

# BASILICA SAN LORENZO

PROJECT 1: PART B  
PRECEDENT STUDY &  
ANALYSIS SKETCH  
JOURNAL.

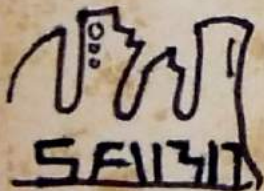
NAME : LIEN CHERNG GING.  
[0322613]



TAYLOR'S  
UNIVERSITY.

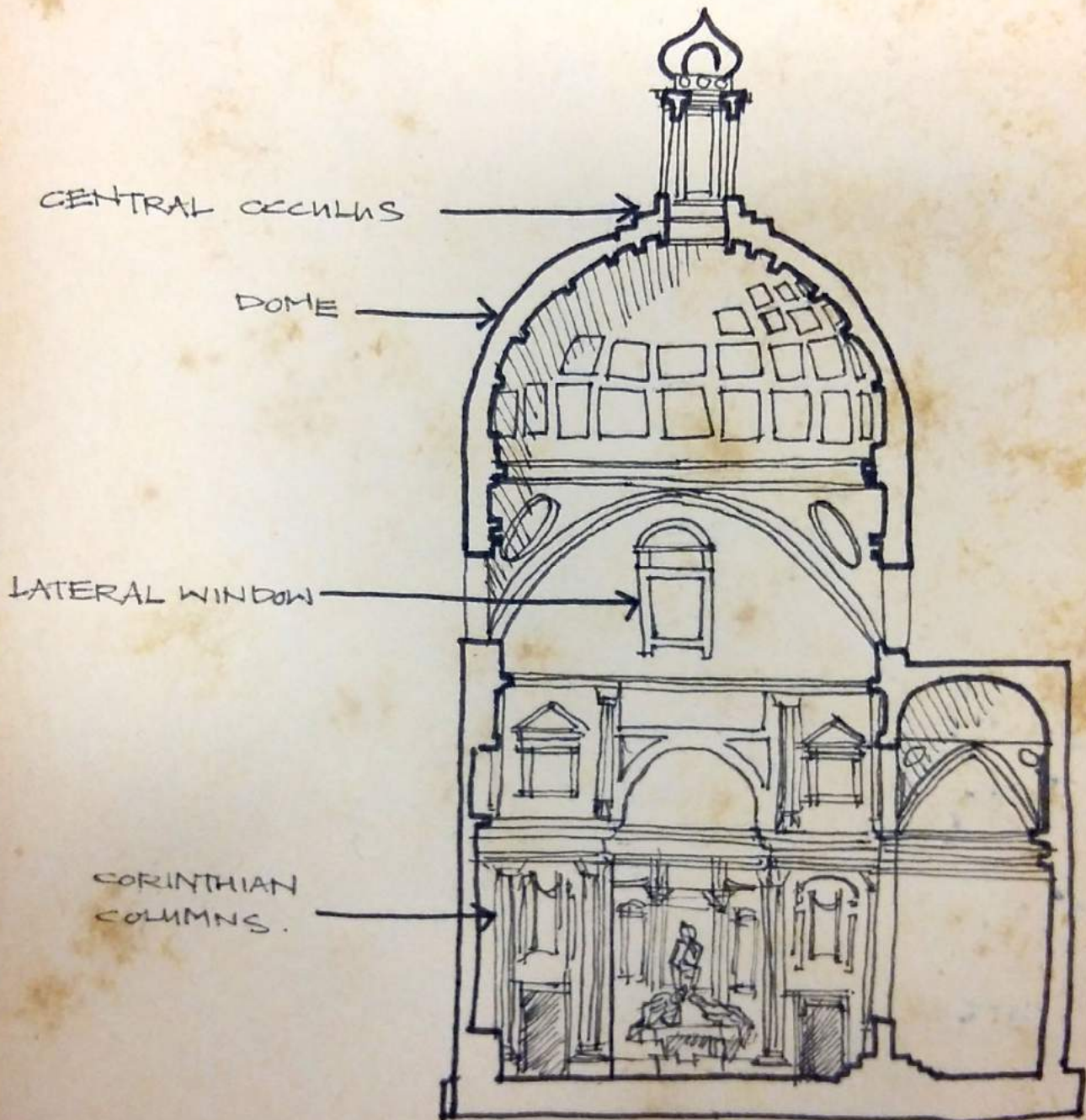


MODERN  
ARCHITECTURE  
STUDIES  
in Southeast Asia  
Research unit.



School of  
architecture,  
building &  
Design.

SECTION DRAWING  
OF  
BASILICA DI SAN LORENZO



THIS IS THE LAST PAGE.

# ARCHITECTURAL HISTORY TIMELINE



11,600 - 3,500 B.C.  
**PREHISTORIC**  
 Gobekli Tepe,  
 TURKEY.

3,100 B.C. - 2,000 B.C.  
**PREHISTORIC**  
 STONEHENGE, ENGLAND.

3,050 - 900 B.C.  
**ANCIENT EGYPT**  
 THE SPHINX & PYRAMID OF GIZA, EGYPT.



