

HISTORY OF ARCHITECTURE I
ARC 2313 - SPRING 2022

LECTURE-18
7 MARCH 2022

For Wednesday, 9 March

Ingersoll: 216-225, 265-279

Reminder: Test #2

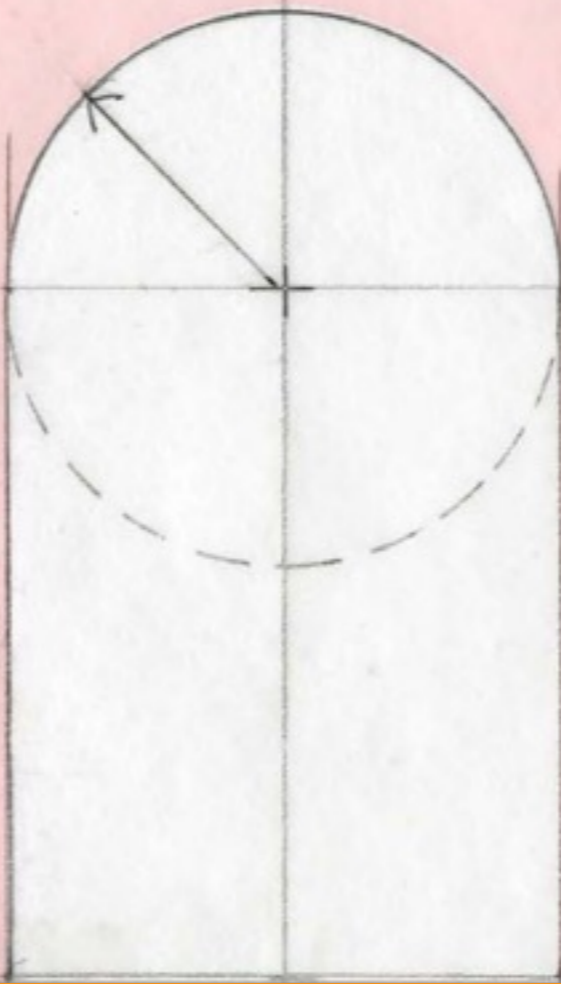
Wednesday, 23 March 2022

(Lectures 12-21)

