

WEEK 5B: Temples of the Ancient East II - India and Angkor Wat

Mohenjo Daro, Indus Valley, Pakistan (2400-2000BC)

This civilisation was entirely unknown until 1921, when excavations in what would become Pakistan revealed the cities of Harappa and Mohenjo Daro.

This mysterious culture emerged nearly 4,500 years ago and thrived for a thousand years, profiting from the highly fertile lands of the Indus River floodplain and trade with the civilisations of nearby Mesopotamia

- Architecture is similar to elsewhere during this period where the material was sundried bricks
- Buildings were single cell spaces
- The city was located on a plain beside the Indus River, with a higher citadel section that featured granaries and a large stepped bath (thought to serve some ritual function).
- As the valley was subject to flooding, the storage of foodstuffs on a higher ground was a sensible precaution
- Buildings were constructed of fired bricks of uniform size, houses were provided with underground drains connected to a well-planned sewer system

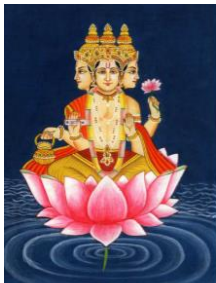
Varanasi

- Located on the Ganges river in India
- The Ganges river was the centre of Vedic mythology
- Varanasi was originally founded as the capital of Kashi mahajanapada (Kingdom)
- It then developed into a major religious site
- It was to be of special significance to Hinduism

Hinduism: the predominant and indigenous religious tradition of South Asia; formed of diverse traditions with no single founder; among its roots is the historical Vedic religion of Iron Age India, and as such Hinduism is often called the "oldest living religion" or the "oldest living major tradition"; demographically, Hinduism is the world's third largest religion, after Christianity and Islam, with approximately one billion adherents, of whom approximately 828 million live in India; other significant populations are found in Nepal (23 million), Bangladesh (14 million) and the Indonesian island of Bali (3.3 million).

Hinduism

- Brahma seated on a Lotus with Four Heads



- Sitting on a lotus indicates that he is always rooted in the Ultimate Reality
- That despite manifestation, the transcendent remains hidden beneath surface awareness
- Four heads represent the manifestation of consciousness as mind (manas), intellect (buddhi), ego (ahamkar) and conditioned-consciousness (chit)

- Shiva (male)



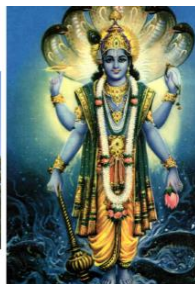
- One of the major gods
- Worshipped in many aspects
- A fierce destroyer
- Naked ascetic
- Lord of the cosmic dance
- Lord of beasts
- In the form of phallus (linga), typically he is depicted with a third eye in the middle of his forehead, wearing a crescent moon in his matted hair and a necklace of skulls at his throat, entwined with live snakes carrying a trident

- Shakti (female)



- May sometimes be depicted with Shiva in intercourse
- The concept or personification of divine feminine creative power
- Sometimes referred to as 'The Great Divine Mother' in Hinduism
- On the earthly plane, Shakti most actively manifests through female embodiment and fertility, though it is also present in males in its potential unmanifest form

- Vishnu (male)



- One of the major gods
- Worshipped in a number of aspects
- Preserver of the cosmos with Shiva and Brahma
- This consort is Lakshmi
- His mount is the eagle Garuda
- Vishnu is considered to have descended to earth nine times to save the world in various incarnations or avatars such as Rama, Krishna and the historical Buddha
- The tenth incarnation will herald the end of the world

Important themes in Hinduism

- Dharma: ethics/duties
- Samsara: the continuing cycle of birth, life, death and rebirth
- Karma: action and subsequent reaction (do good deeds and good things will happen to you)
- Moksha (nirvana): liberation from samsara
- Yogas: various paths or practices