850 B.C. - 476 A.D.  
**CLASSICAL [GREECE]**  
 PARTHENON, GREECE

70 - 80 A.D.  
**CLASSICAL [ROMAN]**  
 FLAVIAN AMPHITHEATRE,  
 ROME, ITALY.

527 - 565 A.D.  
**BYZANTINE**  
 HAGIA SOPHIA,  
 ISTANBUL.

800 - 1200 A.D.  
**ROMANESQUE**  
 LEANING TOWER  
 OF PISA, ITALY.

1100 - 1450 A.D.  
**GOthic**  
 COLOGNE  
 CATHEDRAL,  
 GERMANY.



1400 - 1600 A.D.  
**RENAISSANCE**  
 SANTA MARIA DEL  
 FIORE, ITALY.

1600 - 1830 A.D.  
**BAROQUE**  
 ST. PETER'S  
 BASILICA,  
 VATICAN CITY.

1650 - 1790  
**ROCOCO**  
 OTTOBEUREN  
 ABBEY,  
 GERMANY.

1730 - 1925 A.D.  
**NEO CLASSICAL**  
 U.S. CAPITOL,  
 U.S.

1905 - 1930  
**NEO GOTHIC**  
 BIG BEN,  
 U.K.

1900 - NOW  
**MODERNIST.**  
 SYDNEY OPERA  
 HOUSE,  
 AUSTRALIA.

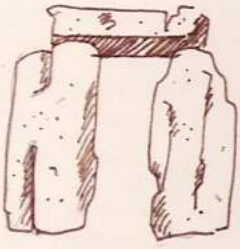
LEW CHENGT QING 0322613

# PREHISTORIC 11,600 - 2000 B.C. ARCHITECTURE.

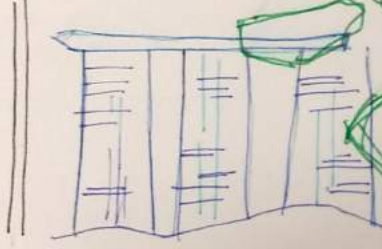
STONEHENGE COULD HAVE BEEN A BURIAL GROUND FROM ITS EARLIEST BEGINNINGS.

IT WAS CONSTRUCTED FROM 3000 B.C. TO 2000 B.C.

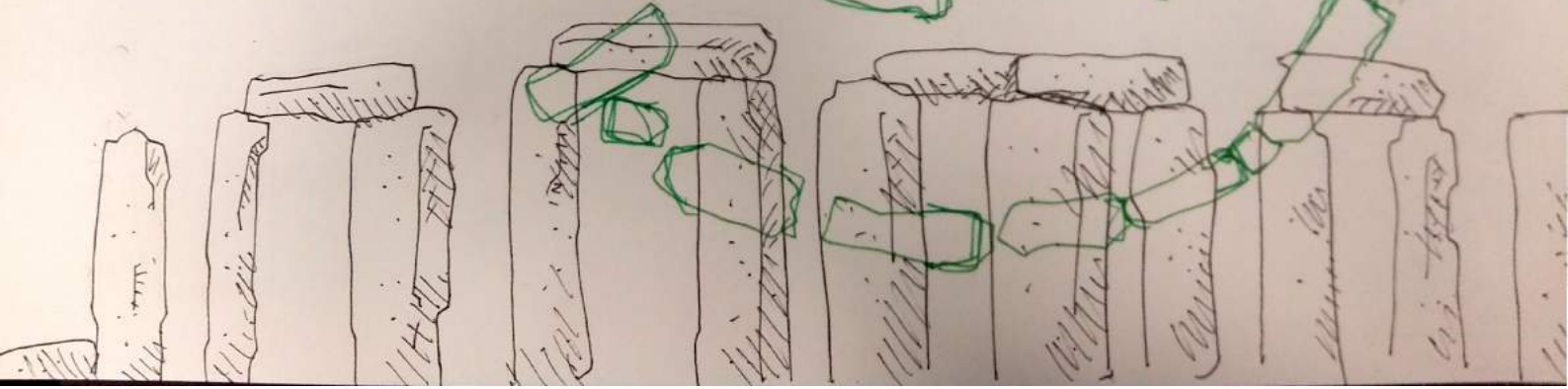
UNIQUE DESIGN INSPIRED DESIGN OF MODERN BUILDINGS.



STONEHENGE

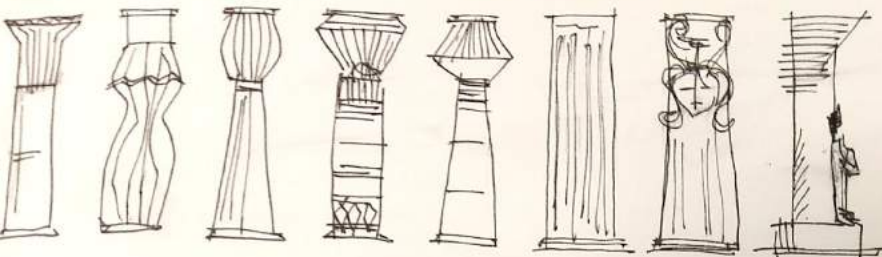


MARINA BAY SANDS RESORT.



