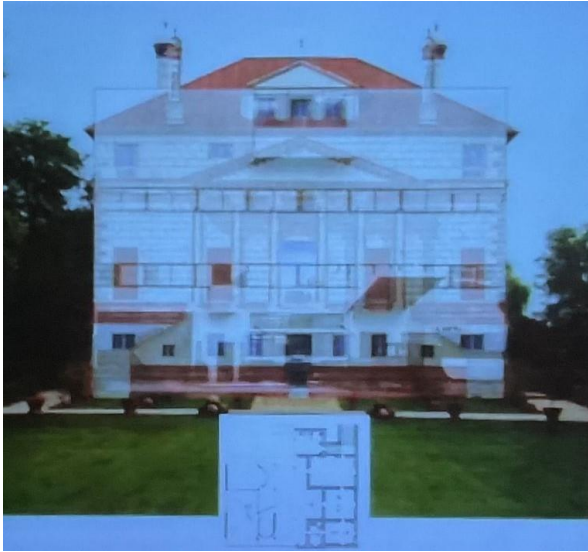


- PALLADIO'S SYSTEM OF PROPORTIONING WAS PRIMARILY BASED ON THE ORDER HE USED, IN THIS CASE THE IONIC ORDER.
- THE CONFLICT BETWEEN THE DEMANDS OF THE ORDER & A SERIES OF 'NATURAL' RELATIONSHIPS IS HOW THE FAÇADE OF MALCONTENTA IS DERIVED FROM.
- THIS SOMETIMES LED TO PALLADIO WILFULLY TWEAKING HIS DIMENSIONS TO SUIT THE PROGRAM. THUS THE COMPLEXITIES OF SECTION & SUBTLETIES OF ELEVATION WERE VERY SKILFULLY TRANSPOSED TO THE PLAN.

Courtesy: Villa Cornaro, Piombino Dese- Prof. Branco Mitrovic

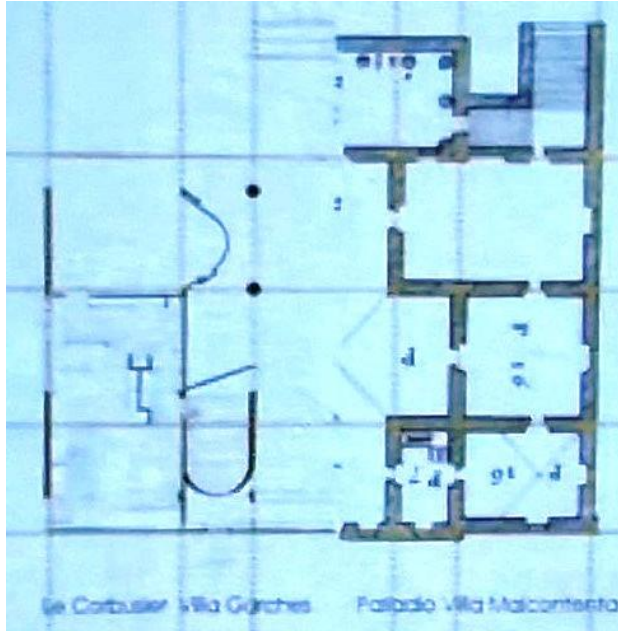
Ref-: Learning from Palladio - Branco Mitrovic

PALLADIO : LE CORBUSIER



ELEVATIONS READ THROUGH FRONT TO BACK AND VICE-VERSA.