Arches

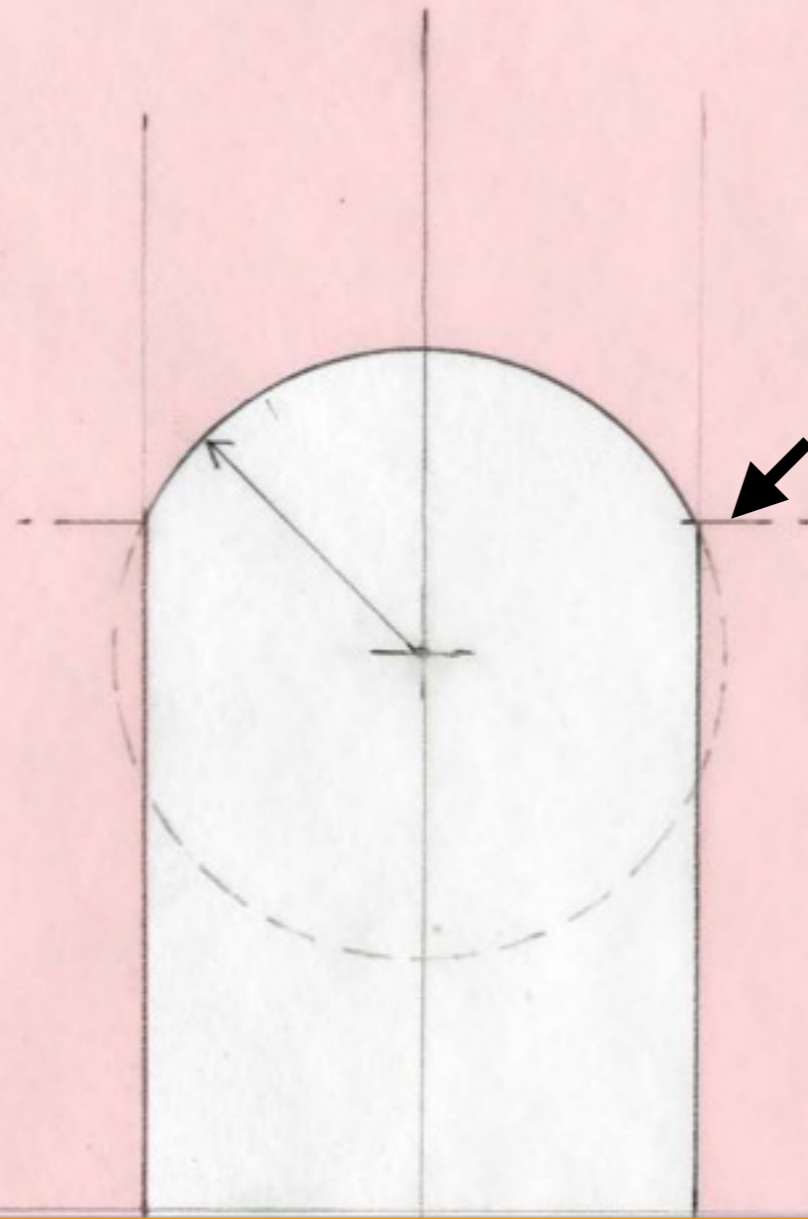
Point of
Tangency

Spring of Arch



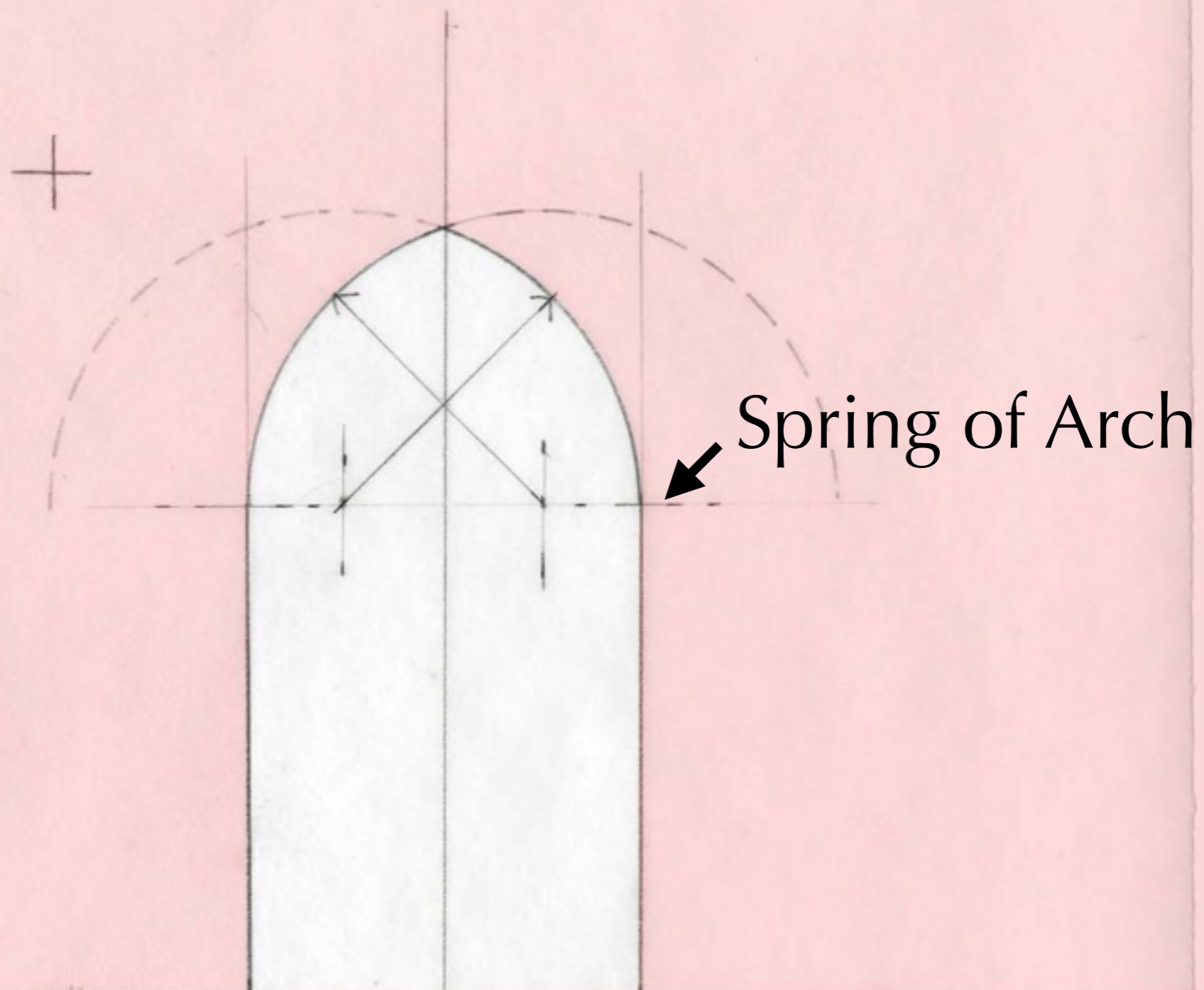
HALF-ROUND ARCH

+



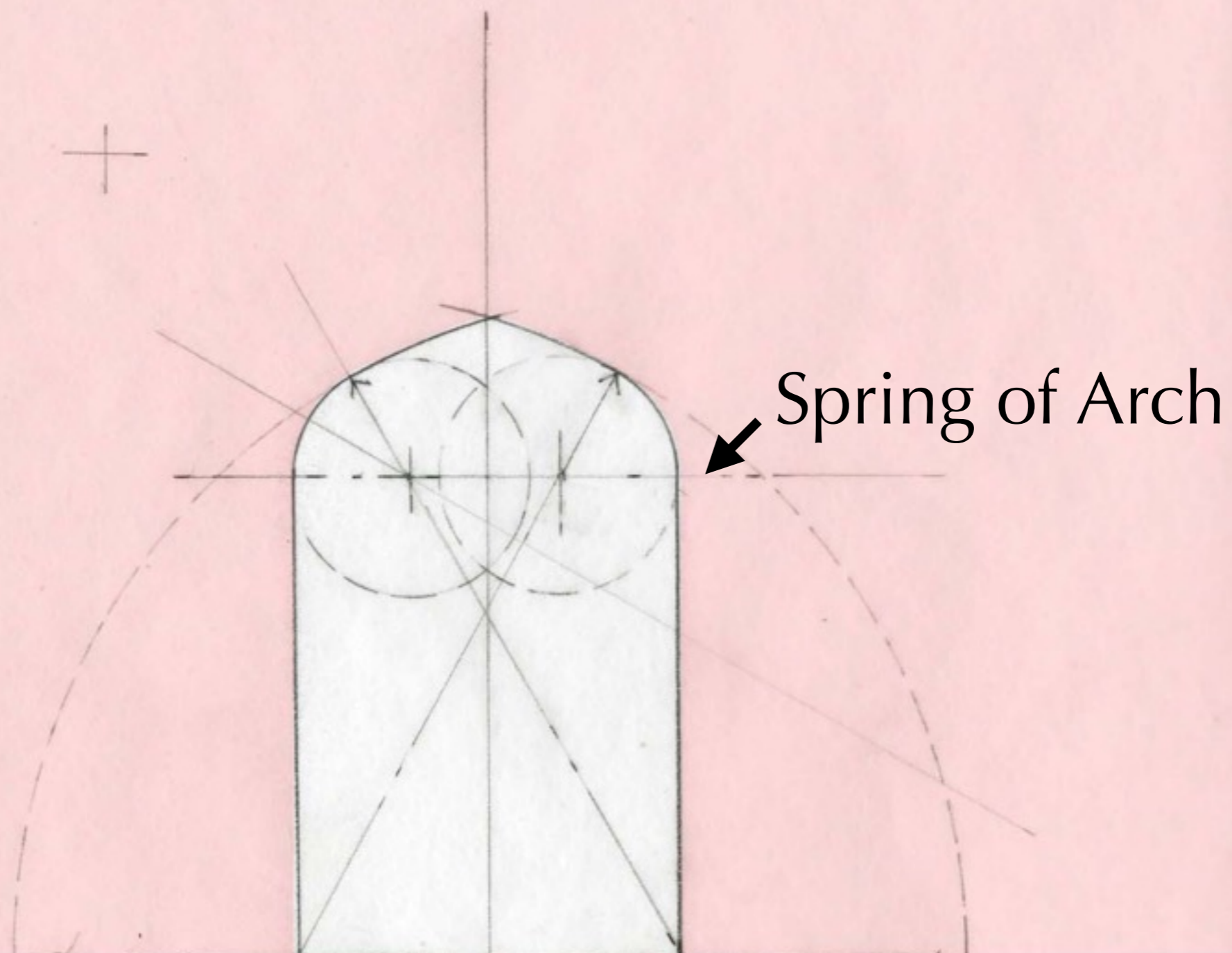
Spring of Arch

SEGMENTAL ARCH



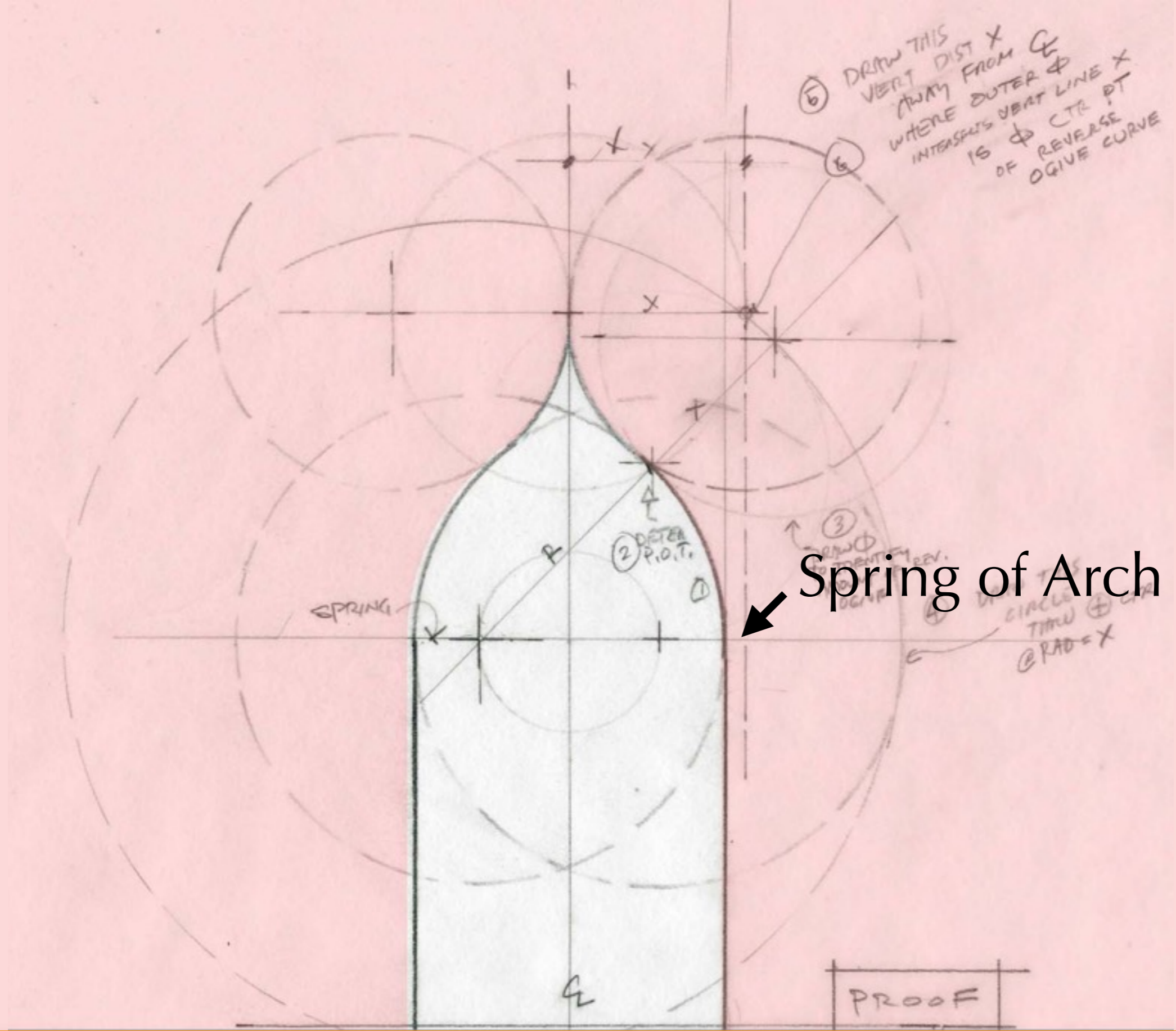
Spring of Arch

POINTED OR OGIVE ARCH



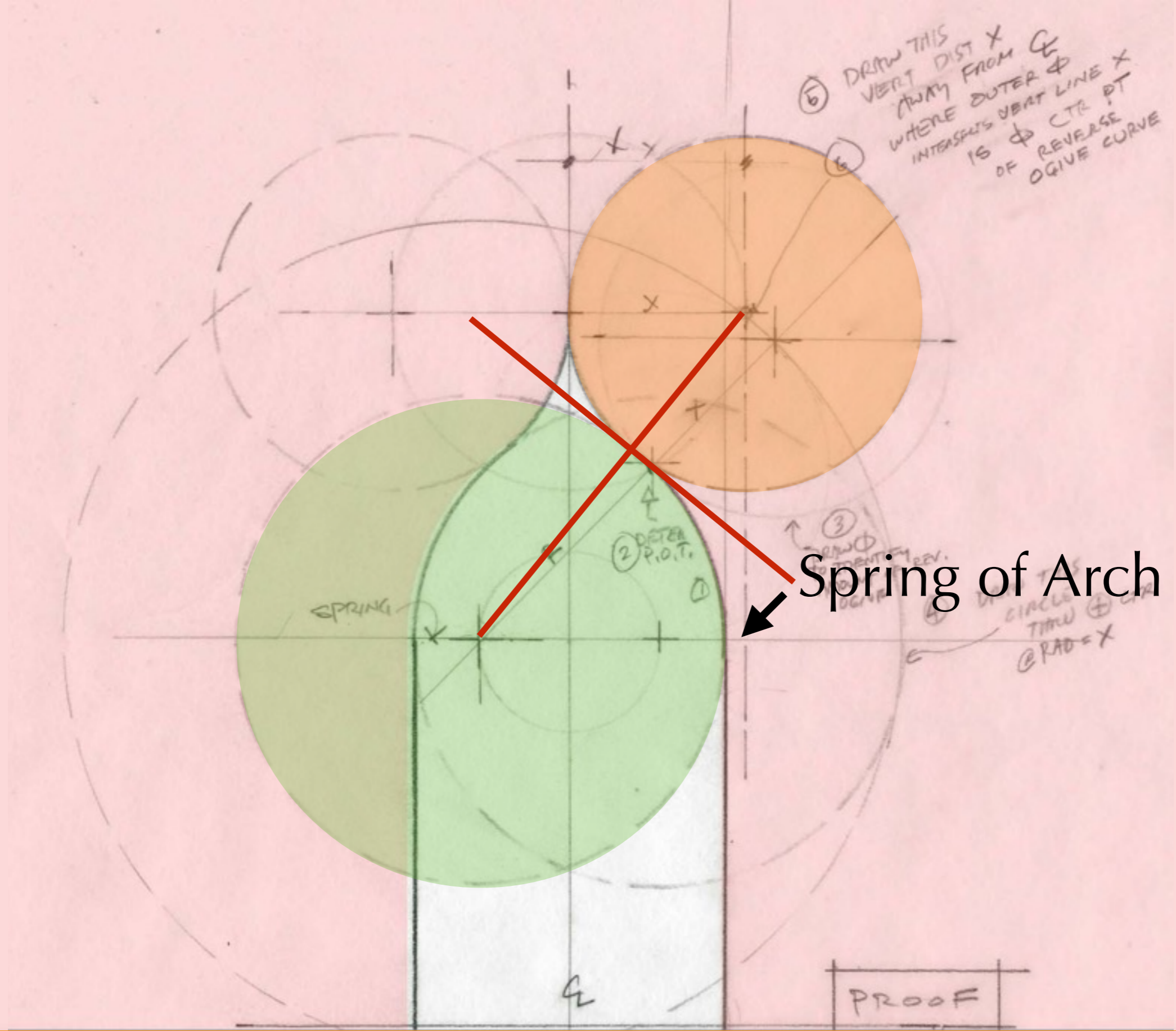
Spring of Arch

FOUR-CENTERED ARCH



Spring of Arch

OGEE ARCH - TANGENT REVERSE OGIVE



OGEE ARCH - TANGENT REVERSE OGIVE

Islamic Realms in Central Asia

Domes of Power ~ Gardens of Paradise



Genghis Khan 1162-1227

Nomadic, brutal, violent conquerer of much of asia

Did not build permanent architecture or societies

After three generations, however,
permanent dynasties emerged under
Islamic influence:

Samarkand — *Timurid Dynasty* in (Uzbekistan)

Isfahan — *Safavid Dynasty* in (Iran)

Agra — *Mughals Dynasty* (Northern India)

Land under the rule of the Mongol Empire Dynasty (1206–1368 AD)



Silk Road
Chengis Kahn's Mongol Empire



Silk Road



Timur

a.k.a. ***Tamerlane***

1370-1405 CE

Timur (a.k.a. **Tamerlane**)
ruled **1370-1405**

TIMURID DYNASTY

(borrowing architecture from the Persians)

ruthless, violent, intimidating

establishes capital at ***Samarkand***
in modern-day Uzbekistan

REGISTAN IN SAMARKAND



~ *Registan* means *desert or sandy place* ~
a public place with three *madrasas* (schools)

PISHTAQ - the threshold cubic piece with an arched opening that leads to the *iwan* arch

