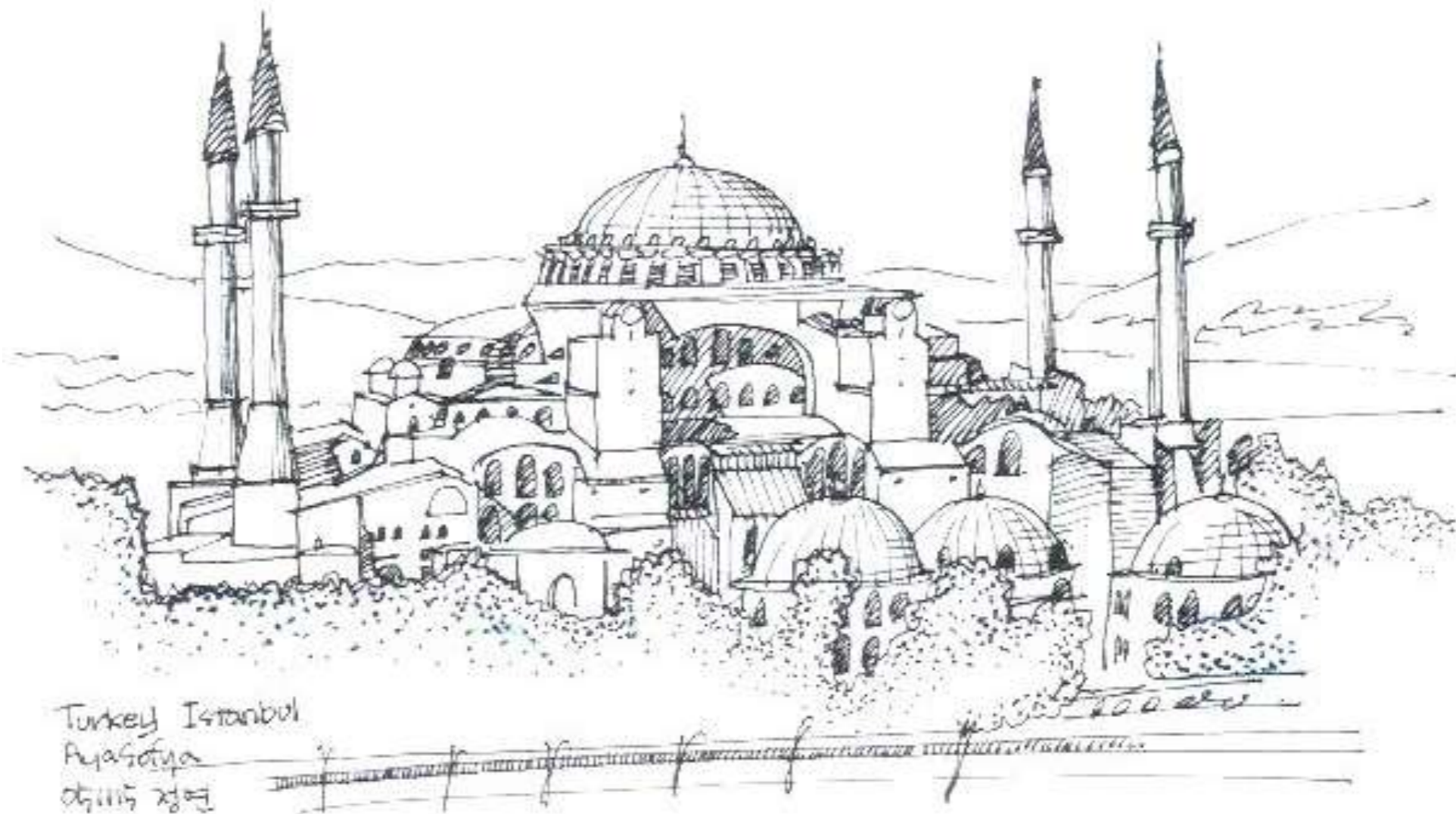


History of Architecture

# Byzantine Architecture



# Geography



# History

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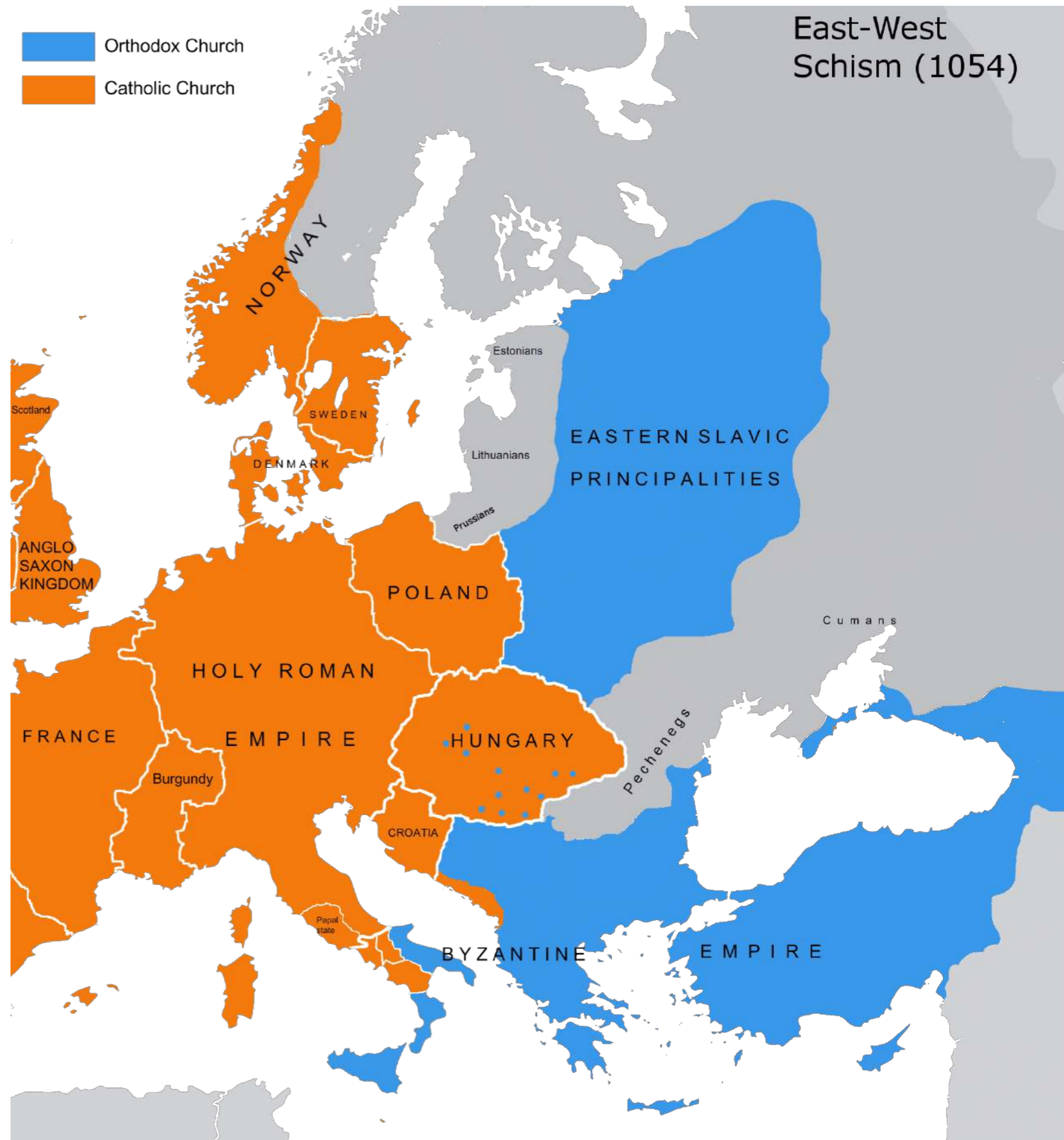
- **Constantinople** was the capital of the Roman empire between **330–395 AD**, then the capital of the **Byzantine empire** between **395–1453**
- **State and church administration merged**
- New form of the Roman Empire in the east emerged during **Justinian era**

## Early Byzantium Emperors

Constantine I the Great	324–337 A.D.
Constantios (Constantius) II	337–361 A.D.
Julian	361–363 A.D.
Jovian	363–364 A.D.
Valens	364–378 A.D.
Theodosios (Theodosius) I	379–395 A.D.
Arkadios (Arcadius)	395–408 A.D.
Theodosios (Theodosius) II	408–450 A.D.
Marcian	450–457 A.D.
Leo I	457–474 A.D.
Leo II	474 A.D.
Zeno	474–475 A.D.
Basiliscos (Basiliscus)	475–476 A.D.
Zeno ( <i>again</i> )	476–491 A.D.
Anastasios (Anastasius) I	491–518 A.D.
Justin I	518–527
Justinian I the Great	527–565

# History

The schism of the Christianity to **Orthodox (east)** and **Catholic (west)** became evident from Justinian era



# History



The Byzantine Empire (The eastern Roman Empire) **flourished during the 5th century AD** and continued to exist for an additional thousand years until it fell to the **Ottoman Turks in 1453**.