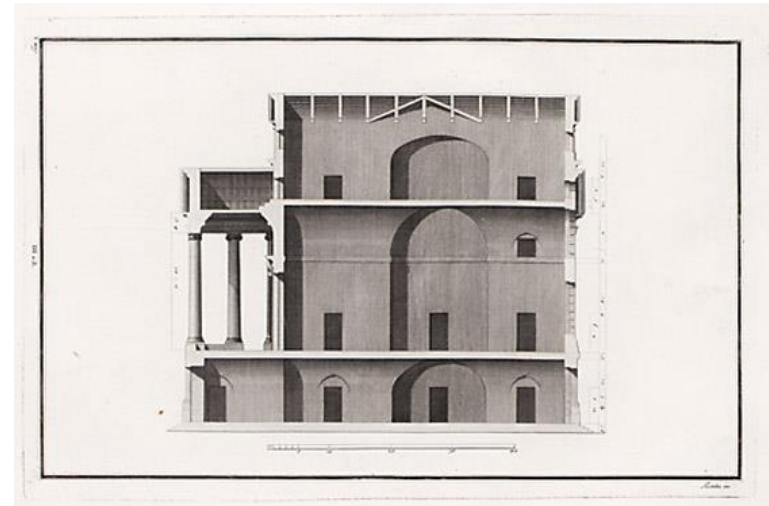
PALLADIO : LE CORBUSIER



PALLADIO-: PARALYZED PLAN & FREE SECTION

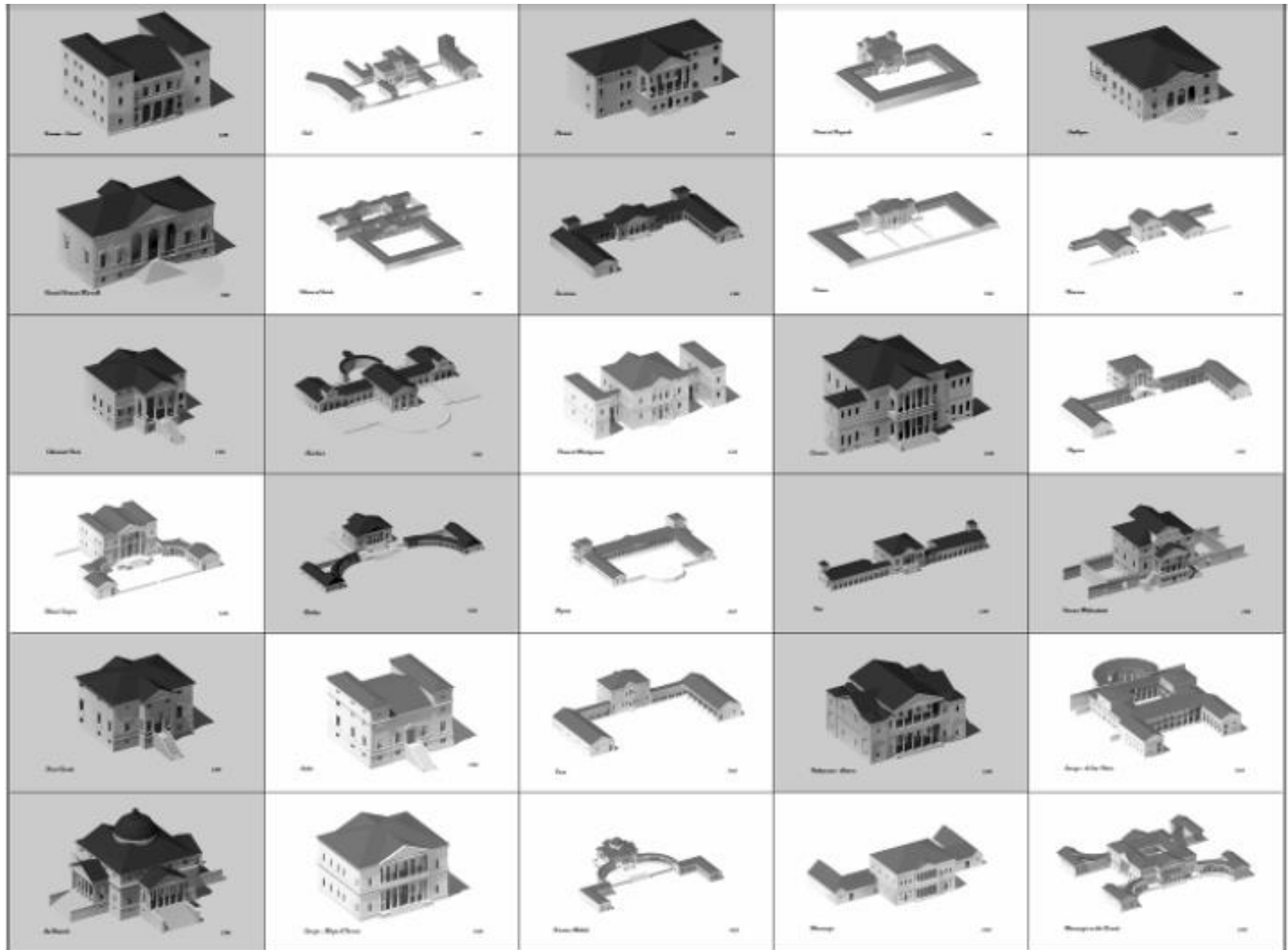
LE CORBUSIER-: FREE PLAN & PARALYZED SECTION.