# ANCIENT EGYPT

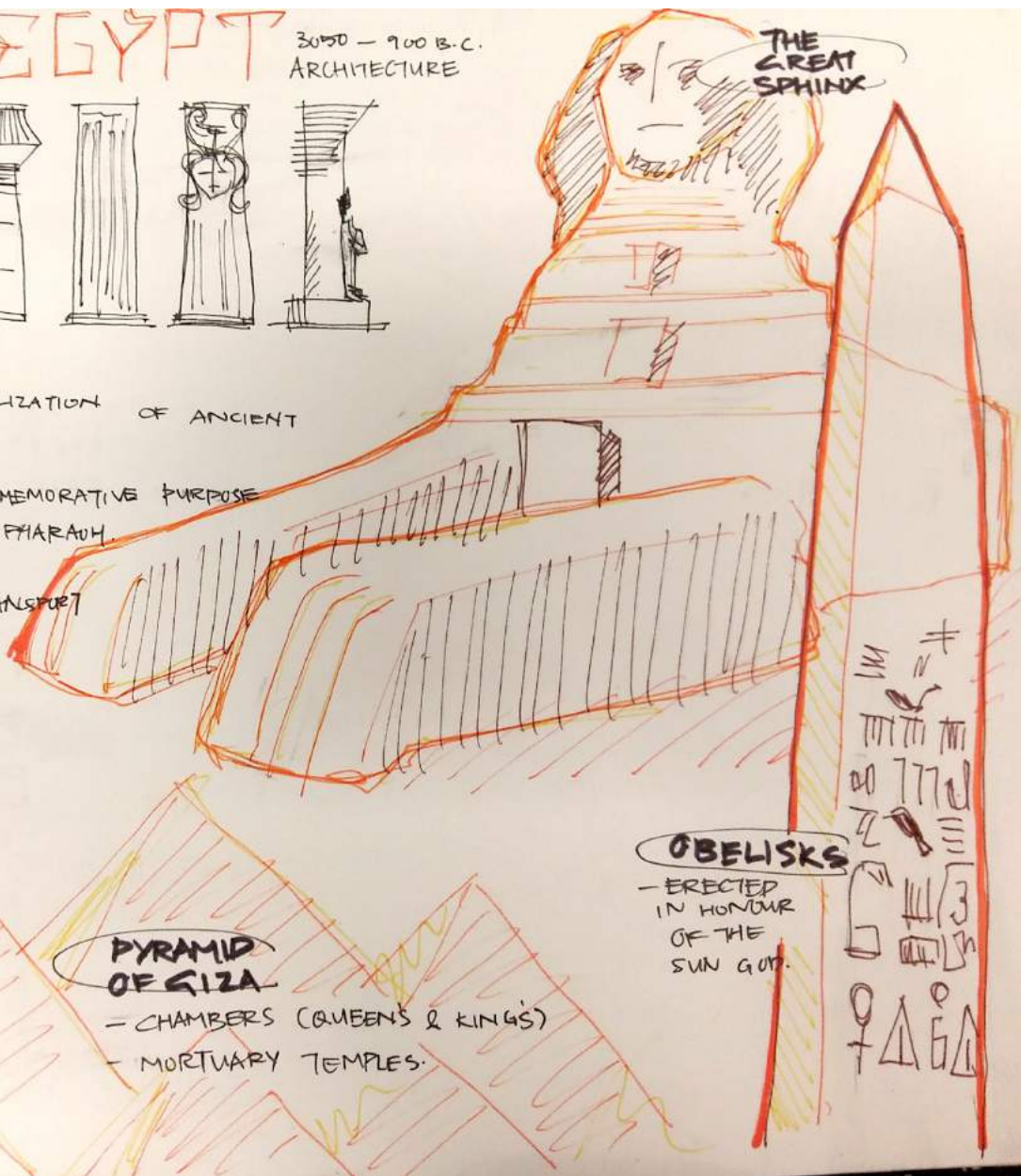
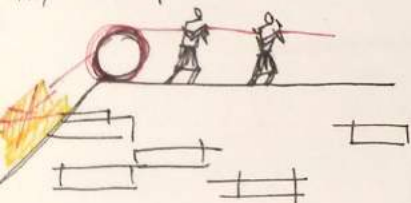
3050 - 900 B.C.  
ARCHITECTURE



ANCIENT EGYPT WAS A CIVILIZATION OF ANCIENT NORTHEASTERN AFRICA.

BUILDINGS WERE FUNDED BY COMMEMORATIVE PURPOSES WHICH REINFORCE POWER OF THE PHARAOH.

USING RAMPS & PULLEY TO TRANSPORT HEAVY OBJECT.



THE GREAT SPHINX

**OBELISKS**

- ERECTED IN HONOUR OF THE SUN GOD.