# Religion

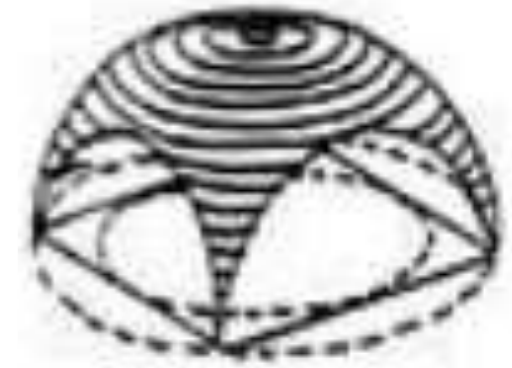
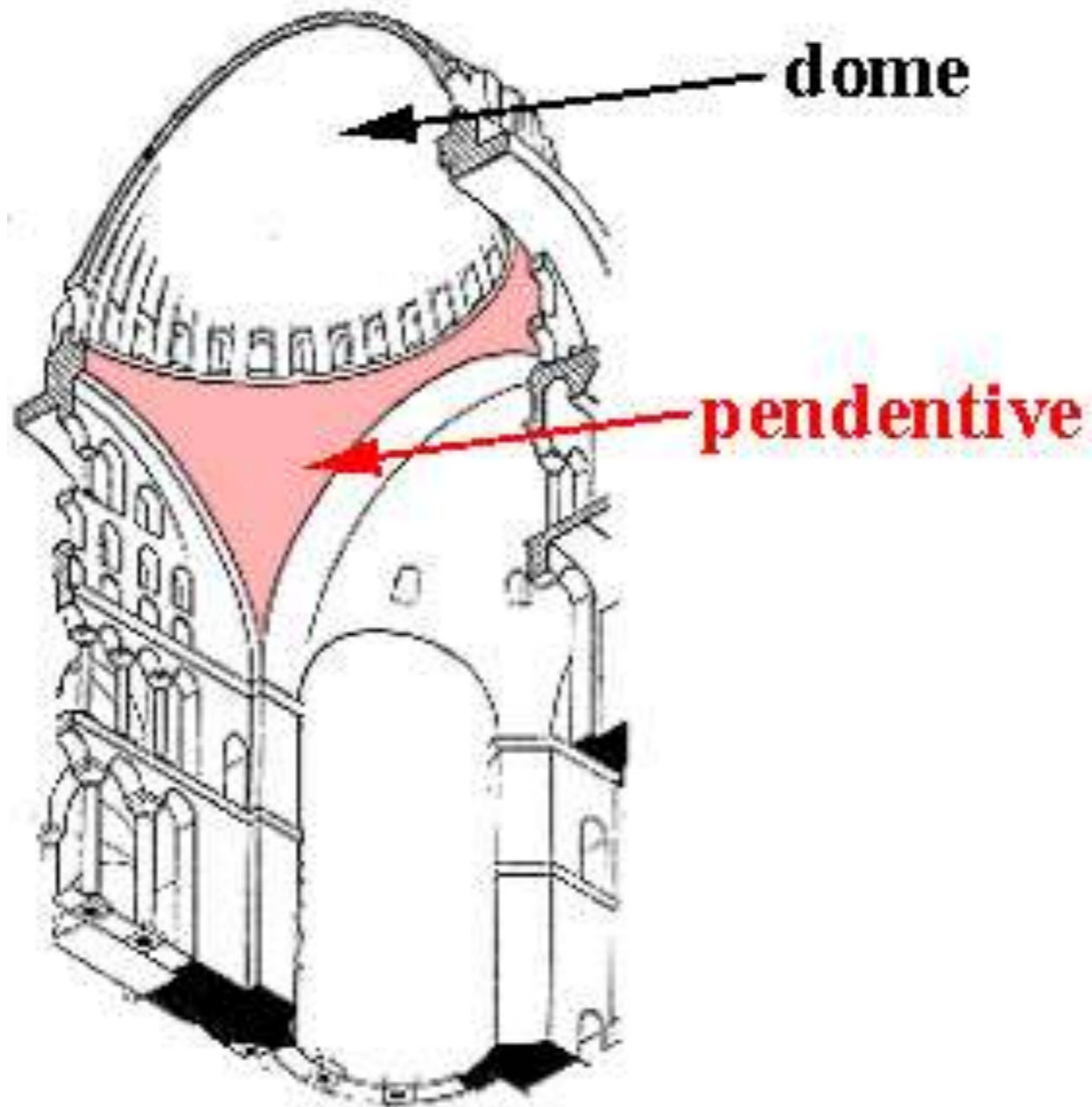
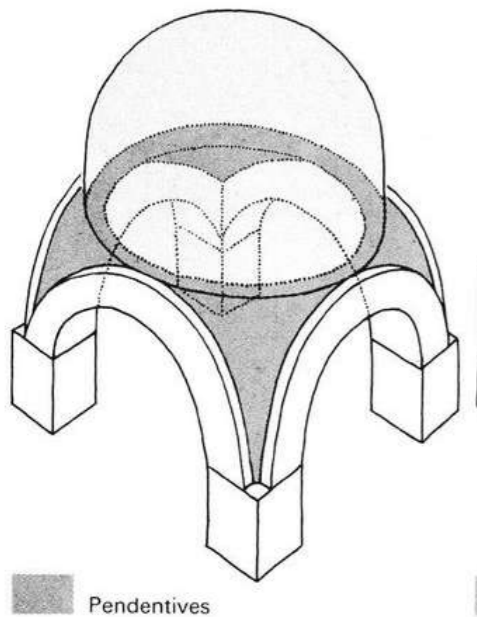
- The Church is viewed as a **house of god** and its design and construction as a **reflection of this symbolism**
- The **scale** of the church was **increased** and its **decoration** became more complex
- Contrast between the emphasis in Early Christian architecture on function and rituals, and in Byzantine architecture on **symbolism**



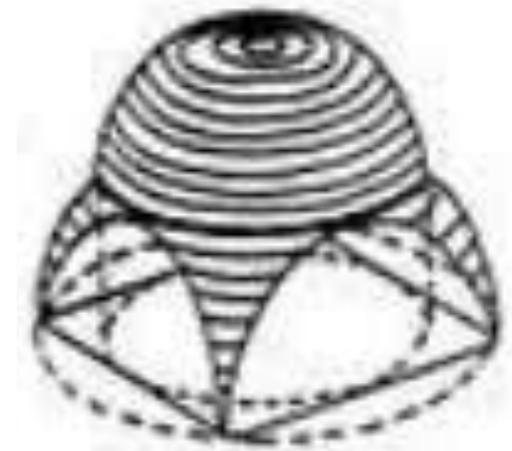
Architecture Character

# Byzantine Church characters

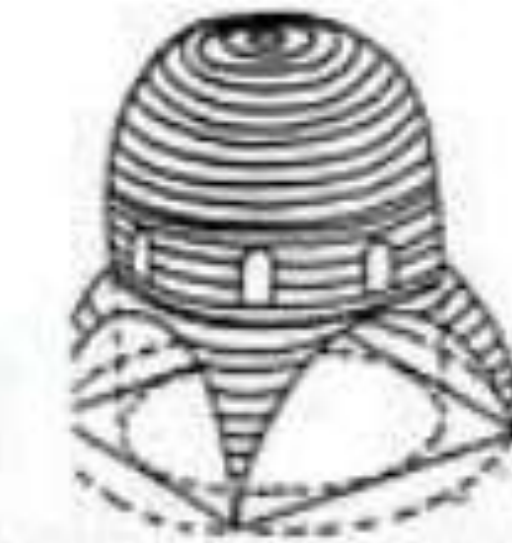
The use of **domed roofs**; usually supported on **pendentives**



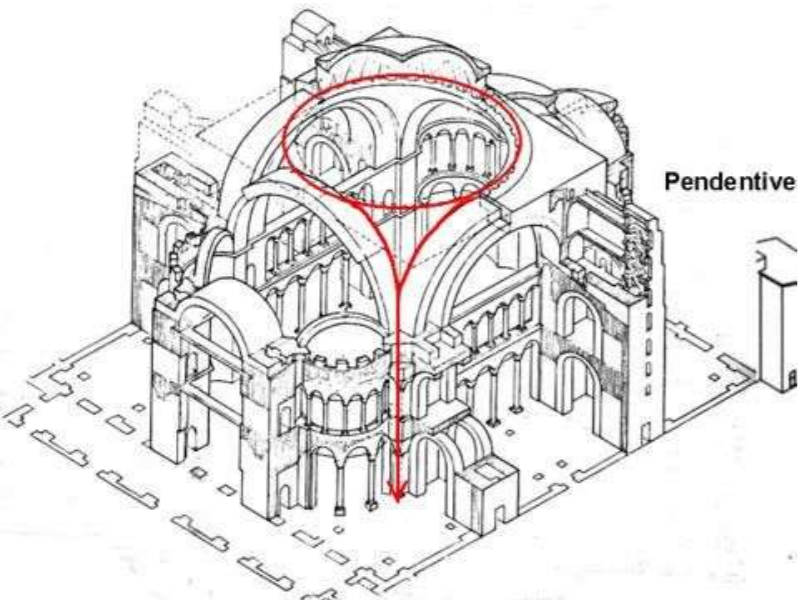
Pendentive dome



Dome with pendentive



Dome with drum on pendentive





# Byzantine Church characters



## Byzantine Church characters:

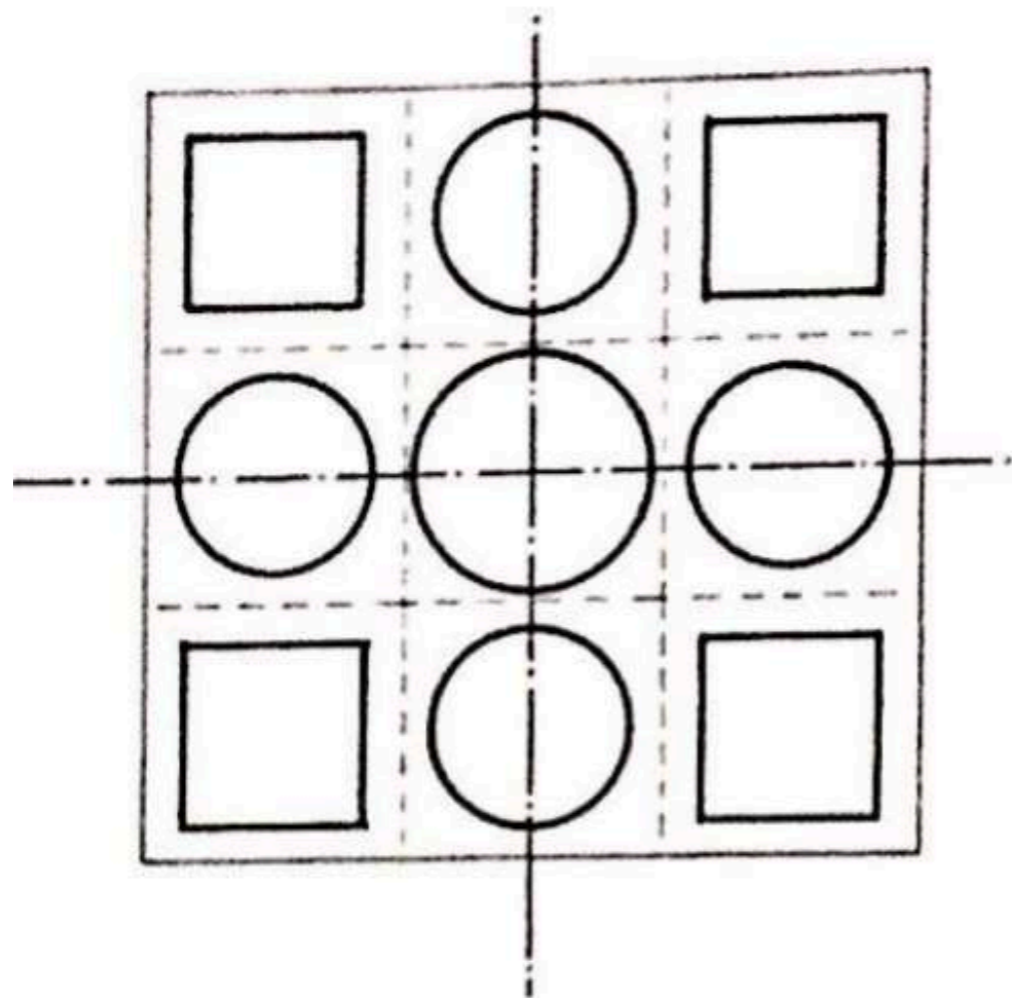
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The use of **brick** and **plaster** with **stone** in walls, with **minimal decorations from outside reflecting the interior orientation of Christianity**

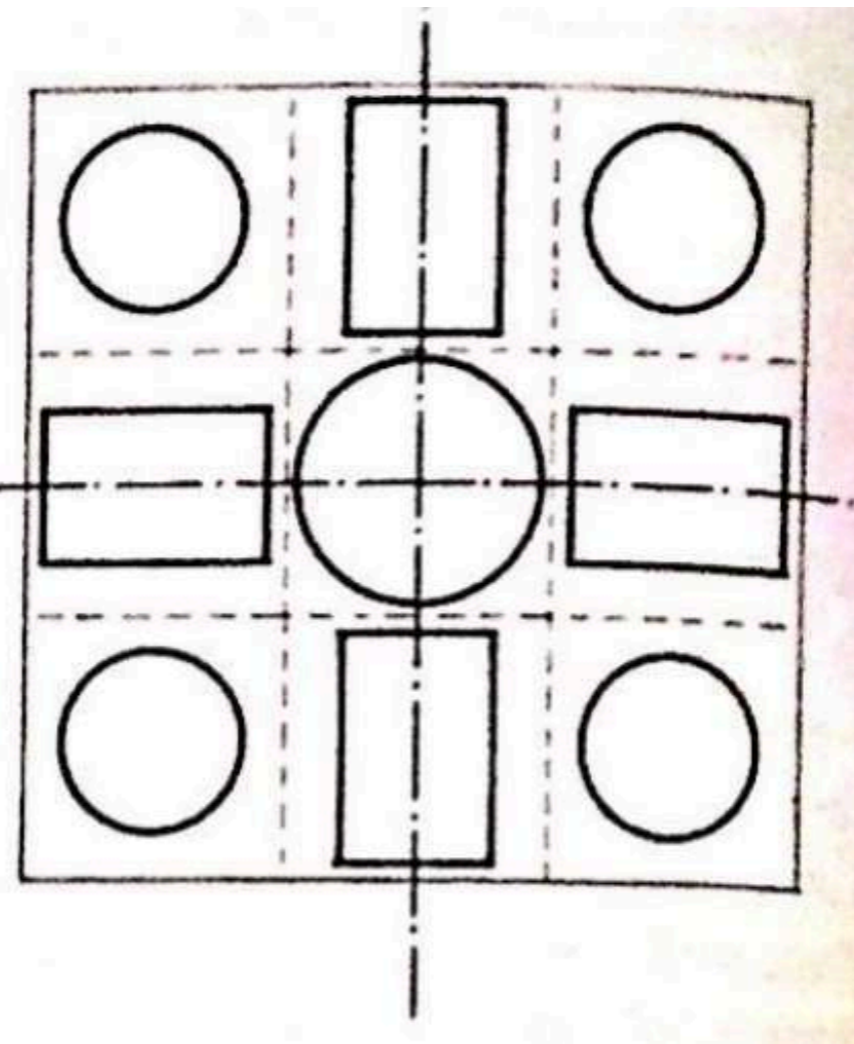


# Byzantine Church characters

- The use of **centralized church plan**
- Numerous plan variations in which large **square** were divided into **nine components** squares with **dome at the centre** and the corners or at the centre and on the cross axes