THE ARCH, VAULT, THE PYRAMID, THE PITCHED ROOF ARE AMONG THE PREROGATIVES OF SOLID-WALL CONSTRUCTION, THANKS TO THE 'PARALYZED', TRADITIONAL PLAN.



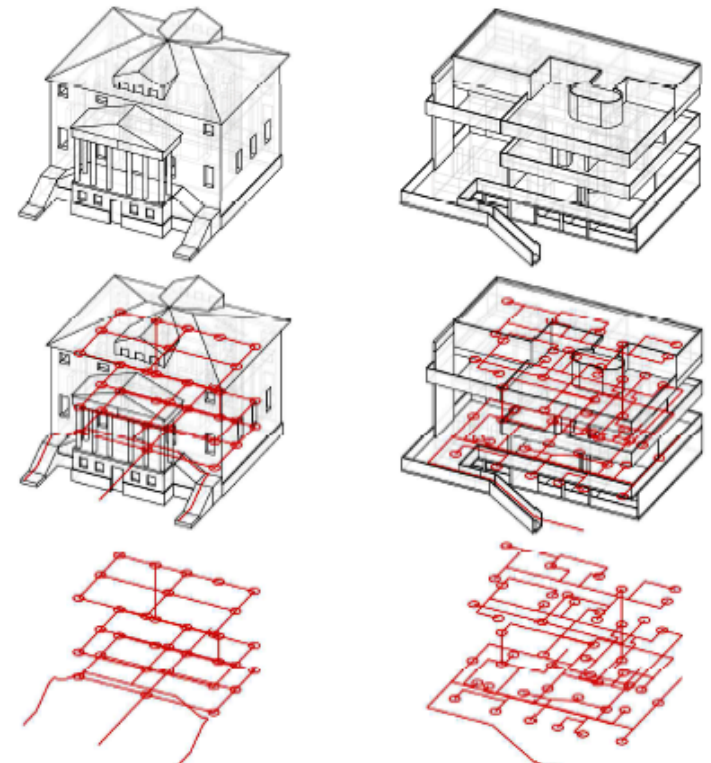
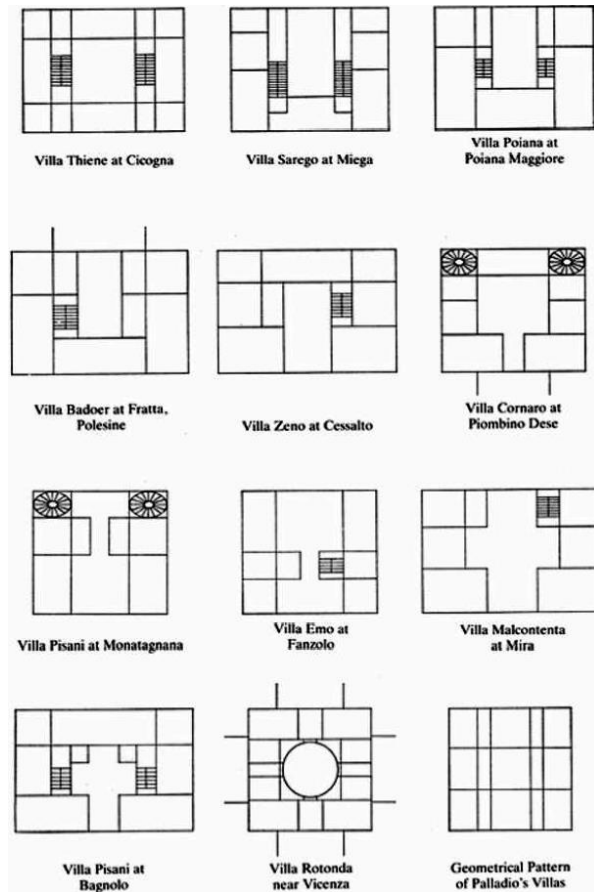
DESPITE THE FREE PLAN, IT WAS NEVER EASY TO VISUALIZE THE INTERIOR SPATIAL ORGANISATION OF VILLA STEIN, UNLIKE IN MALCONTENTA, WHERE ONE COULD CONCEIVE THE ENTIRE BUILDING WHILE STANDING AT THE CRUCIFORM HALL.