Varanasi and Hinduism

- At dawn every morning thousands of Hindus gather on all the steps leading down to the shore to face the sun that rises across the broad expanse of the Ganges and that is reflected in its waters
- Half immersed in the river, they greet the sun by cupping a little of the Ganges into their palms and pouring it back into the river with arms extended
- This is followed by a slow turn of 360 degrees on the spot, a miniature of circumambulation
- A quick dip in the river completes the ritual
- In Varanasi there are specific steps (Ghats) where cremations are done
- People also bring ashes of their loved ones and scatter them in the river

Hindu temples

- Follow east-west axis
- Ladkhan Temple, Aihole, India (7th century AD)



- Previously build with timber for a village assembly hall
- It is now represented in stone
- Column porch with stone lintels

Hindu temple designs

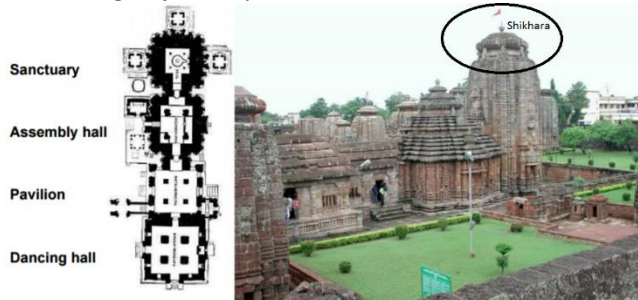
- Most temples include forms that are symbolic of:
 - The holy mountain
 - The sacred cave (in the holy mountain)
 - The cosmic axis (from centre of sacred cave)
- Geometry derived from a subdivided square or mandala is commonly used, together with a single unit that sets all proportions
- Temple complexes are usually aligned on the cardinal points, representing the four corners of the earth, with the major entrances facing east
- Mandala:



- Derived from the Sanskrit word 'circle'
- As a visual element it is a spiritual and ritual symbol in Hinduism and Buddhism - representing the Universe
- It represents the cosmos metaphysically or symbolically
- In diagram/plan form it almost always includes the square and the circle
- It can sometimes also be interpreted as the abode of the deity

Hindu temple architecture

- Lingaraja Temple, Bhubaneswar, India (105-1150)



- Linga means phallus and raja means king
- Joining of male and female metaphor for joining of the universe
- Shrines show physical expression of human sexual intercourse
- Linga: upright stone which symbolises the male sexual organ and male god Shiva
- Around the base of the lingas will be concentric circles called yoni which represent the female organ and the female god Shakti
- Three separate halls precede the garbhagriha (sanctuary) at the end of the processional axis
- Each hall has a distinctive roof profile so that the composition builds towards the high shikhara
- Shikhara:
 - The characteristics mountain-peak roof of mature Indian Hindu temples
 - It symbolises Mount Meru (holy mountain)
 - There will also be a water tank (kund)

- Lakshmana Temple, Khajuraho, India (950)



- Temples are raised on a platform or plinth
- Corner shrines reflect the main shrine but at a miniature scale
- Axial approach
- Pillared hall
- Sanctuary
- A devotee can circumambulate the sanctuary
- Originally made of lightweight timber but now stone
- There are sculptures in the walls which shows stories of gods including sexual intercourse



- Kandariya Mahadeva Temple, Khajuraho, India (1012-50)



- At the same complex and has the same typology
- Raised platform
- Enter from the east
- Porch like elements
- Chitragupta Temple, Khajuraho, India



- Pratapeswar Temple, Khajuraho, India



- Built later than the other temples
- Shows the Islamic architectural influence on the temples
- Invasion from moguls from Persia
- It is a Hindu structure with Islamic elements as the moguls were tolerant of other cultures
- The arches are Islamic influence
- Brihadesvara Temple, Tanjore, India (11th century)



- The elements have increased in size
- The central axis is defined by a gopura or towering entrance gate on east side
- Pyramidal shikhara roof over the main shrine which rises from a square base
 - It towers 60 metres to dominate the extensive temple complex
 - Its domed top is cut from a single piece of granite in a form that resembles a Buddhist stupa
- Gopuras of the Ranganatha Temple, Shrirangam, India (1000-1500)