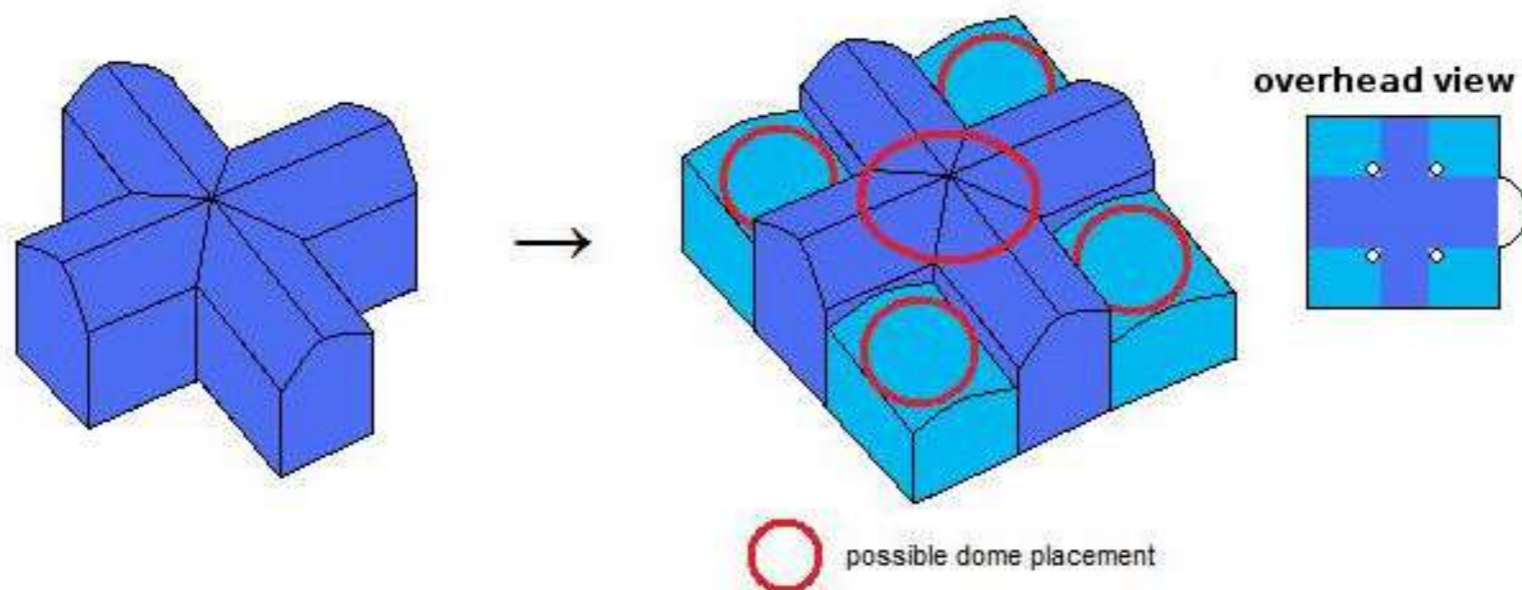
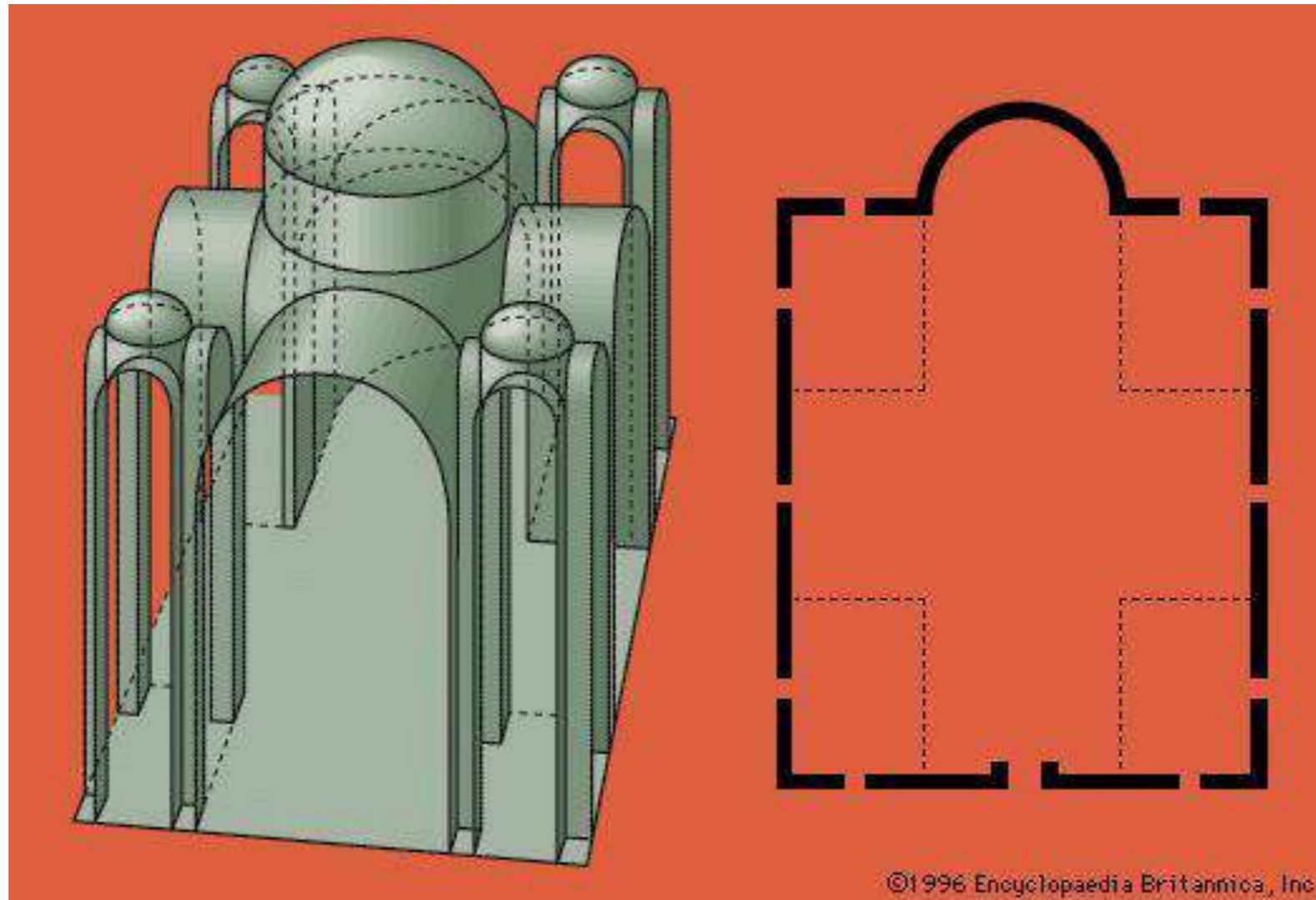


Domed Cross



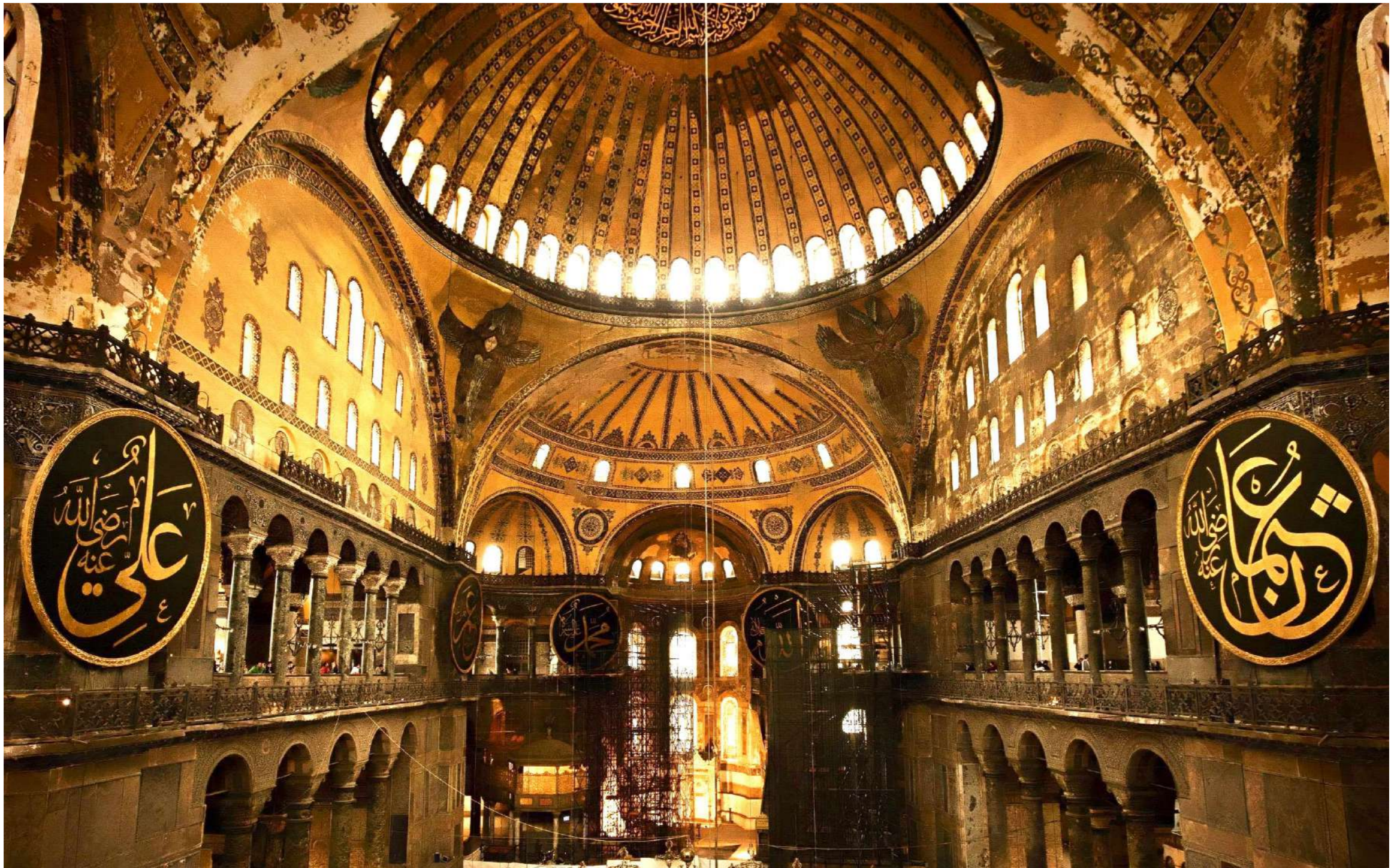
Cross in square

# Byzantine Church characters:



## Byzantine Church characters:

Complex program of **interior structure**, **lighting** and **decorations** to create **fascinating interiors**