PALLADIO VILLAS: 3D CAD MODELS



PALLADIO : LE CORBUSIER

9 SQUARE GRID



Andrea Palladio, Villa Foscari "Malcontenta". 1550.

- 9 square grid homogeneous space
- Rigid mathematic composition

Le Corbusier, Villa Stein "Garches". 1927.

- 9 square grid homogeneous space
- Fluid mathematic composition

ACCORDING TO RUDOLF WITTKOWER, ANDREA PALLADIO HAD DEVELOPED A GENERATIVE PROJECT SYSTEM THAT ALLOWED HIM TO DESIGN HIS VILLAS AROUND 9 SQUARES.

Ref:-

1. Architectural Principles in the Age of Humanism – Rudolph Wittkower;
2. Palladio – James Ackerman;

PALLADIO VILLAS: CAD PLANS

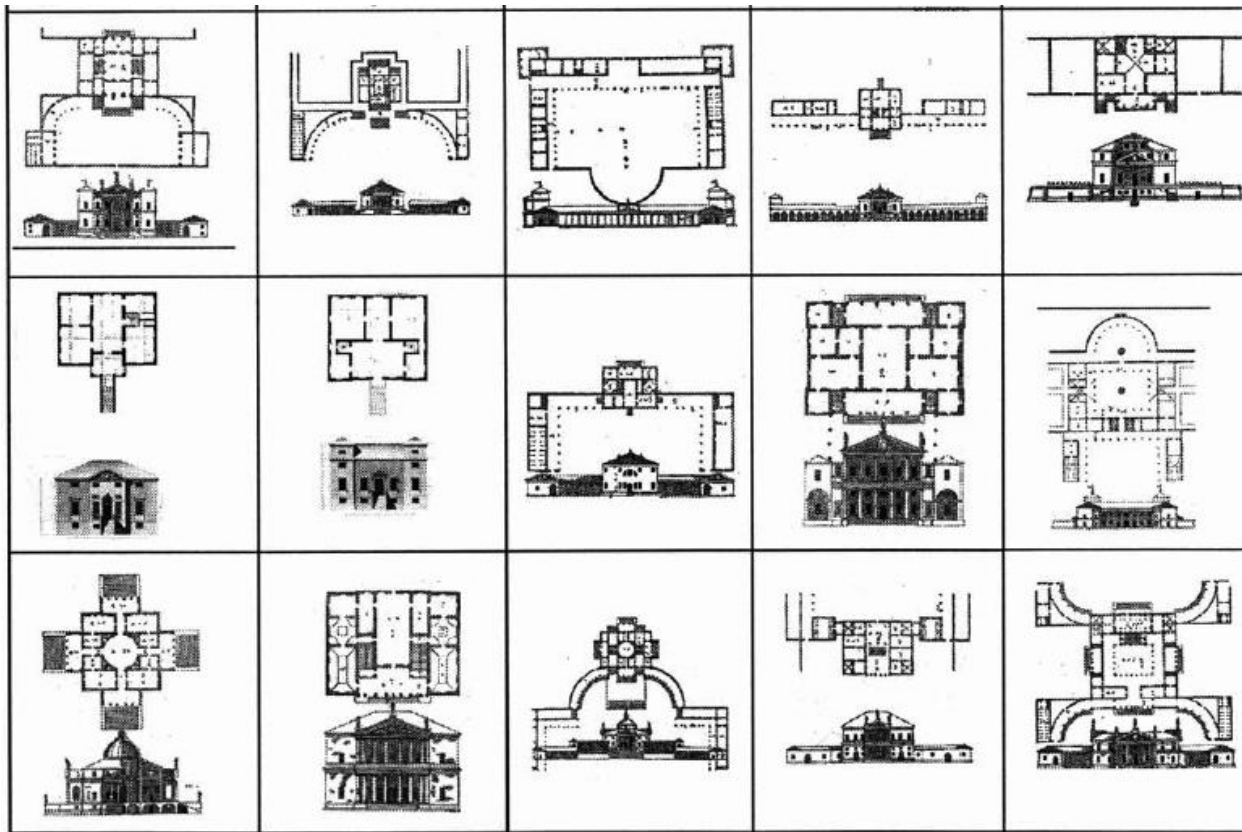