- In Southern India, temples were surrounded by multiple sets of perimeter walls, each provided with towering gate (gopura)
- Often vibrantly decorated and depicts the lives of the different gods
- The gopura defines the processional axis and towers over secular community outside the temple precinct

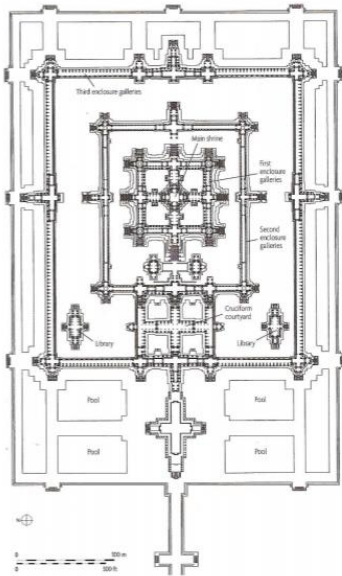
- Kailash Temple, Ellora, India (757-773)



- A rock temple
- Was dedicated to Shiva
- Stones were carved away to reveal the architecture

- Angkor Wat, Cambodia (begun 1120)





- Hinduism spread to southeast Asia through the activity of Indian merchants
- In Cambodia, the vast temple of Angkor Wat is a fusion of Indian religion and native Khmer tradition
- It is one of the largest religious structures ever built
- King Suryavarman II was the builder
- He built it as his state temple and capital city
- In India, Hinduism never involved the concept of a god-king or ancestor worship, but these were key parts of Cambodian traditions
- Angkor Wat is unusual in its double use as a mortuary shrine and Hindu temple dedicated to Vishnu
- Large scale represents the ambitions of the builder
- Clarity of design can be compared to Buddhist complex of Borobudur in Indonesia
- Its plan is derived from mandala
- Nested sets of galleries focus on central shrine, the symbolic representation of Mount Mehru, home of gods
- It was built as a Hindu temple but 200 years later it became a Buddhist temple
- The central tower was constructed over a garbhagriha or womb chamber that is the core of every Hindu temple
- Elements of architecture:
 - Orientate to cardinal axis
 - Shikhara denotes the vertical access
 - Garbhagriha need to be in the shikhara
 - One or more ritual chambers where ceremonies or dance performances can be held before reach garbhagriha

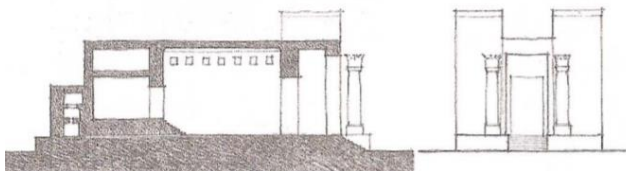
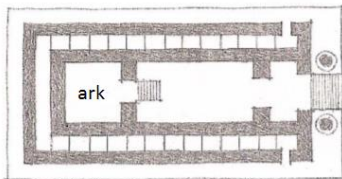
WEEK 6A: Temples and Typologies - church, mosque and synagogue

Spaces of religion

- Pantheism - many gods
 - e.g. ancient Egypt, ancient Greece, ancient Rome
- Monotheism - one god
 - Judaism (Torah - synagogue)
 - Christianity (Bible - church)
 - Islam (Koran - Mosque)