## Byzantine Church characters:

The use of **mosaics** in the interior



# Byzantine Church characters

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The Byzantine style merged between east and west motifs

## **From the East it borrowed:**

- The color and luxury
- The central plan
- Symbolic decoration full of geometric patterns
- An appeal to the emotion

## **From Roman and Greek it adopted:**

- The basilica layout
- Columns
- Vaulting techniques
- Arches

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Early Church

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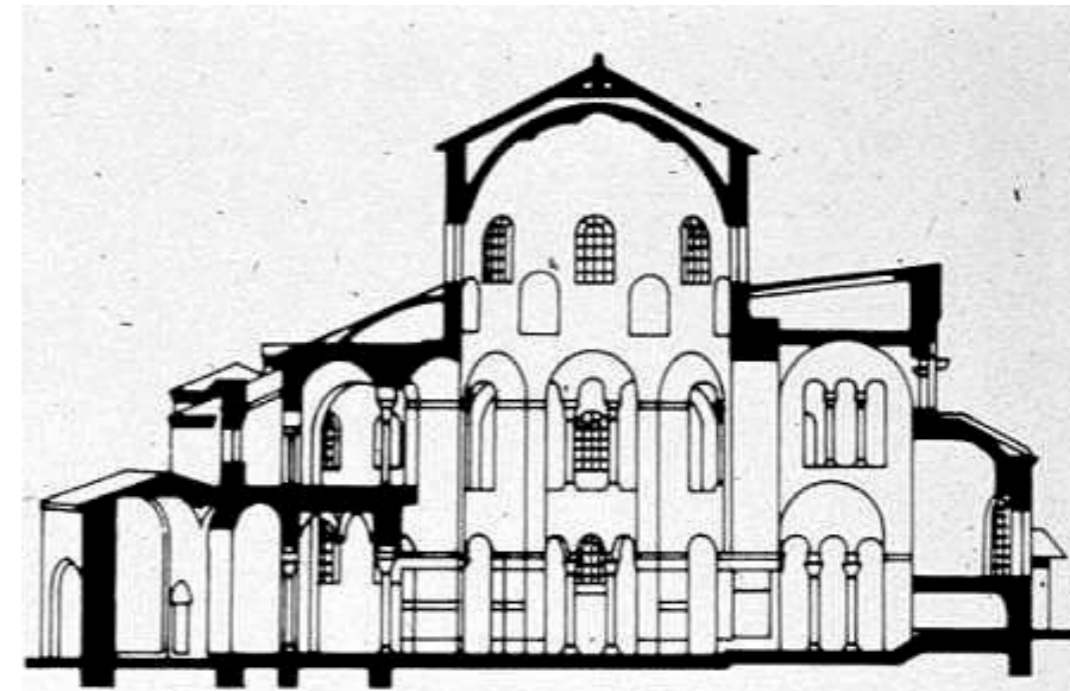
**San Vitale, Ravenna, Italy (534-548)**

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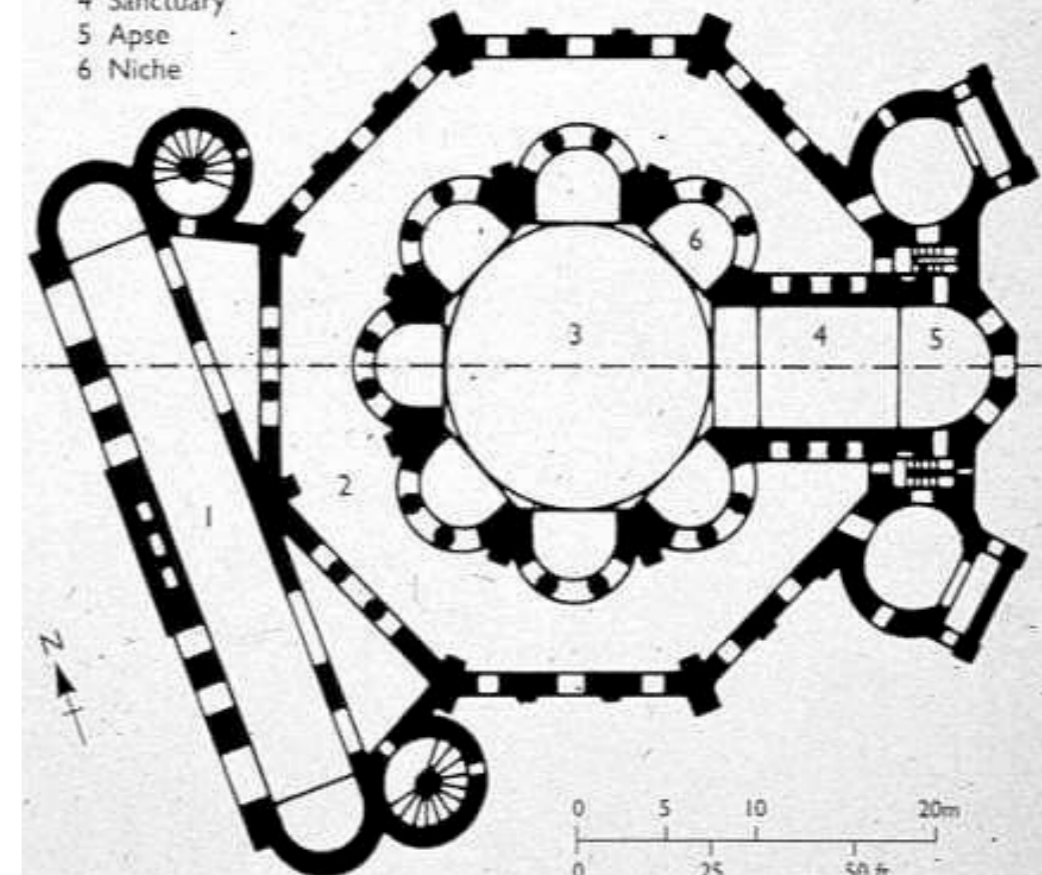


# San Vitale, Ravenna, Italy (534-548)

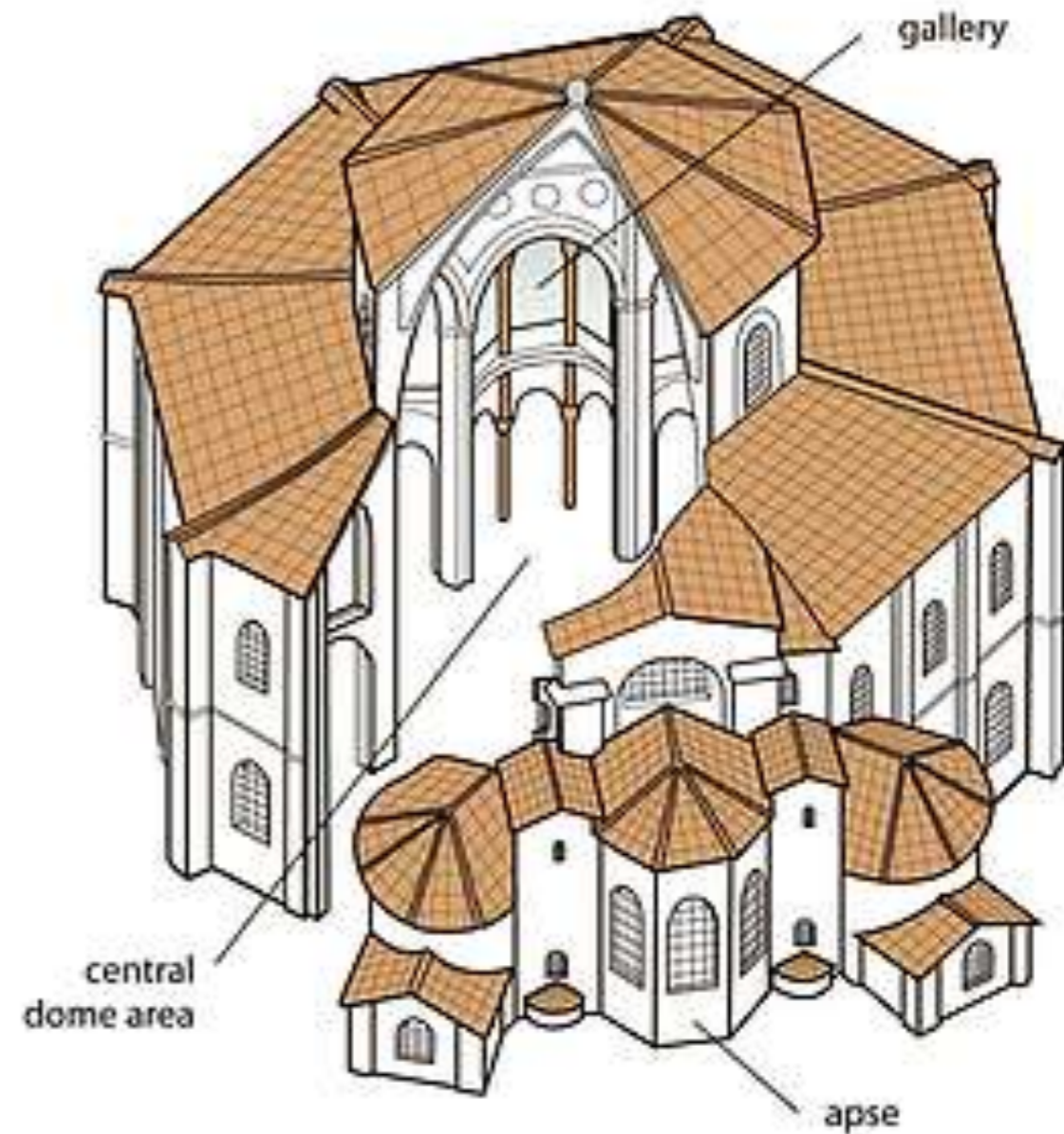
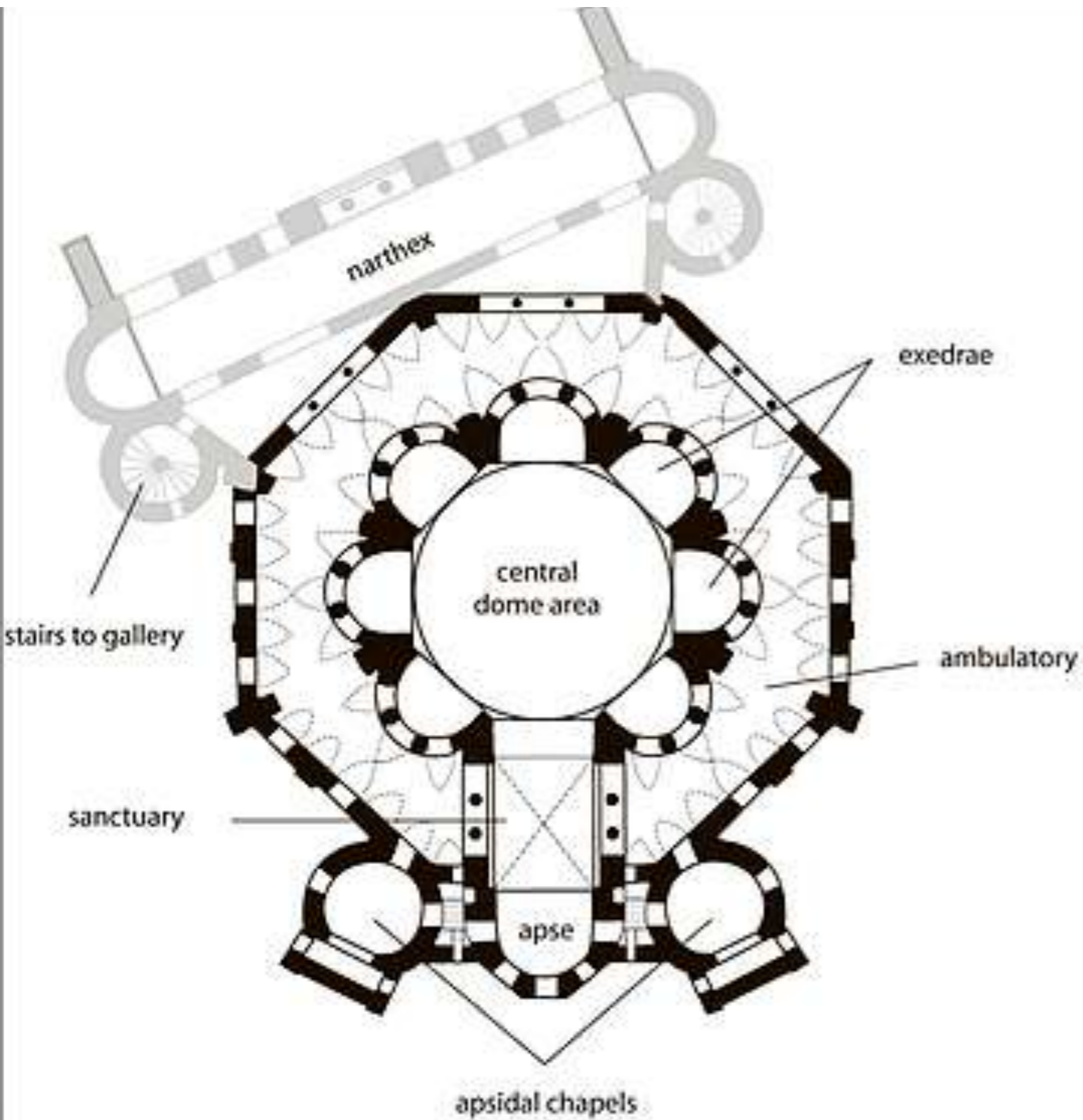
- Built during **Justinian time**
- Has **double shell** of two octagons with an adjacent atrium
- The opening of the inter octagons push out in **arcaded niches**
- Over the centre there is a **dome** with **clerestory windows**
- Material used are **marble**, **stucco** and **mosaic**