Fig. 2.7 Palladio's original drawings

DECONSTRUCTION OF A PALLADIO VILLA

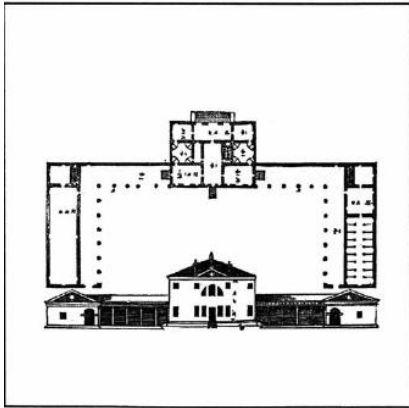


Fig. 2.3 Villa Zeno floor plan

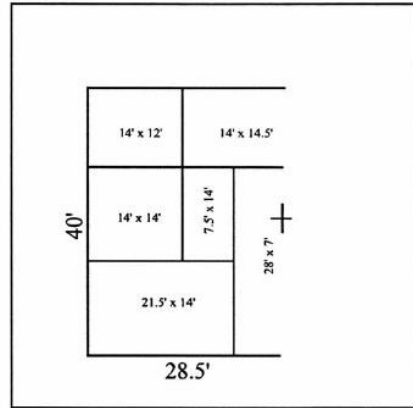


Fig. 2.4 Villa Zeno half plan diagram

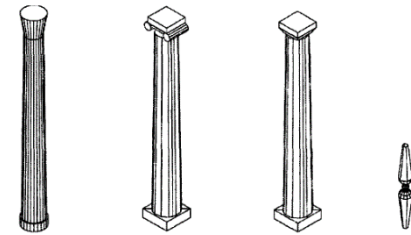
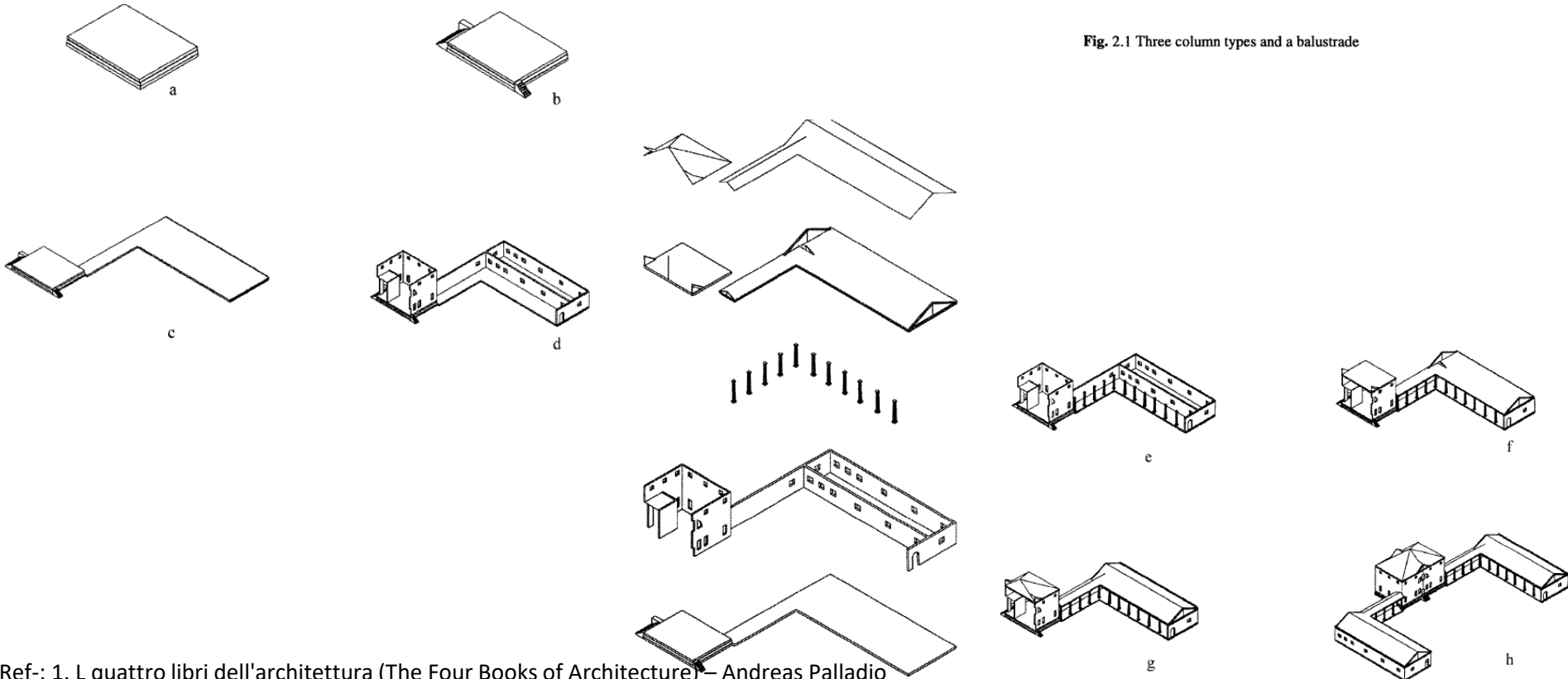