**PYRAMID OF GIZA**

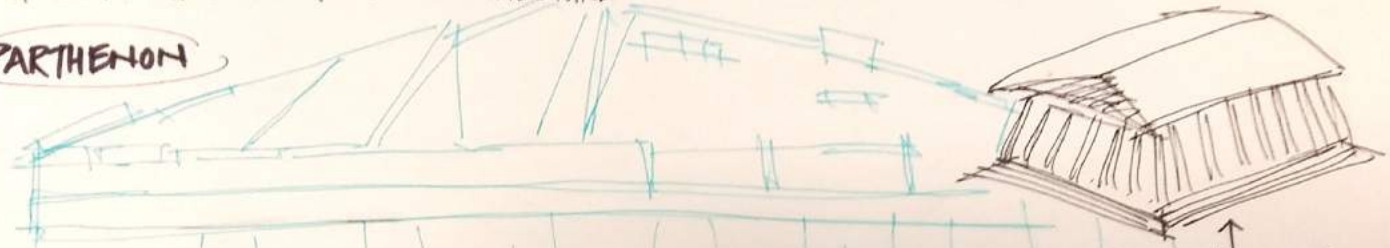
- CHAMBERS (QUEENS & KING'S)  
- MORTUARY TEMPLES.



# CLASSICAL

850 B.C. - 476 A.D.  
ARCHITECTURE

## PARTHENON



- CONSTRUCTED ACCORDING TO PRECISE RULES.
- USES ENTASIS, CALCULATED PERSPECTIVE.  
(COLUMN SPACING, SWELLED OUT COLUMN SHAFT)



## CLASSICAL ORDERS.

### GREECE

<b>DORIC</b> NO CARVINGS	<b>IONIC</b> SCROLL SHAPED ORNAMENTS	<b>CORINTHIAN</b> DECORATED WITH SCROLLS, LEAVES, FLOWERS.

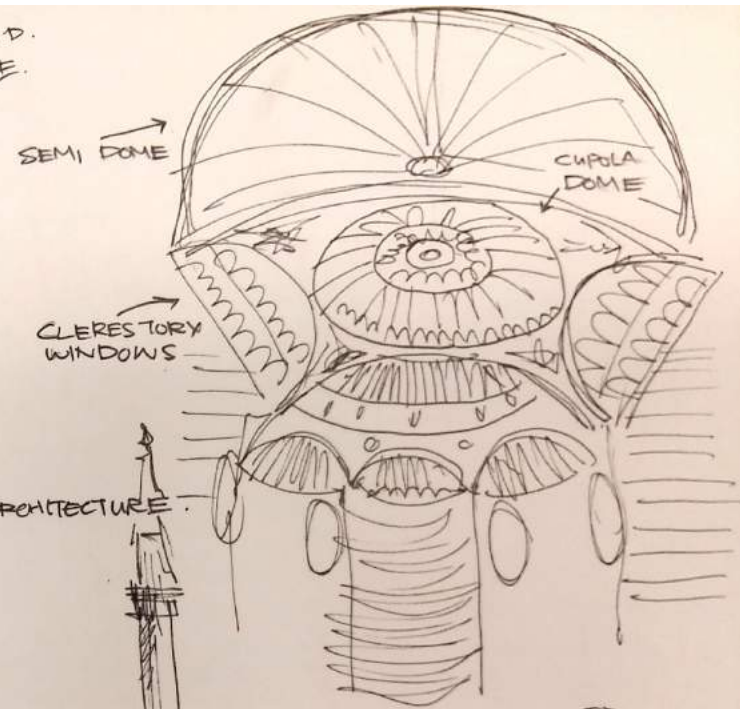
### ROMAN

<b>TUSCAN</b> SMOOTH NO ORNAMENTS	<b>COMPOSITE</b> COMBINATION OF IONIC & CORINTHIAN STYLE.

# BYZANTINE ARCHITECTURE. 527 - 569 A.D.

## HAGIA SOPHIA.

- \* CATHEDRAL → MOSQUE → MUSEUM.
- \* MOSAIC DECORATIONS.
- \* FUSION BETWEEN EASTERN & WESTERN ARCHITECTURE.