- 1 Narthex
- 2 Ambulatory
- 3 Nave
- 4 Sanctuary
- 5 Apse
- 6 Niche

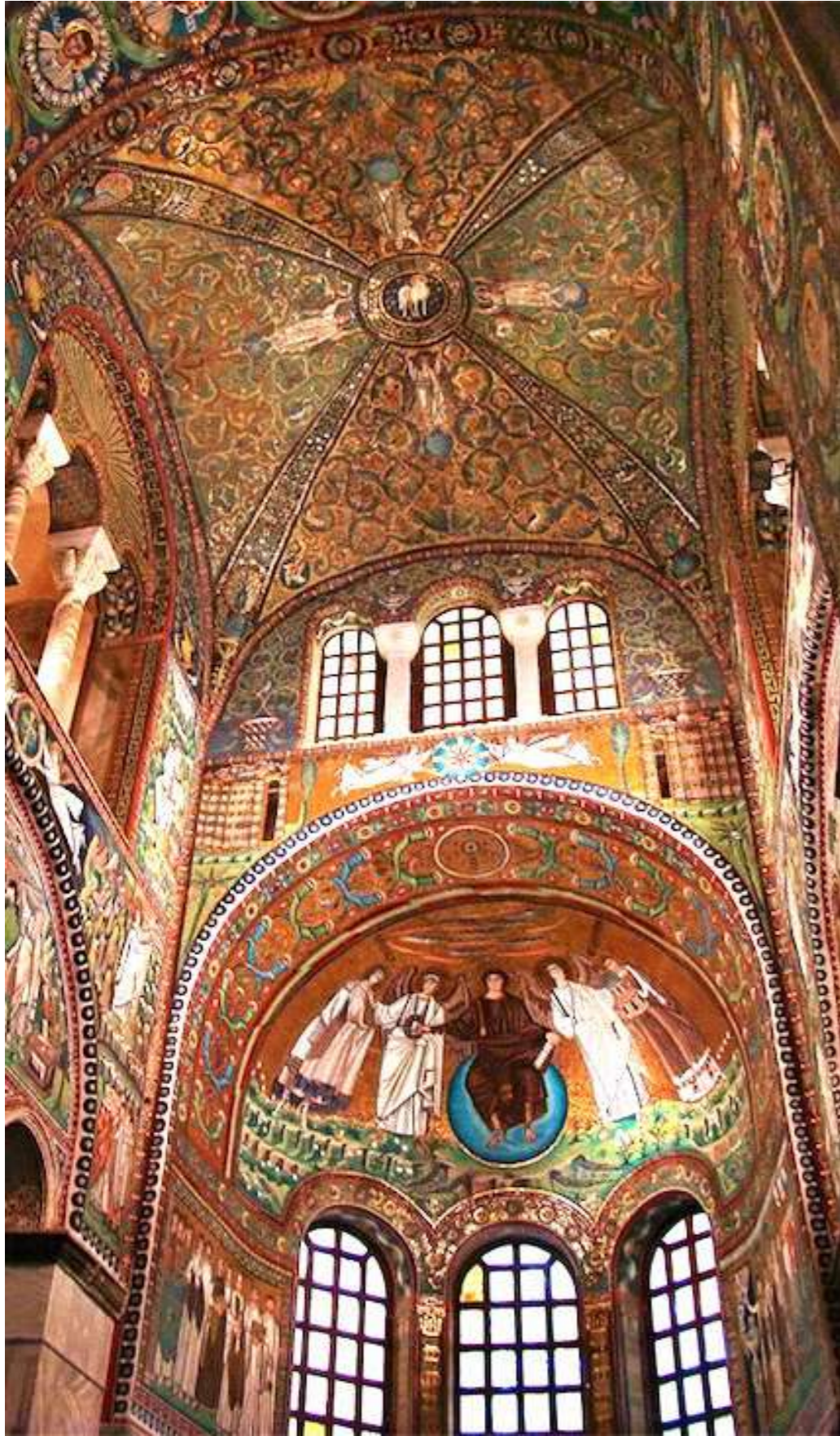


# San Vitale, Ravenna, Italy (534-548)



# San Vitale, Ravenna, Italy (534-548)

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# Byzantine Churches

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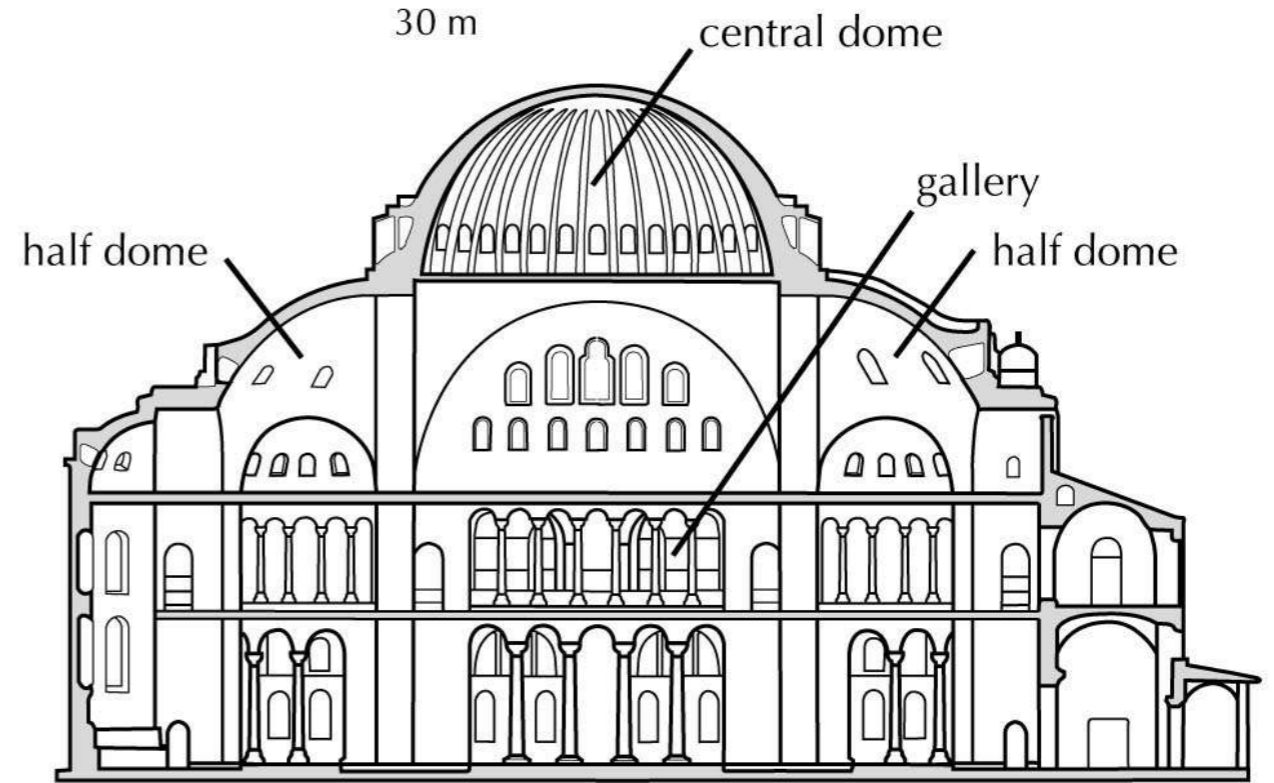
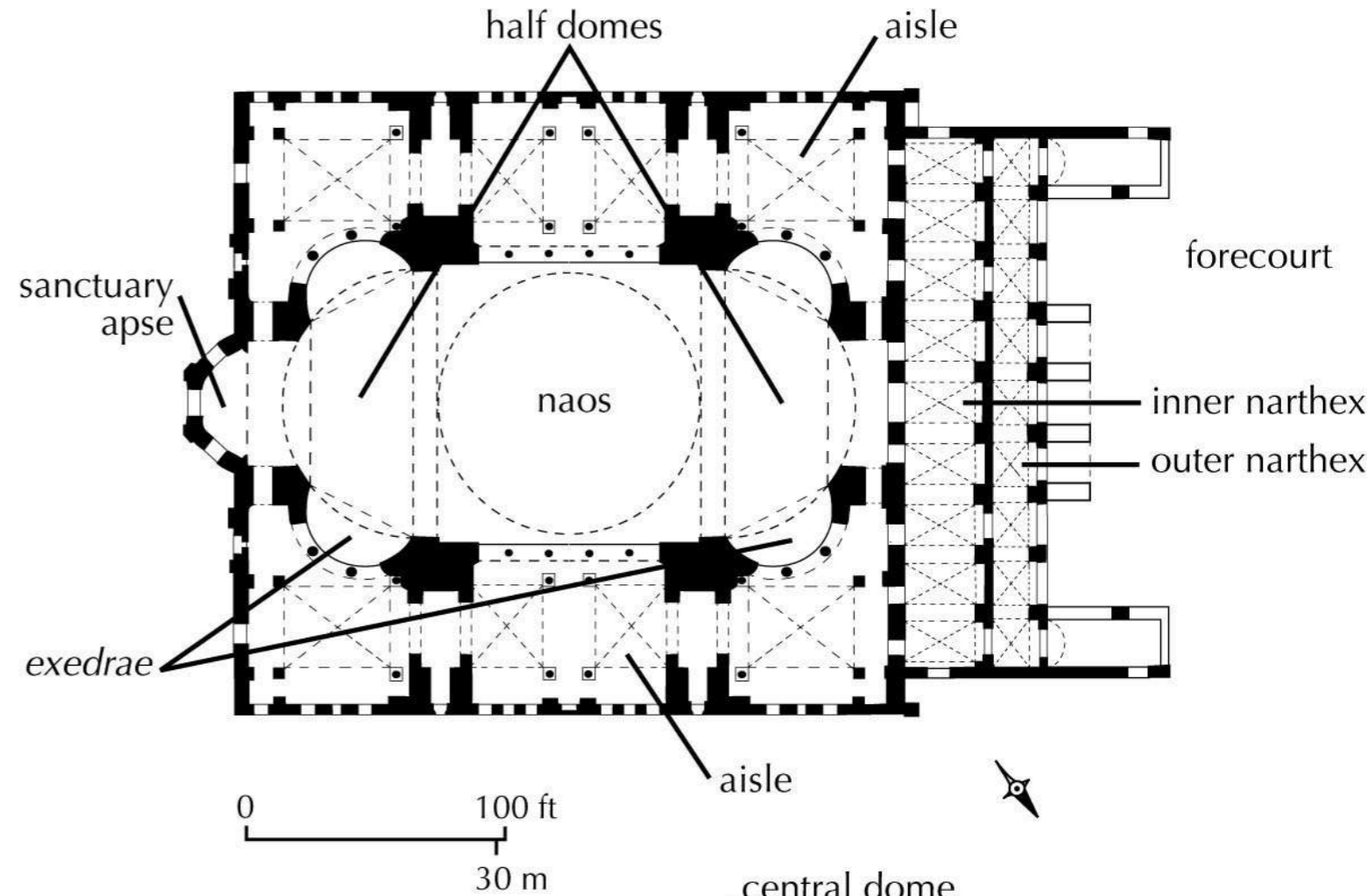
# Hagia Sophia, Constantinople (532-537)