Fig. 2.1 Three column types and a balustrade



COMPONENTS OF A PALLADIO VILLA

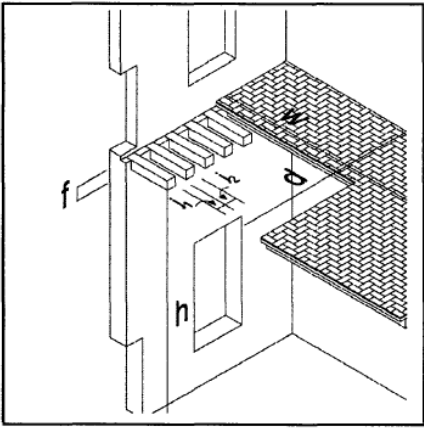


Fig. 4.7 Floor joist with brick flooring above

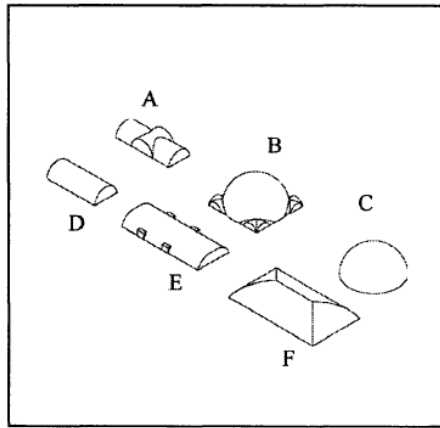


Fig. 4.8 Six vault types

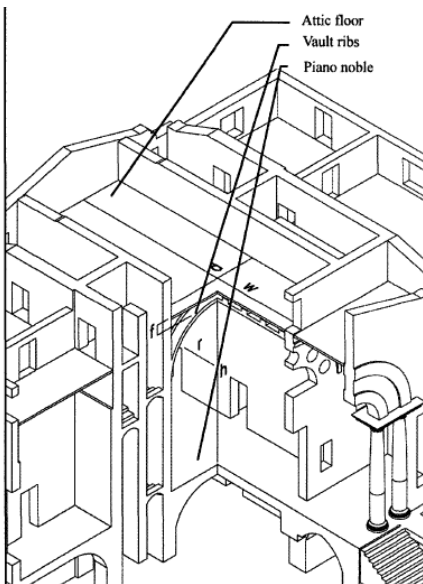
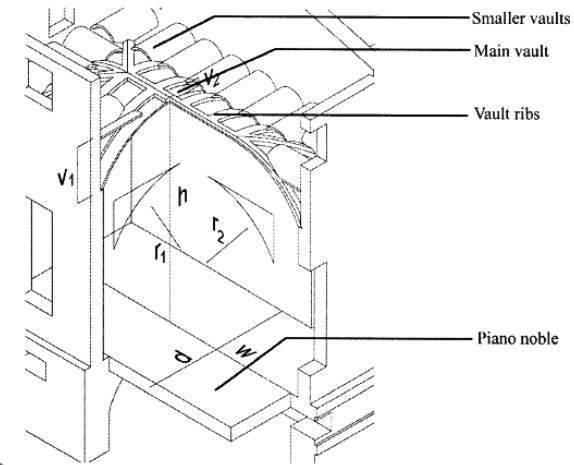
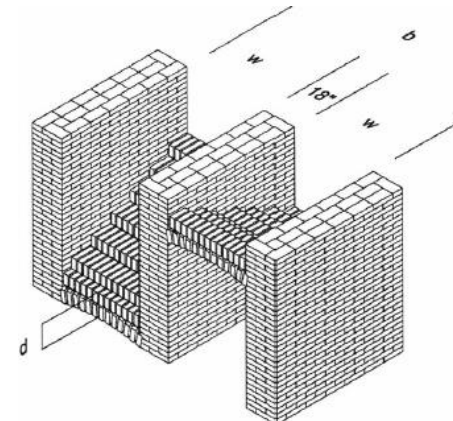