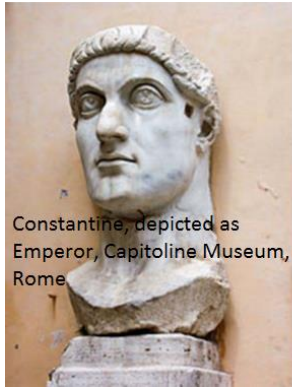
Judaism

- Emperor Titus enforced the diaspora (scatter population) of Jews in 70AD
- With Egyptian Kingdom in decline and revival of trade in Mediterranean Sea, Western Asia and the Levant (present day Israel, Lebanon, Southern Coast of Turkey) experience semi autonomy (rule on own)
- The Israelite Kingdom which had been established in late 1300BC, following from exodus of Jews from Egypt (Moses took Israelite people from Egypt to Israel)
- Judaism contribution lies in its ethical monotheism, which is the base of both Christianity and Islam
- Development of Judaism architecture was cut short due to destruction of Temple of Solomon, Jerusalem, and the force exile of Jews by Emperor Titus meant they had no land which led to Jewish architecture having little opportunity to develop
- They were often encouraged to settle in ghettos which forms Jewish ghettos
- **Temple of Solomon, Jerusalem (1000BC, destroyed 596 BC, rebuilt 515 BC, destroyed again 70AD)**
 - 2 pylon like elements on each side and 2 columns
 - Houses the Ark of the Covenant (a gold-covered wooden chest described in the Book of Exodus as containing the two stone tablets of the Ten Commandments)
 - It always has posts on them which allows it to be carried easily suggesting that given that the Jews always had to move, they could always take their most prized possession with them
 - King David bear the Ark of the Covenant into Jerusalem
 - Solomon married daughter of a pharaoh meaning there are Egyptian influences in the architecture of the temple
 - Temple had an area at front for animal sacrifices
 - Ark is contained in a windowless room called "ear of the God"



- After Moses' death, they entered Israel and founded Jerusalem as their capital
- In the medieval times, they tried to recreate scale of Temple of Solomon
- The ceiling of the Sistine Chapel, Vatican Palace, Rome, Italy (1475-83) is the exact dimensions of the Temple of Solomon, as given in the Old Testament
- Romans destroyed the second Temple of Solomon and the emperor built a Temple to Jupiter on the same site

Christianity officially recognised in the Roman Empire (326AD)



Constantine, depicted as Emperor, Capitoline Museum, Rome



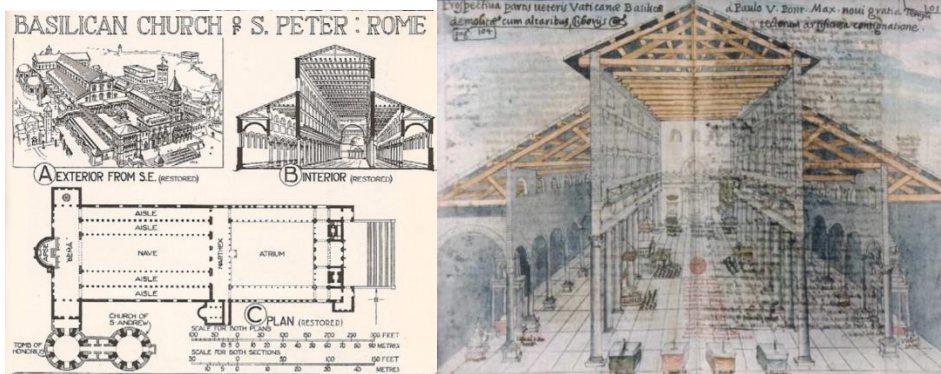
Constantine, depicted as Christian at Hagia Sophia, Istanbul

- The Roman Emperor Constantine (272-337), ruling from 206-337 converts to Christianity on his death bed in 337
- This meant now that whoever was Pontifex Maximus (Roman Emperor) was now also head of the Church and vicar of Christ
- Other religions at the time were seen as "anti-Christian" therefore were to be wiped out, exiled etc.
- This also meant that the religious pluralism that had flourished in the 5th century, and out of which Christianity had emerged, was quashed by the end of 6th century (by 6th century AD, all other religions were non-existent)
- Judaism was given leeway but was under pressure as Christians were forbidden to marry Jews and synagogue builders were no longer built
- If Emperor is Christian, the empire will mostly become Christian
- Christianity's monotheism (one god) brought sense of authenticity which had been lost by old temple culture by Greeks and Romans
- Constantine moves capital of Roman Empire from Rome to Istanbul
- Impact of Christianity on Roman architecture was negative as imperial forum was abandoned, temples were chopped down for building materials, walls were added between columns to create churches, stones from Roman buildings were fired in kilns to make lime for mortar