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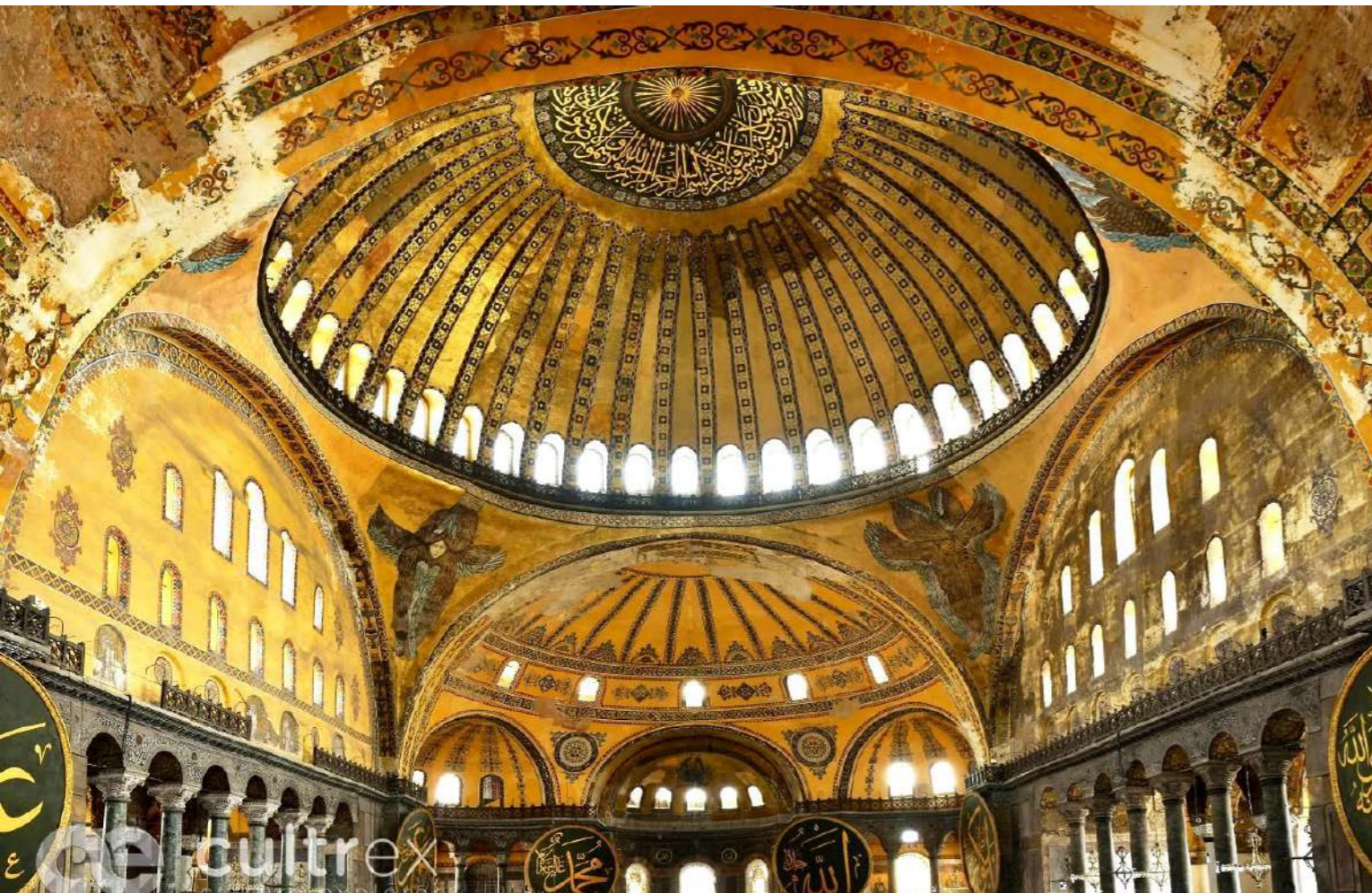
# Hagia Sophia, Constantinople (532-537)

- Dedicated to the Holy Wisdom (God)
- **Centralized** building combining the centralized and axial plan
- A **square marked by four massive piers** at the centre capped by a **dome** carried on **pendentives**. **33 m in diameter, and 55 m high**
- Along the main axis, **half domes** rising below the main dome
- End with an **apse** at the **East**



# Hagia Sophia, Constantinople (532-537)

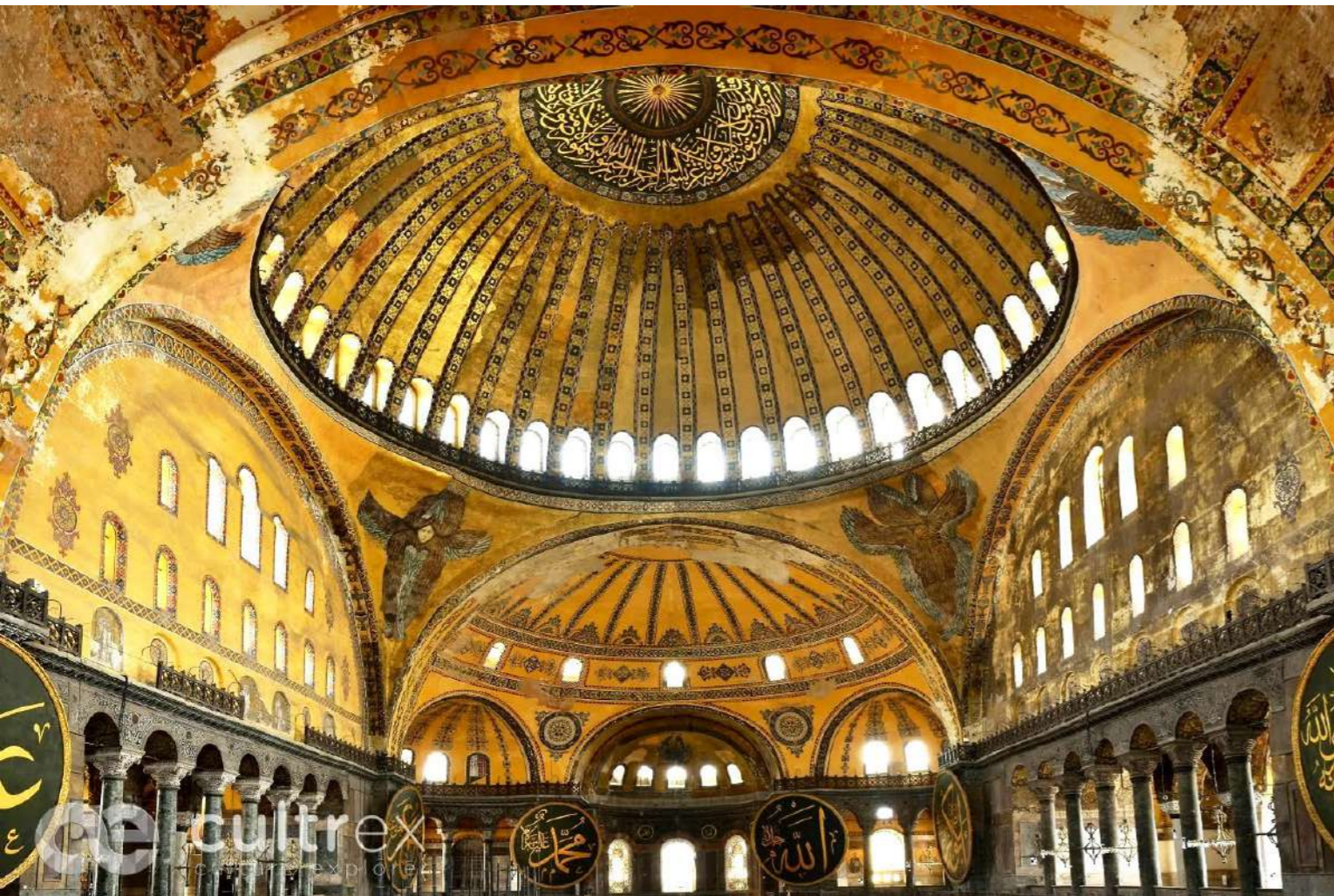
- The dome, the first to rival that of the Pantheon, was completely of **brick**
- But its structural sophistications were **designed to be invisible to observers**, who marveled at its gilded inner surfaces shimmering in the light