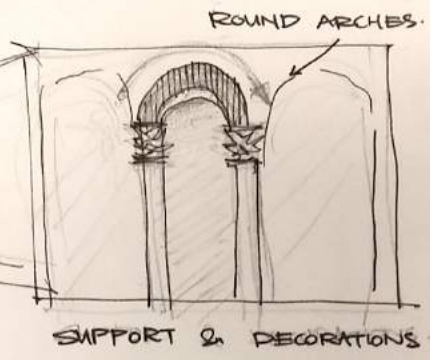
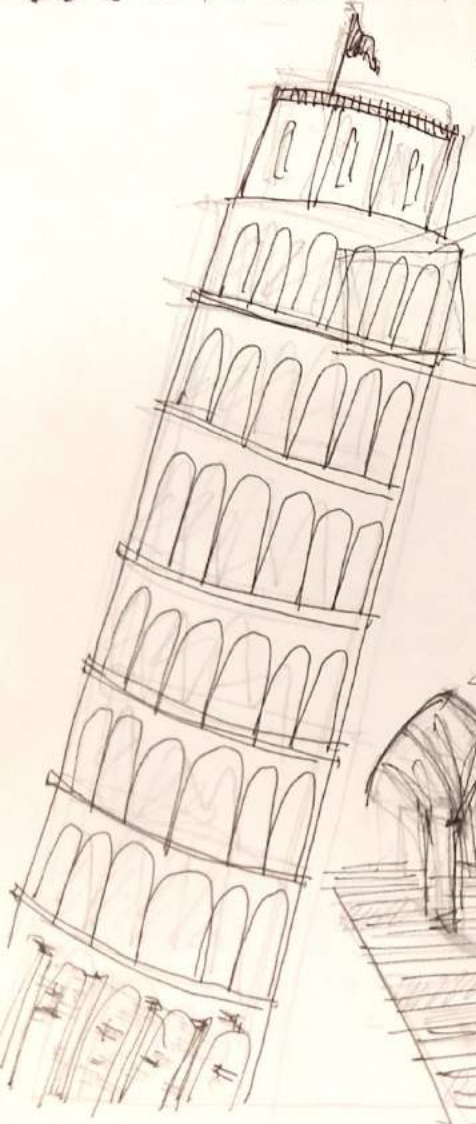
EPITOME OF BYZANTINE ARCHITECTURE.



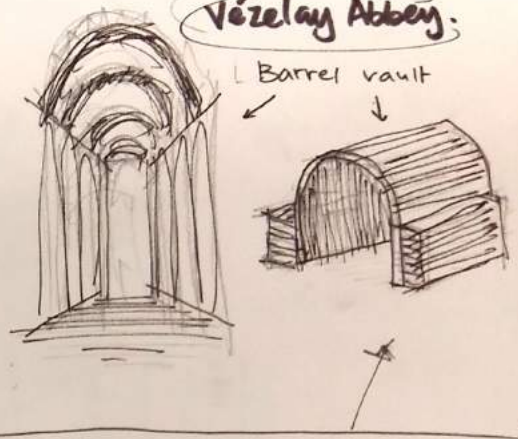
APSE MOSAIC OF THE VIRGIN AND CHILD

# ROMANESQUE ARCHITECTURE. 800-1200 A.D.

## LEANING TOWER OF PISA.



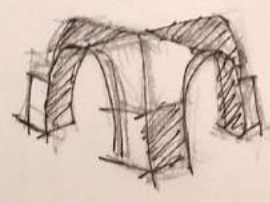
## Vézelay Abbey.



DESIGN & CONSTRUCTION EVOLVED FROM EARLY ROMAN & BYZANTINE.



## Clunney Abbey. GROIN VAULT





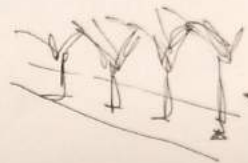
# Gothic

1100 - 1450 A.D.  
ARCHITECTURE.

- \* ADAPT EARLIER ROMANESQUE STYLE.
- \* POINTED ARCHES SUPPORTS MORE WEIGHT = HIGHER BUILDINGS.
- \* STAINED GLASS & WINDOWS.