Church

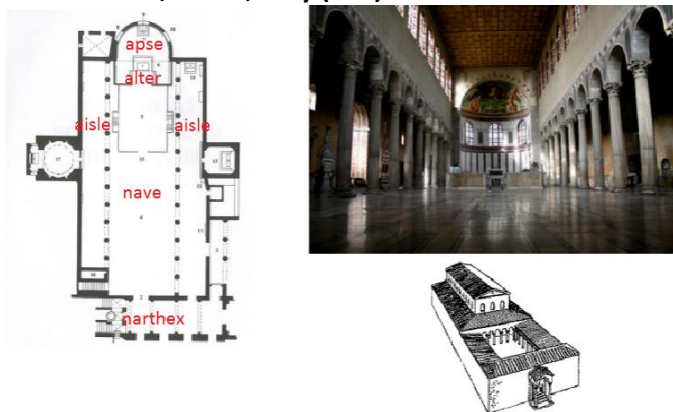
- Aisle: in a basilican church, the portion set parallel to the nave, generally separated from it by columns or piers
- Apse: terminations of the nave of basilica or the choir in a basilican church
- Baptistry: building, generally octagonal, used for the Christian rite of baptism
- Basilica: 'king's hall'
 - In Roman architecture, a hall used for public administration. The term generally refers to a rectangular building that has a central section with a higher roof flanked by lower aisles on both long sides. A semi-circular projection, the apse, was often set at one or both of the shorter ends
 - Early Christian adapted the form as a basis for church design, replacing one apse with the main entrance and establishing a processional axis the length of the building. The altar was placed in the apse at the end
- Chancel: the east end of a church, in which the main altar is placed
- Choir: the eastern end of a basilican church, where the divine service was sung
- Crossing: in a basilican church, the space where transepts, nave and choir intersect
- Greek cross plan: a plan in the form of a cross having arms of equal length
- Latin cross plan: a plan in the form of cross having one longer arm that creates a nave
- Martyrium: a building associated with a Christian martyr
- Nave: the western arm of a basilican church

Basilica Church of St Peter, Rome, Italy (330)



- Early Christian church aren't built with reinforced concrete (Roman architecture) but instead with Timber frames and tiled roofs which is simpler.
- Was built where Basilica of Constantine, Rome, Italy (310-313) was
- It is outside the Roman Empire walls, built on top of a Necropolis as it was built where St. Peter was buried
- Columns which went down either side of the nave were taken from pre-Christian Roman temples
- They put arches on top of columns which goes against rules of classical architecture
- Nave was used for whoever could afford it, to be buried in, with the floor carpeted in graves (street, graves and sanctuary)
- Churches highlights the mass appeal of religion as temples used to be mysterious and not many people visited, whereas at churches, people could perform rituals in groups

Santa Sabina, Rome, Italy (425)



- In the apse, there will generally be mosaic tiles telling a story from the bible

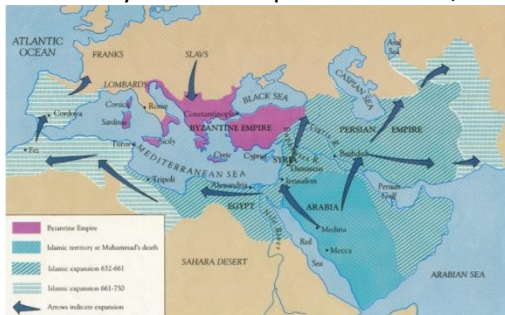
San Clemente, Rome, Italy (1084-1108)

- There is present day basilica which is from 1100
- If you go down 17 metres, there are layers where at the top there is the 4th century basilica, converted from home of a Roman nobleman, used in 1st century as a church as Christians churches were forbidden so they were done in people's houses, the basement in 2nd century has served as a mithraeum (cult of Mithras)
- Below that there is a home of a Roman nobleman build on foundations of an earlier building destroyed in the Great Fire of 64AD
- On ground, they used ancient Roman columns, Cosmatesque inlaid paving (recycled ancient Roman tiles); apse has mosaics on the theme of the Triumph of the Cross