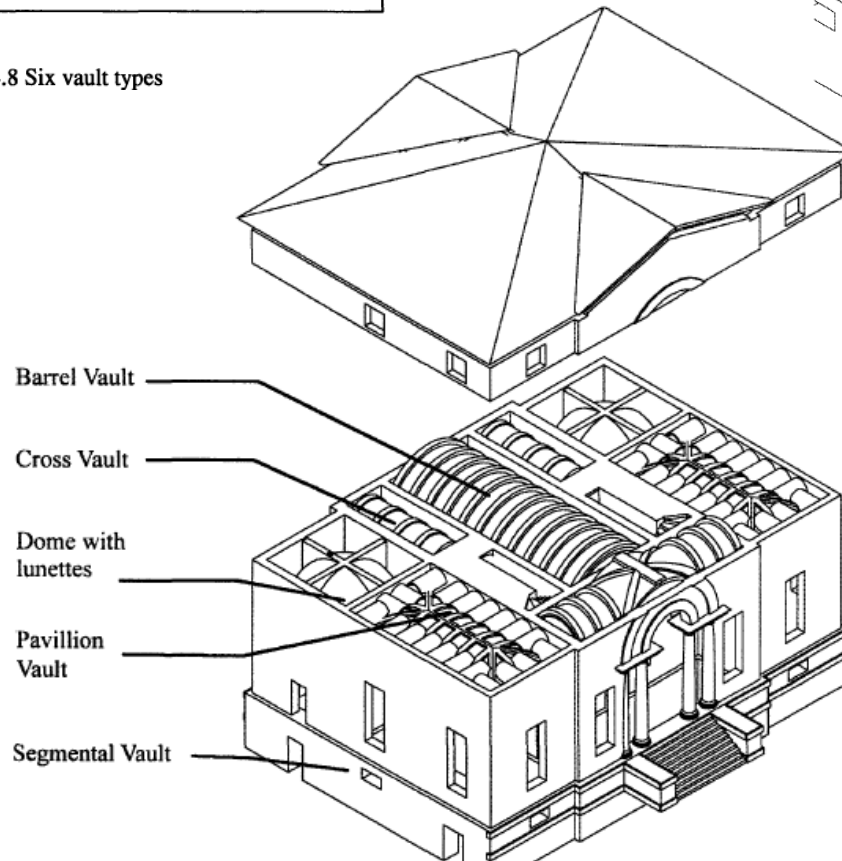
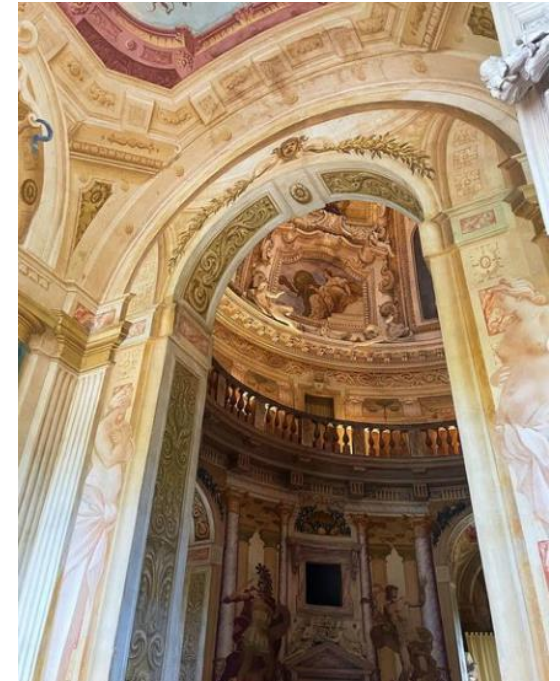
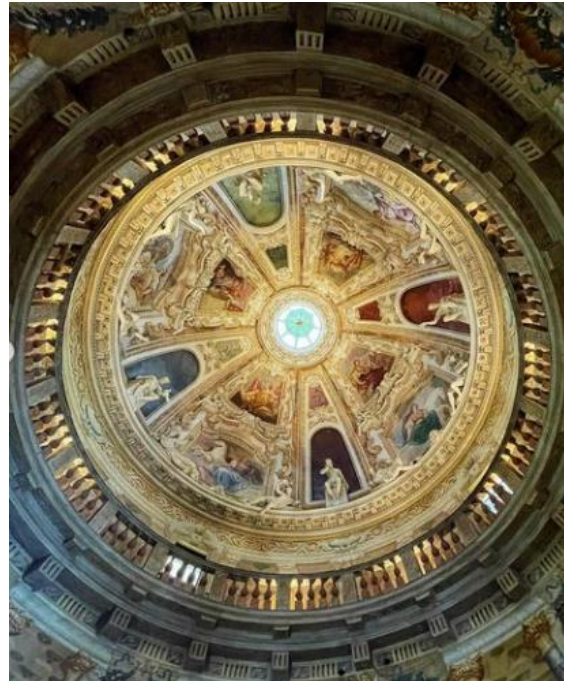


Fig. 4.15 Cross section of barrel vaulted central hall



Battista Franco and Giambattista Zelotti



Alessandro and Giovanni Battista Maganza and Anselmo Canera were commissioned to paint frescoes in the principal salons.