IWAN - the deep arch at the entry

QUIBLA - The direction toward Mecca

MIHRAB - A niche in the wall indicating *quibla*

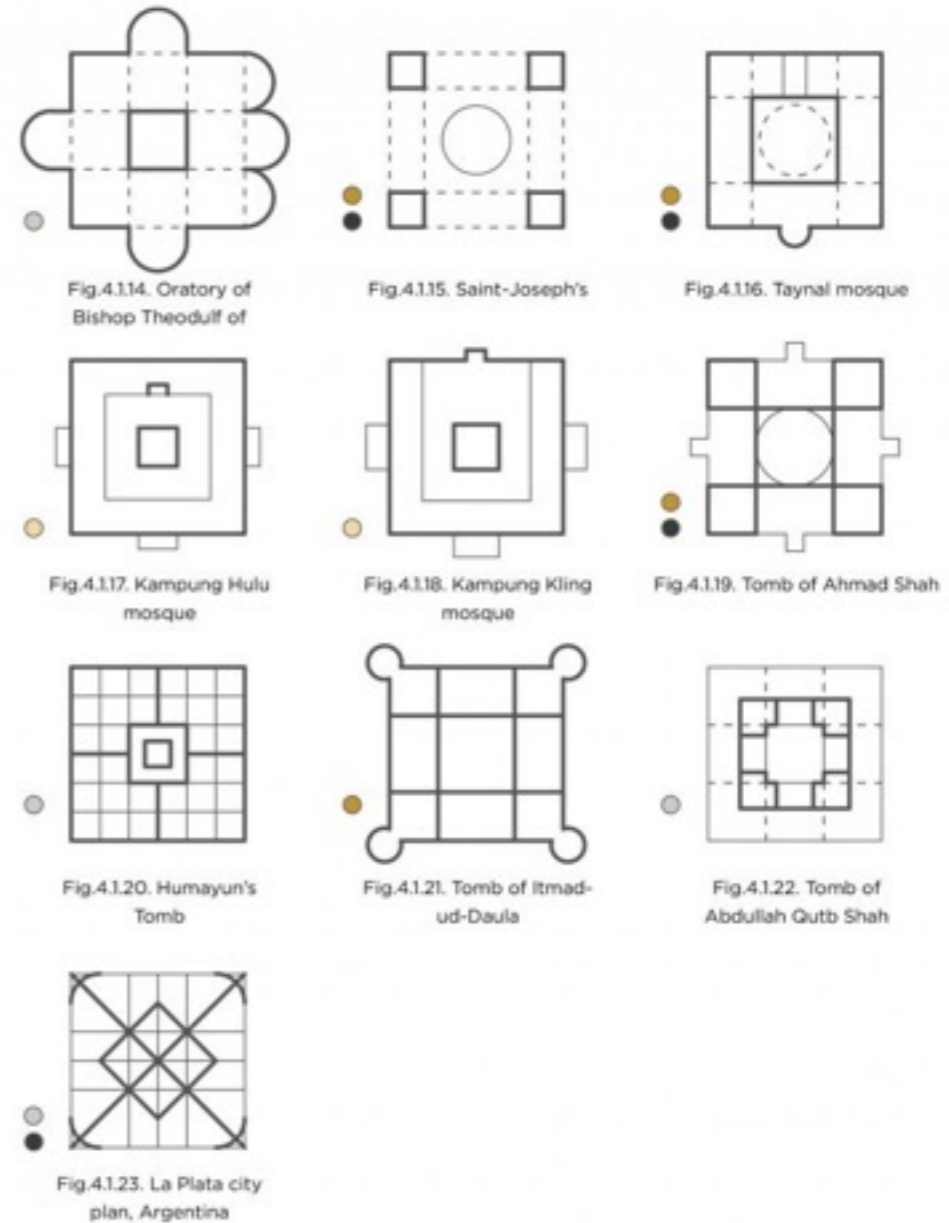
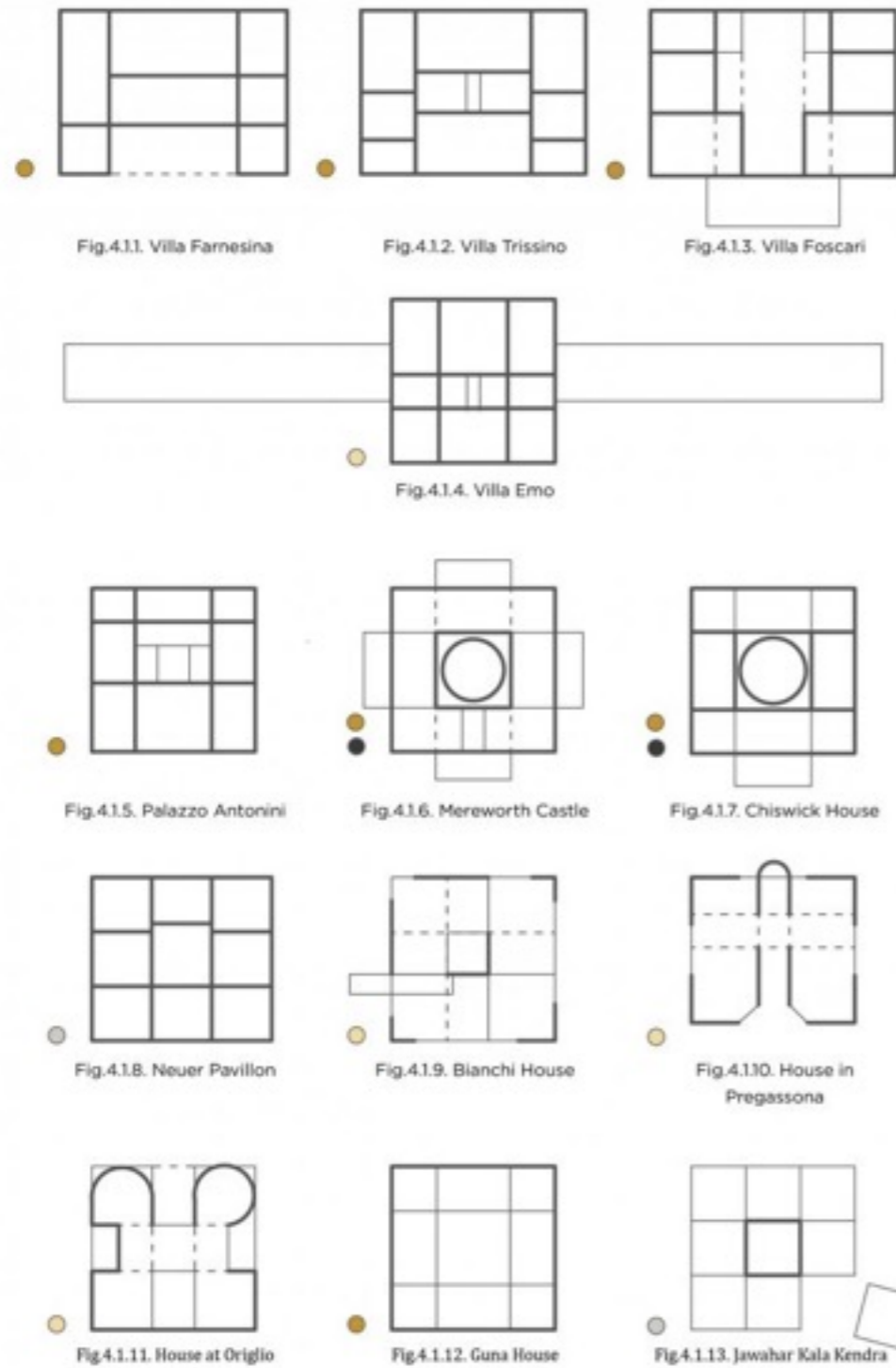
FOUR-CENTERED ARCH - a.k.a. the *Persian Arch*