WATER SPOUTS

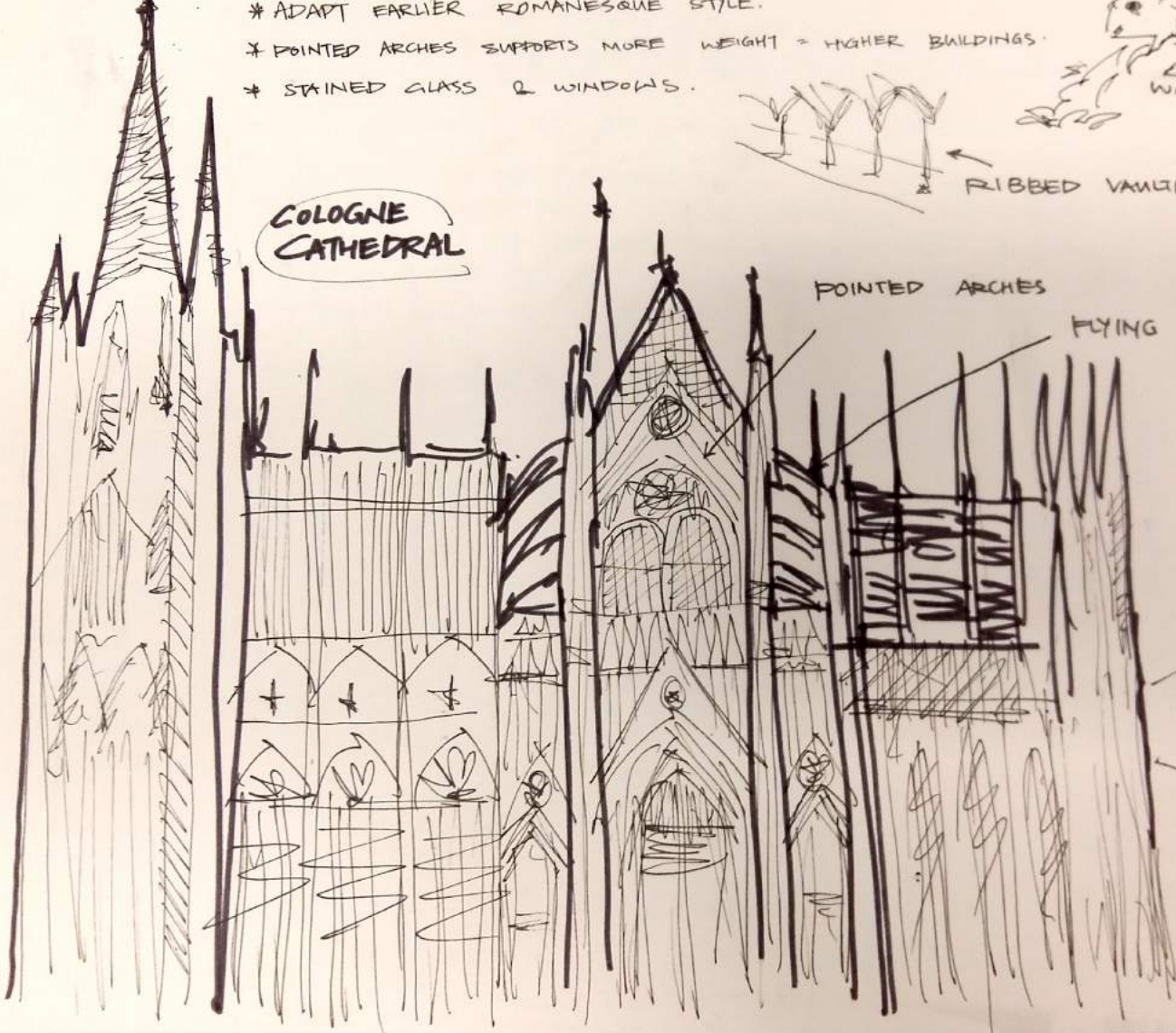


RIBBED VAULTING.

COLOGNE  
CATHEDRAL

POINTED ARCHES

FLYING BUTTRESSES.



GARGOYLES

# Renaissance

1400-1600 A.D.  
ARCHITECTURE

- MOST EVIDENT IN FRANCE & ITALY.
- CONSCIOUS REVIVAL OF ANCIENT GREEK & ROMAN ARCHITECTURE ELEMENTS.
- THE USES OF BUTTRESSES WAS FORBIDDEN IN FLORENCE (STYLE FAVORED BY ENEMY)
- HIGHLY SYMMETRICAL & CAREFULLY PROPORTIONED FEATURES.
- ARCHES, DOMES, CLASSICAL COLUMNS & PILASTERS STRUCTURES.