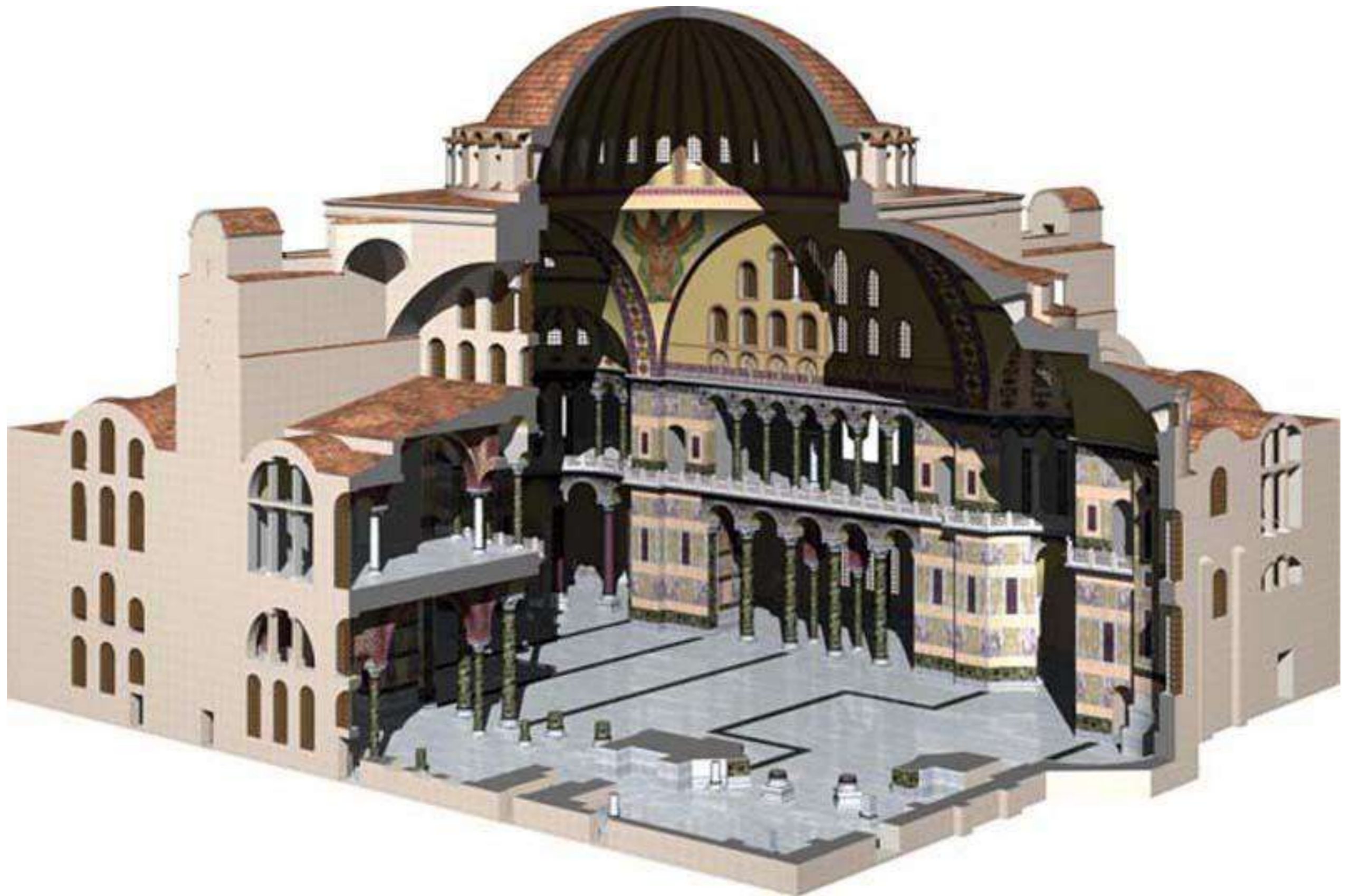
# Hagia Sophia, Constantinople (532-537)

- The base of the dome was pierced with **forty windows**
- The interior was decorated with **mosaics and marble**

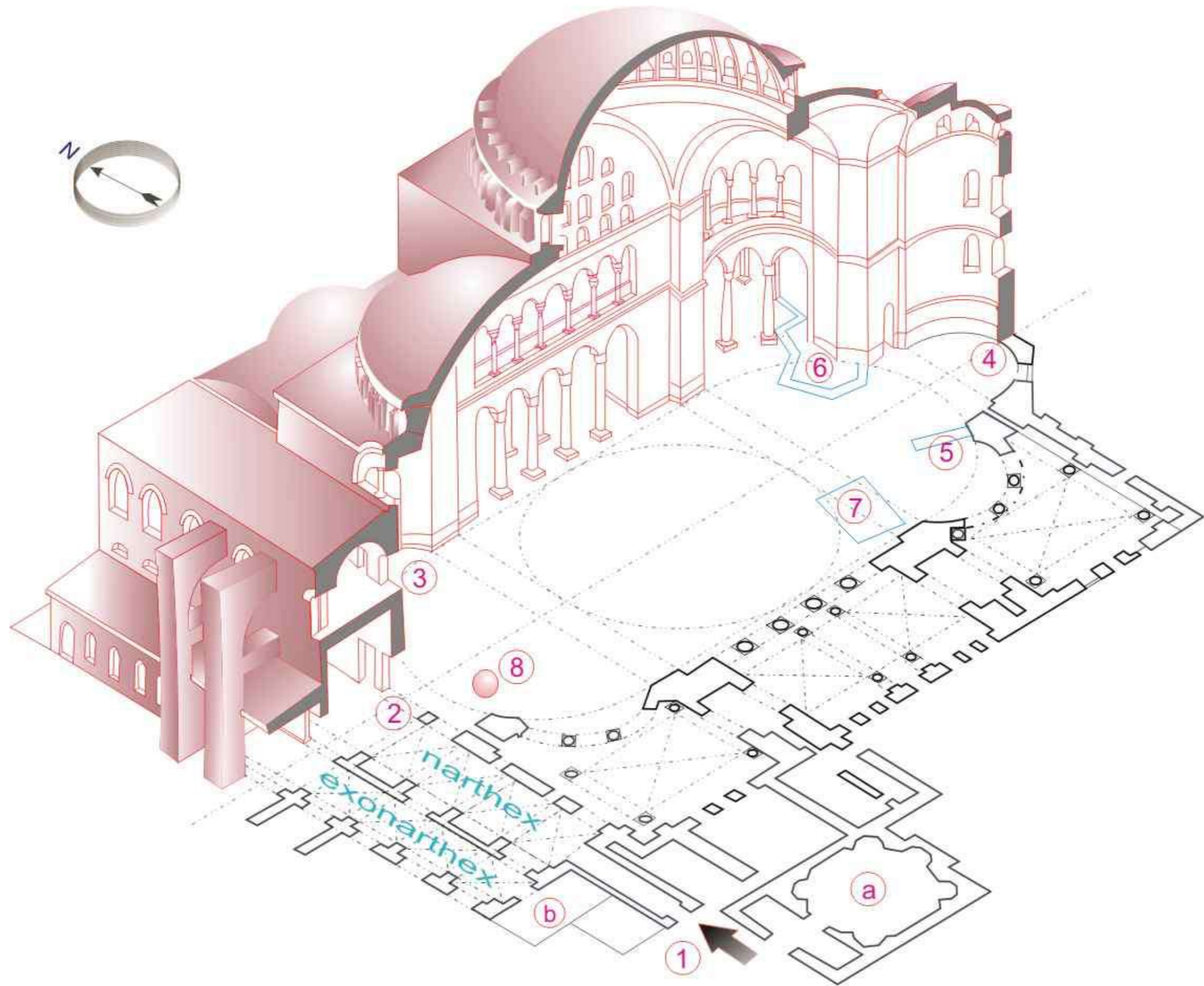


# Hagia Sophia, Constantinople (532-537)

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# Hagia Sophia, Constantinople (532-537)



# Hagia Sophia, Constantinople (532-537)

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## Hagia Sophia, Constantinople (532-537)



Unlike the static forms and spaces of classical architecture, here all seems in motion, surfaces curving and intersecting, light from hundreds of windows reflected by marble walls and mosaics

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# Byzantine Churches

Churches outside of Constantinople

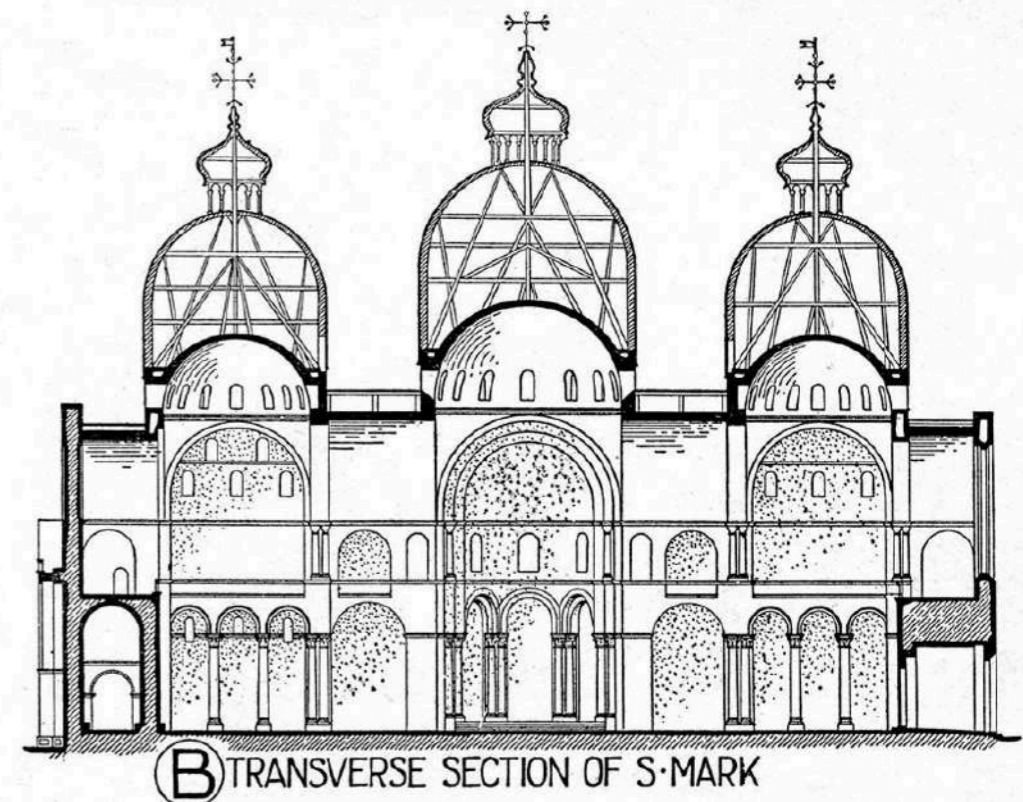
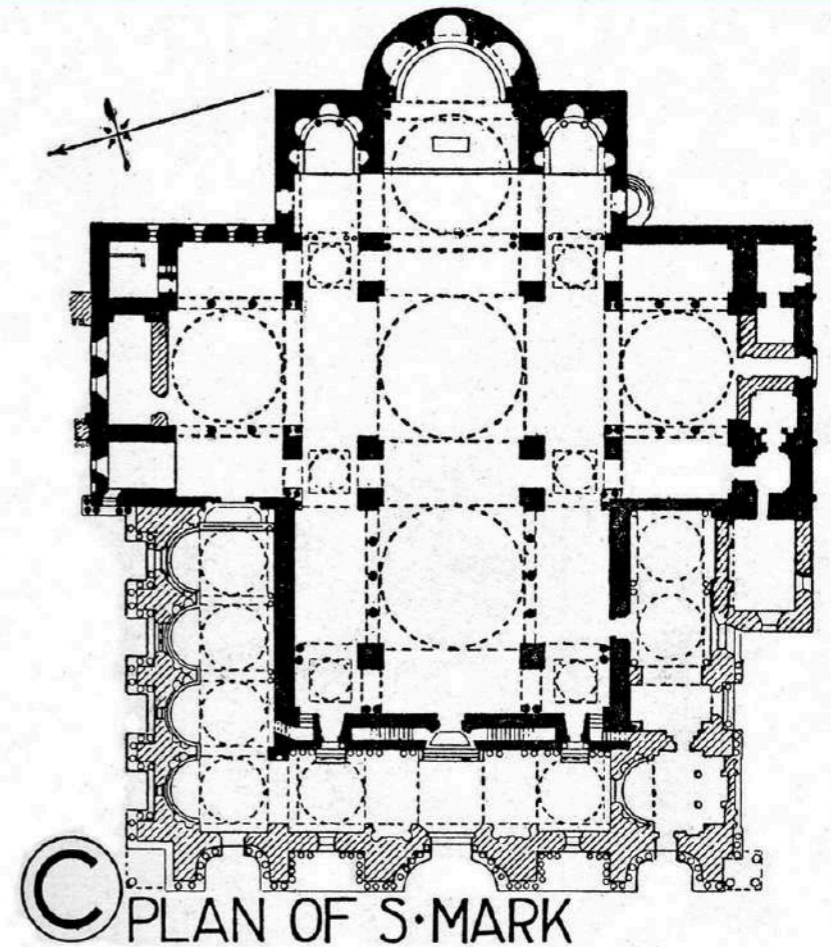
# St Mark's Basilica, Venice (1063-1095)