ISLAMIC DOME - *Onion Dome*, often raised on a drum

HASHT BIHISHT - *Nine Square Grid* - symbolizing a center with eight paradises in this case

CONCLUSIONS:

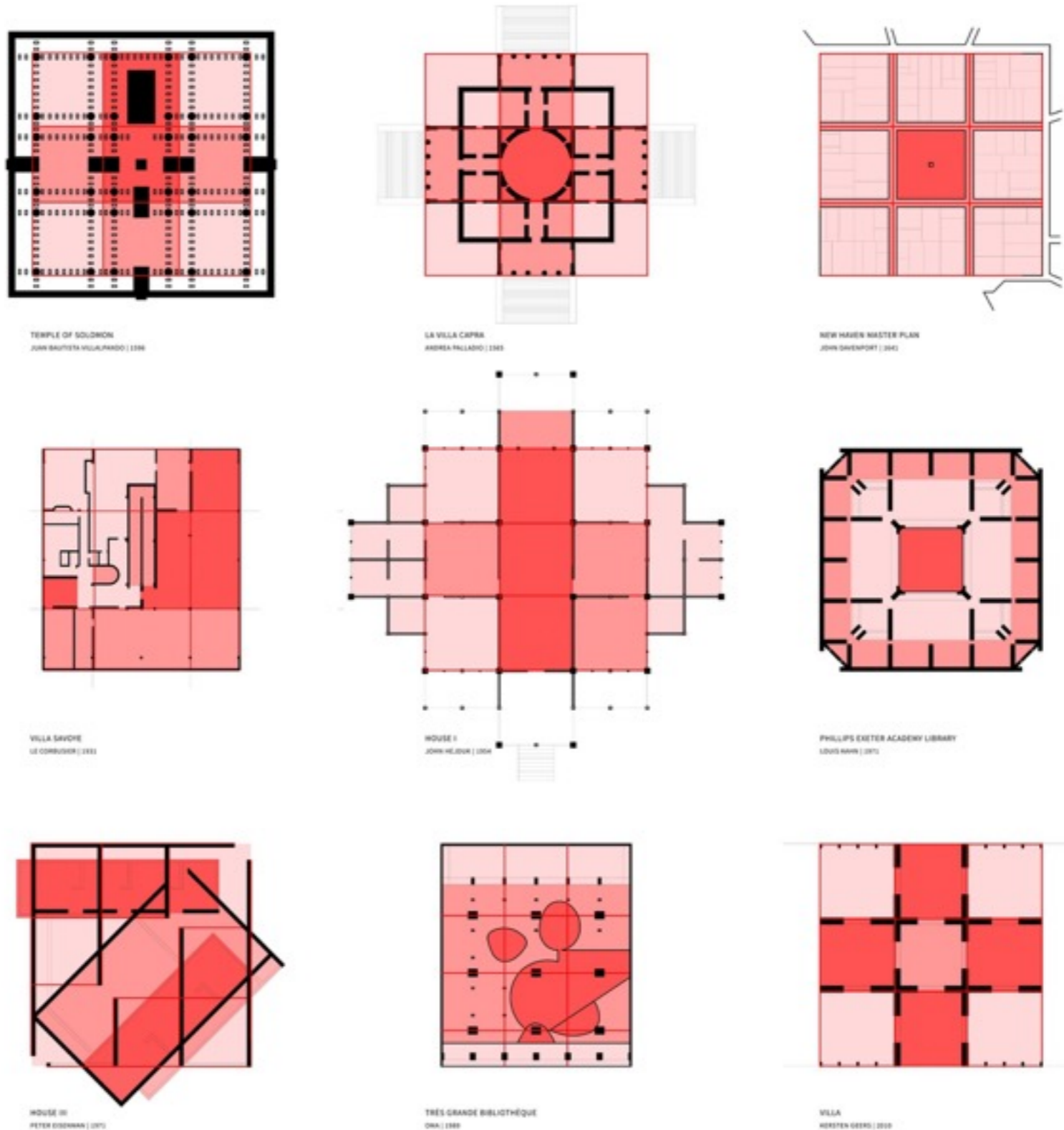
Central:



- Increase in size of center
- Decrease in size of center
- Same size of center
- Contrast in shape

THE NINE SQUARE GRID

- ancient universal diagram for organizing existential space and hierarchy

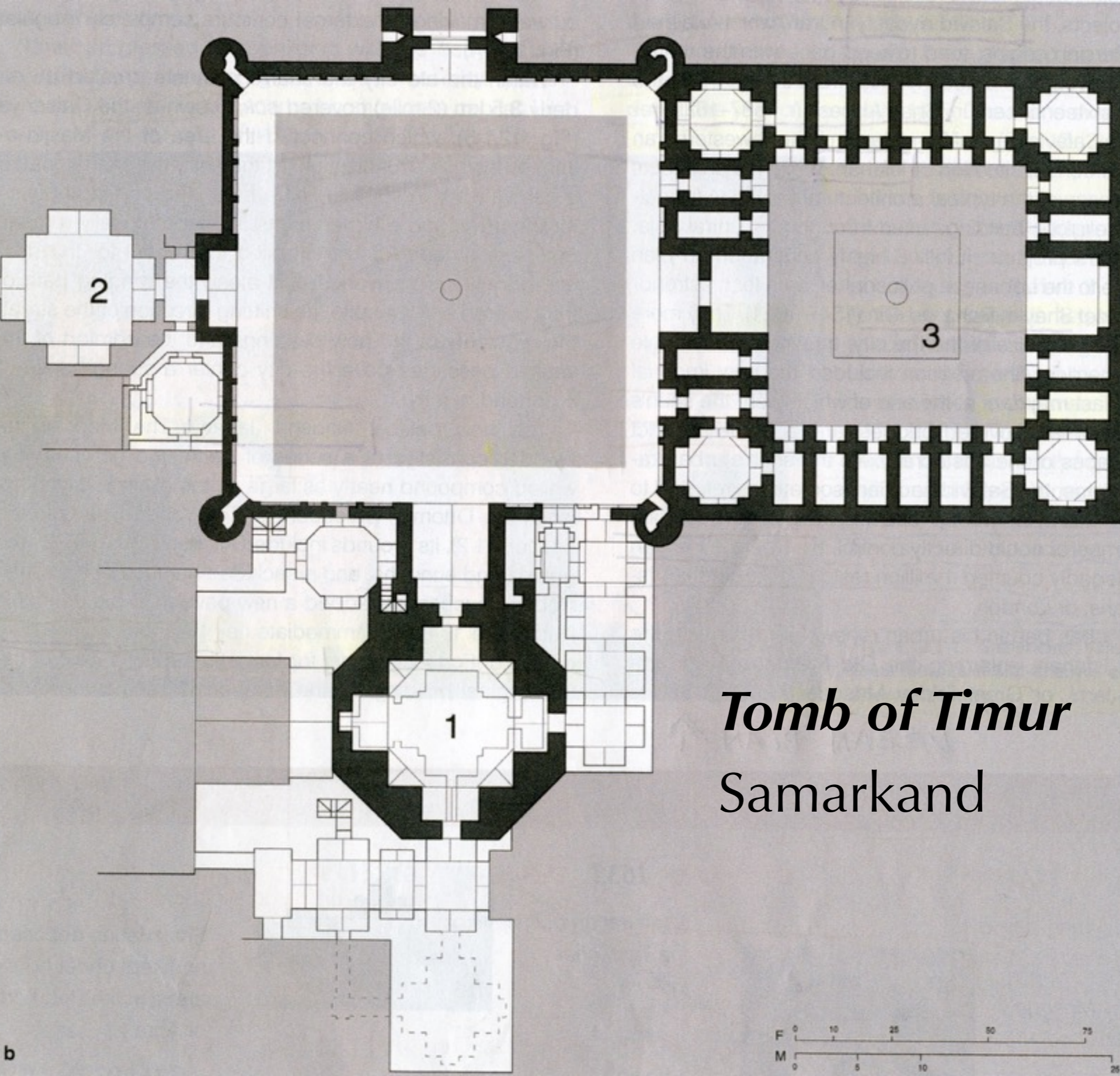