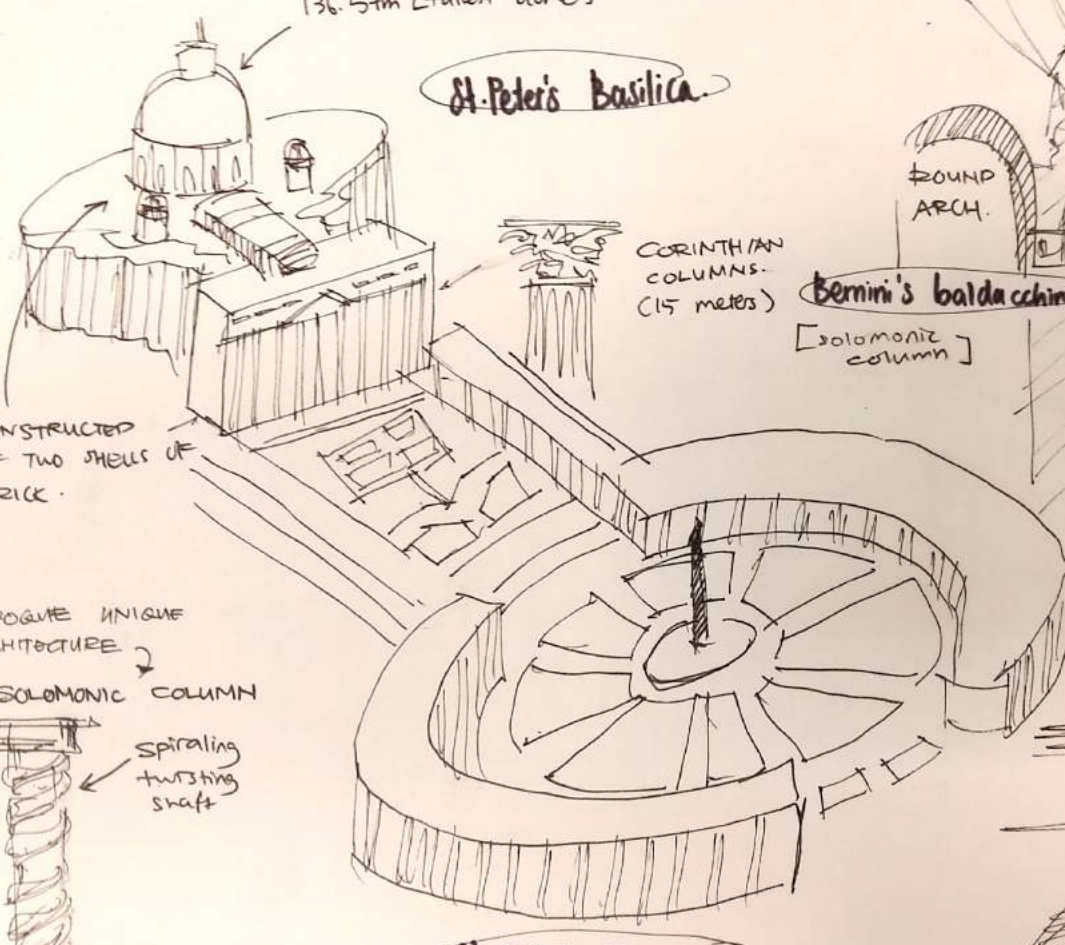
# BAROQUE

1600-1830 A.D.  
ARCHITECTURE.

136.57m [tallest dome]

St. Peter's Basilica.

BARREL VAULT.



ROUND ARCH.

Bernini's baldacchino

[solomonic column]

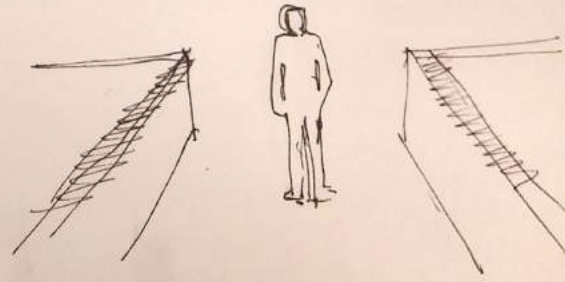
CONSTRUCTED OF TWO SHELLS OF BRICK.

BAROQUE UNIQUE ARCHITECTURE

SOLOMONIC COLUMN

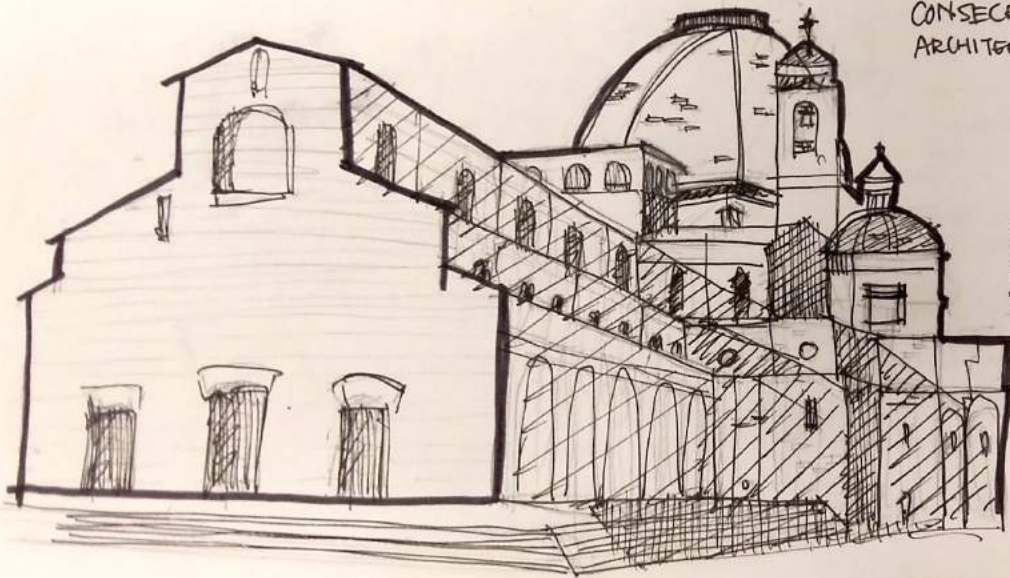
spiral twisting shaft

St. Peter's Piazza.



# Basilica San Lorenzo

RENAISSANCE ARCHITECTURE.



LOCATION : FLORENCE, ITALY.  
CONSECRATED : 1422-1470  
ARCHITECTS : FILIPPO BRUNELLESCHI  
ANTONIO MANETTI  
MICHELOZZO.