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# St Mark's Basilica, Venice (1063-1095)

- Based on a **Greek cross** floor plan
- **Five dome church** influenced by Hagia Sophia
- **Four square arms**, project from the centre, each square covered by a dome
- The front façade is Gothic and was added much later



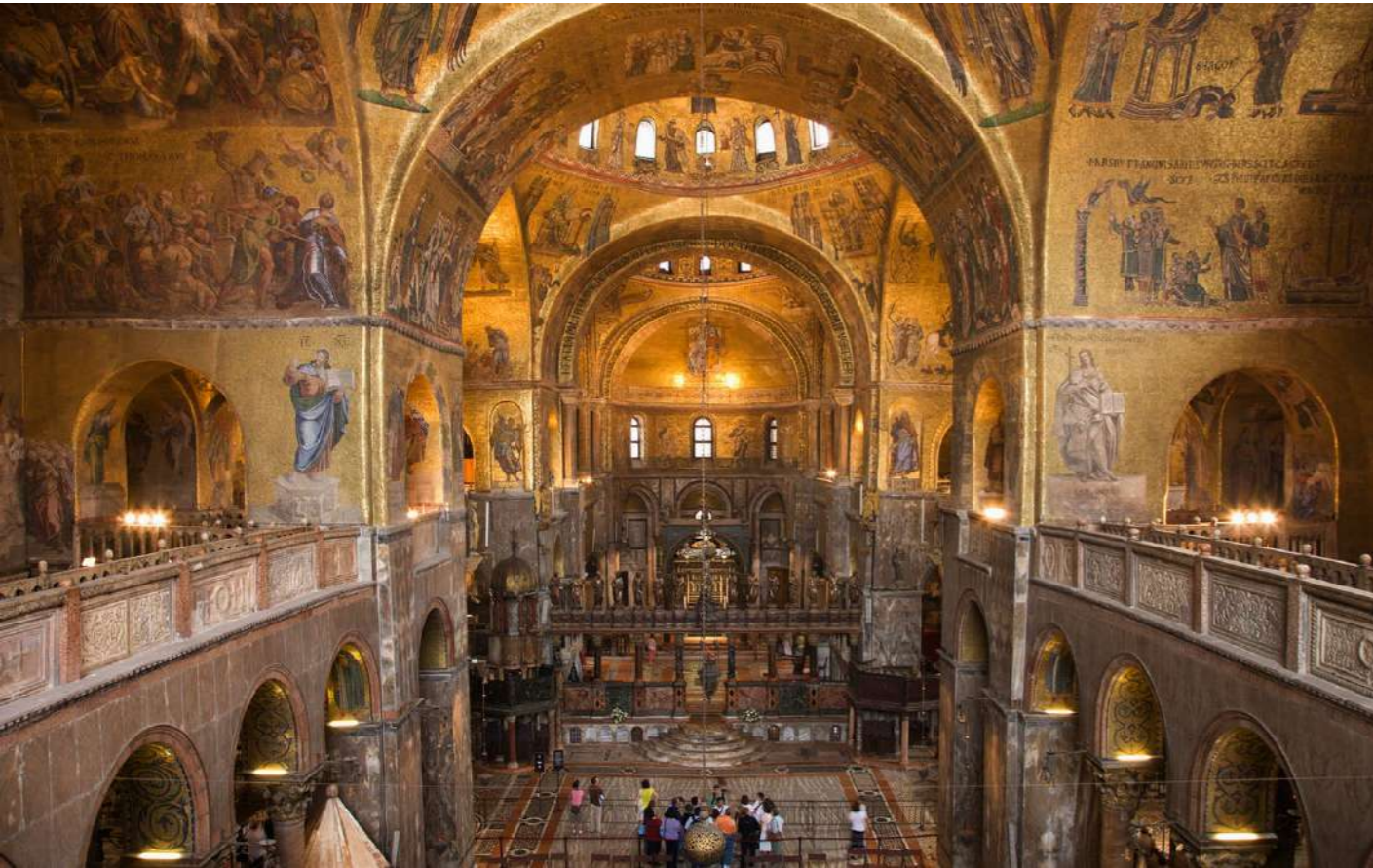


# St Mark's Basilica, Venice (1063-1095)

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## St Mark's Basilica, Venice (1063-1095)



The walls were covered entirely in **gold mosaic** presenting figures of the apostles, saints and angels

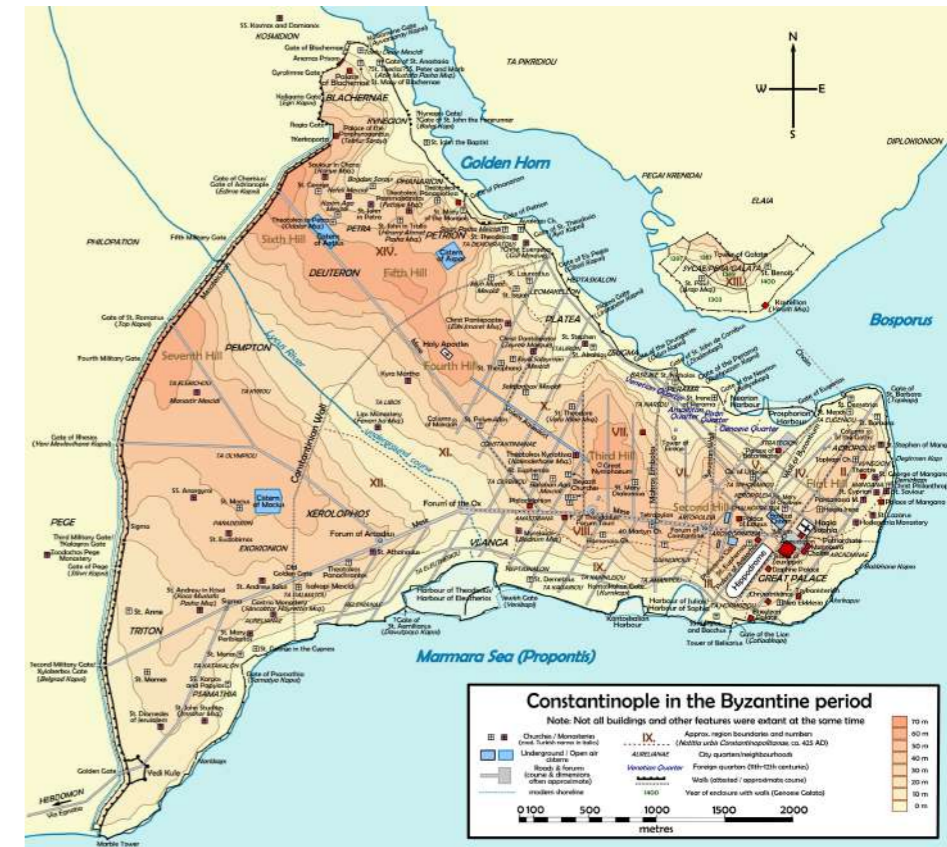


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Constantinople City

# Constantinople City

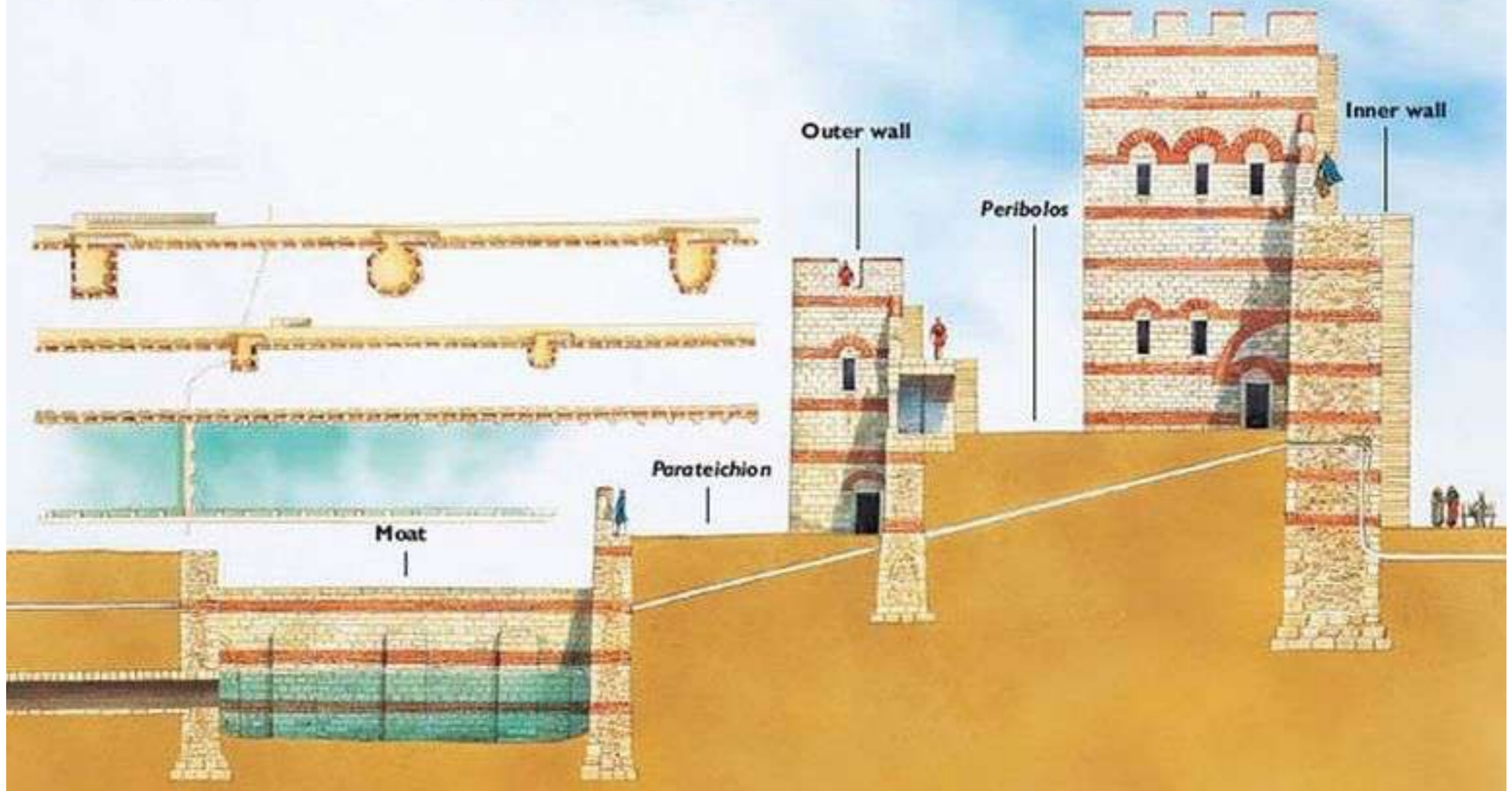
- **Peninsula** surrounded by water except to the west
- At the west it is protected by a **triple wall 6km long**
- The city had a **radial** disposition



# Constantinople City

## Cross-section and plan of the Theodosian walls

This plate shows a complete cross-section and plan of a typical stretch of the Theodosian walls. The section shows the different layers of defence. On the plan are the different shapes of towers.





# Constantinople City

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# Constantinople City

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# Byzantine Architecture

Influence on Islamic Architecture



The Dome of the Rock, 691

The mosque of Sultan  
Salim al Thani,  
Turkey, 1569





Taj Mahal, 1643

Links:

<https://www.youtube.com/watch?v=KRpp3jzv1Tw>

Next lecture

Romanesque Architecture