Islam

- Originated in Arabia in 610AD
- The angel Gabriel is said to have been appeared to Mohammed in Mecca and there spoke of revelation of God, or Allah

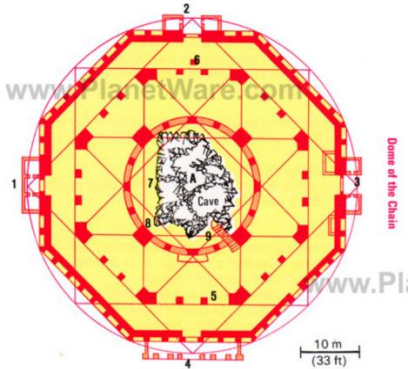
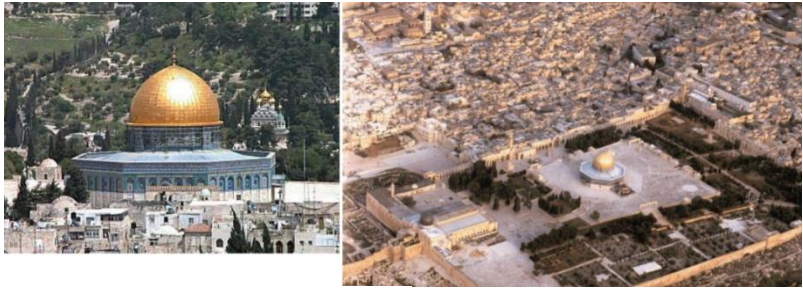
- These revelations were collected into a holy book, the Qur'an (Koran), which expressed the message of Islam
- Each Muslim accepted five basic truths or duties
 1. Belief in the oneness of God, and that Mohammed was God's messenger
 2. To pray five times daily
 3. To fast from sunrise to sunset during the month of Ramadan
 4. To give alms to the poor
 5. To make at least one pilgrimage to Mecca, wealth and death permitting
- By 661 Islamic armies swept through Iran, Iraq, Israel, Egypt, and north African coast, Spain, France
- They settled in Spain until 1492, where they were kicked out



Mosque

- Iwan: roofed or vaulted chamber open on one side, often facing the courtyard of a mosque
- Madrasa: Islamic college/school for theological, legal and literary studies
- Mihrab: a niche in the qibla wall indicating the direction of Mecca
- Minaret: in Islamic architecture, the tower associated with a mosque from which the faithful called to prayer
- Minbar: in a mosque, the pulpit from which the imam leads prayers
- Mosque: an Islamic house of prayer
- Muqarna: Islamic vault treatment that fragments the surface into many concave segments. May be built in masonry or suspended as elements from an overhead structure
- Qibla: direction of Mecca, indicated in a Mosque by the mihrab
- Sahn: open courtyard in a mosque

Dome of the Rock, Jerusalem (687-91AD)



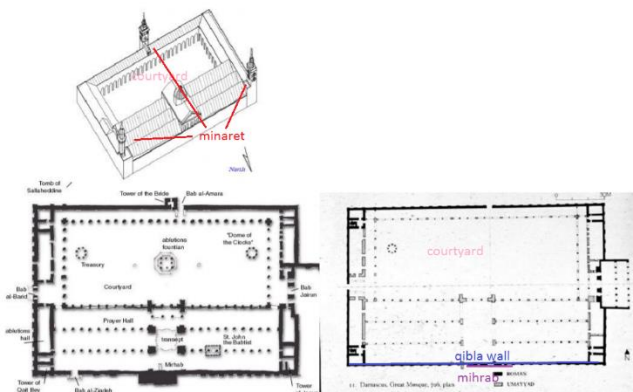
- Site sacred to Jews - where Temple of Solomon was believed to be
- Where Abraham sacrificed Isaac to Christian Lord
- Muslims honoured it for Abraham (Jews, Christian and Muslim believed Abraham)
- Shrine is positioned around the rock in the centre
- People circumambulate the rock
- Timber dome