ARCHITECTURAL TYPE : CHURCH.  
AFFILIATION : ROMAN CATHOLIC

MATERIALS:

- \* SANDSTONE (EXTERIOR)
- \* PIETRA SERENA (INTERIOR)
- \* ANDALUSIA ESCORZA MARBLES.
- \* GOLD (DECORATIONS)
- \* BRONZE (PULPITS)
- \* MARBLE (PILARS)
- \* COARSE TERRACOTTA BRICKS. (FACAD)

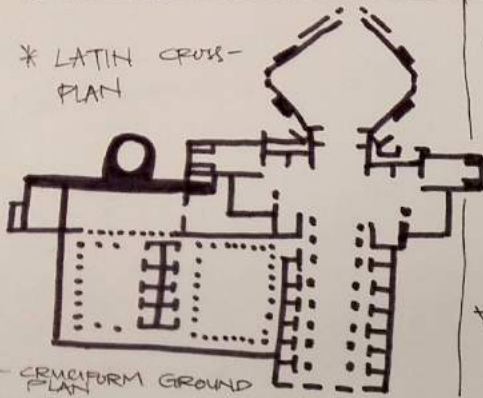
## STRUCTURE & DESIGN

- CRUCIFORM GROUND PLAN
- AUSTERE GEOMETRIC STYLE
- REVIVAL OF CLASSICAL STYLE
- SPATIALLY LONGITUDINAL.

FUNCTIONS : CHURCH OF MEDICI FAMILY.  
BURIAL PLACE OF FAMILY MEMBER  
TOURISM SPOT (PRESENT)

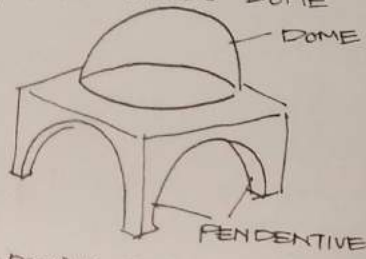
# ARCHITECTURAL ELEMENTS

\* LATIN CROSS-PLAN



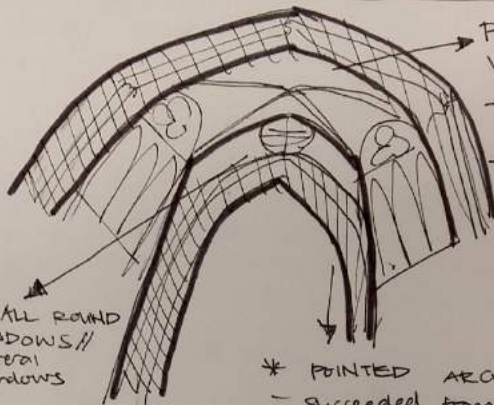
- CRUCIFORM GROUND PLAN  
- LONG NAVE CROSSED BY TRANSEPT.

\* PENDENTIVES DOME



- receives greater weight of dome

\* PROPORTIONAL RELATIONSHIPS BETWEEN NAVE & AISLE.



PARACHUTE VAULTS.

- no lateral pressure.  
- located on cover of aisles.

\* SMALL ROUND WINDOWS // Lateral windows

to bring in natural lights into renaissance paintings.

\* POINTED ARCHES.

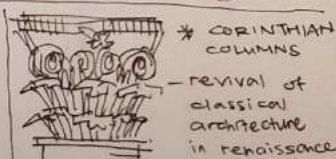
- succeeded from Gothic architecture  
- Channels weight onto columns at steep angle

STRAIGHT LINES, PLANES, FLAT CEILING, GEOMETRIC SHAPES

- emphasize linear perspectives.

\* Dominance of MATHEMATICAL PROPORTION

- (centre aisle : aisle : chapel depth = 4 : 2 : 1)  
- generates perspective layout



\* CORINTHIAN COLUMNS  
- revival of classical architecture in renaissance period

- rich and festive atmosphere.

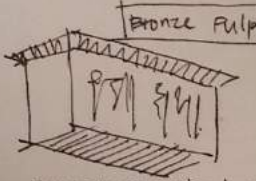


MICHELANGELO'S DAWN & DUSK

- dedicated to central members of Medici family

ROUND ARCH  
- succeeded from Roman architecture.

- eliminates tensile stress and resolving forces into compressive stresses.



- sculptures introduce new renaissance form early in 15th century.

# COMPARATIVE ANALYSIS

	COLOGNE CATHEDRAL	BASILICA SAN LORENZO	ST. Peter's BASILICA
	<b>Gothic</b>	<b>Renaissance</b>	<b>Baroque</b>
<b>KEY-FEATURE</b>	GRAND, DETAILED, VERTICALITY	SYMMETRICAL, PROPORTIONAL, CLASSICISM, AUSTERE.	GRAND, EMOTIONAL, ORNAMENTED
<b>FORM SHAPE</b>	TALL, CRUCIFORM PLAN	LONGITUDINAL, CRUCIFORM PLAN	HEAVY FORM, LESS LONGITUDINAL
<b>SUPPORT</b>	<p>FLYING BUTTRESS. - TAKES WEIGHT OFF THE BASE OF TOWER.</p>	<p>REVIVAL OF CLASSICAL ARCHITECTURE.</p>	<p>- USED IN ALTARS, FURNITURE, AS GIFTS. - ORNAMENTAL. SOLOMONIC COLUMN CREVICE</p>
<b>WINDOW</b>	<p>ROSE WINDOW STAINED GLASS.</p>	<p>CENTRAL OCVLLUS. LATERAL WINDOWS.</p>	<p>TRIANGULAR PEDIMENT SEGMENTAL PEDIMENT</p>