The Kaaba or Black Stone, Mecca, Saudi Arabia

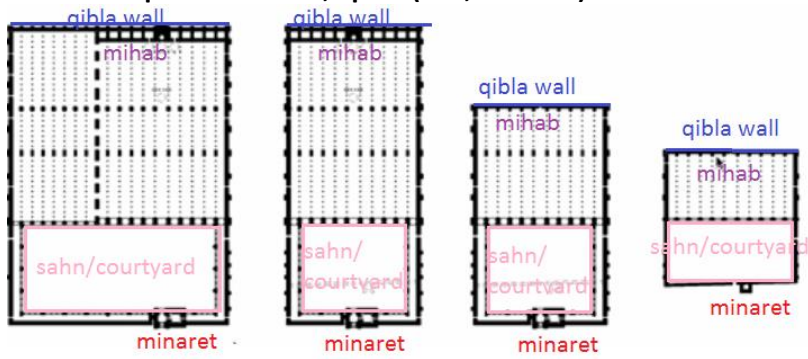
- The heart of the Islamic world
- The point towards which all Muslim places of worship are oriented
- In 630, the Prophet decided that those praying should no longer face towards Jerusalem but towards the shrine of Kaaba in Mecca
- The Kaaba thus became the focus of the ritual pilgrimage which every Muslim must make at least once in their lifetime
- They perform ritual circumambulation there

Development of mosque arrives from groups of people who would pray at Mohammed's home
Original notion of mosque is an elaboration of house of Prophet in Medina, Saudi Arabia

Umayyad Mosque, Damascus, Syria (706-15)



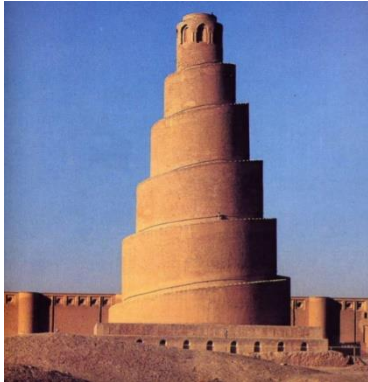
Great Mosque of Cordoba, Spain (785, 833-988)



- More people meaning they need larger area
- Move qibla closer to Mecca and have move columns
- Christian's ended up putting a church in the middle of the Mosque when they tried to drive Muslim out of Spain, orientated East-West

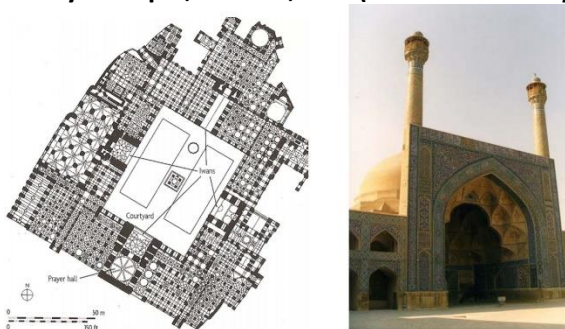


Great Mosque at Samarra, Iraq (847-61)

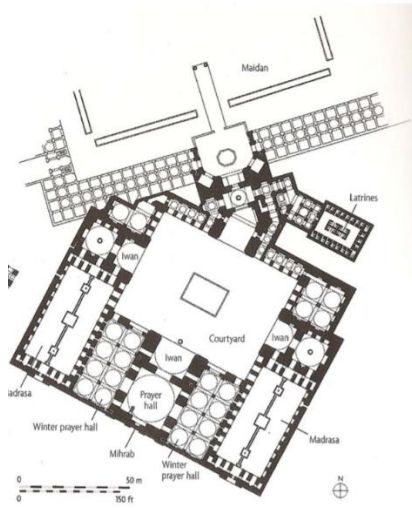


- Minaret is a large spiral tower
- Made of mud brick

Friday Mosque, Isfahan, Iran (8th-16th century)



Iwan, Masjid-i-shah, Isfahan, Iran (1611-1630)



Mosques are a building type based around ritual which hasn't changed over thousands of years