THE NINE SQUARE GRID

- ancient universal diagram for organizing existential space and hierarchy



Registan in Samarkand



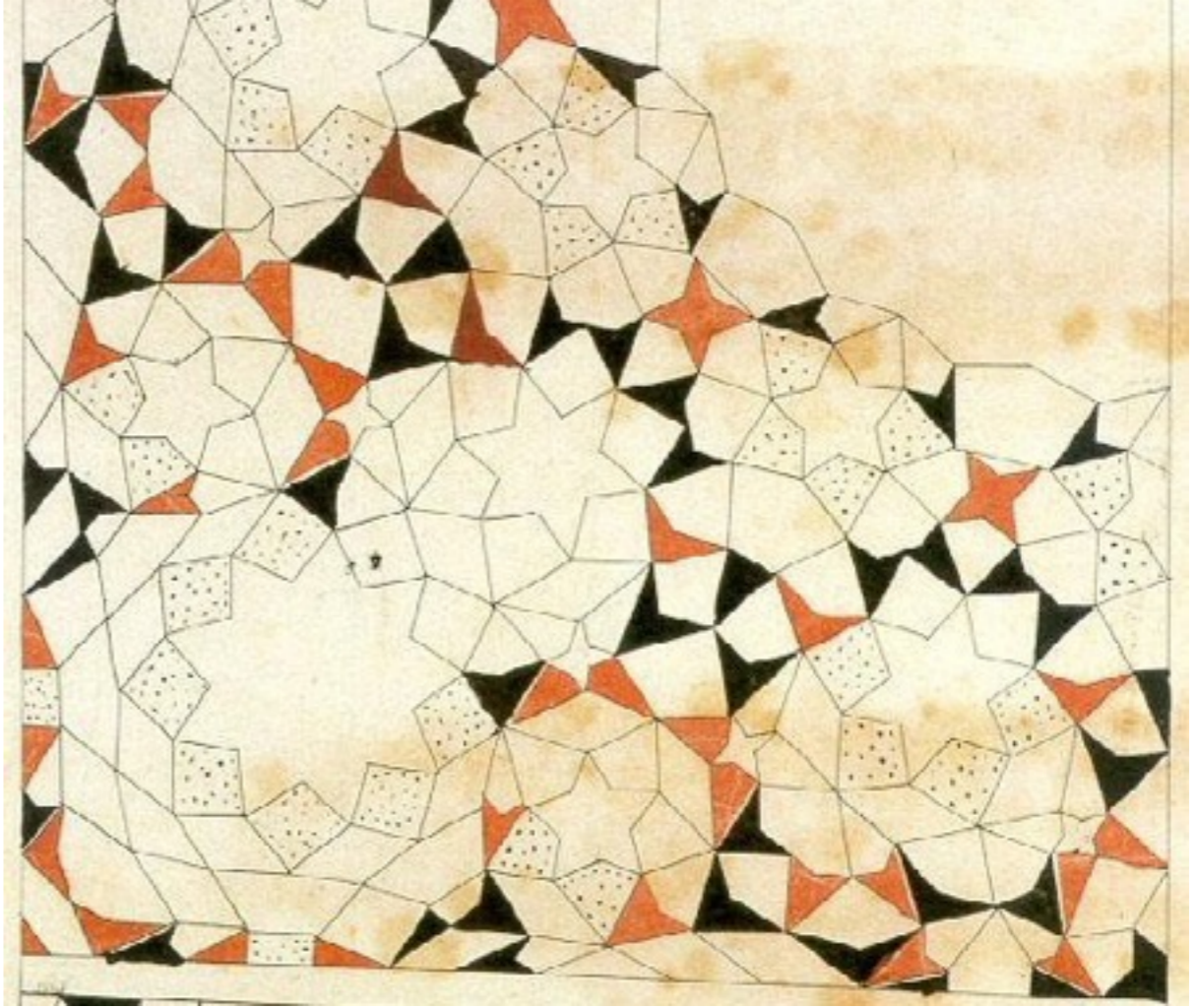
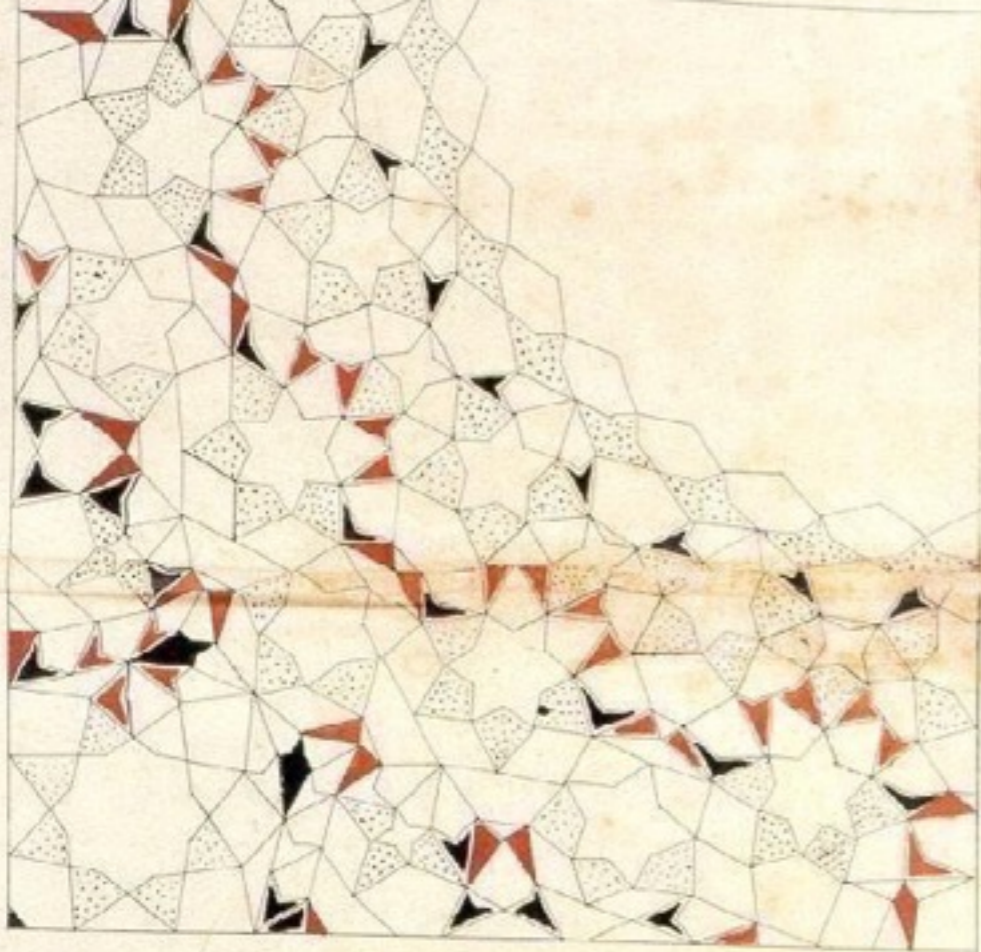
Tomb of Timur
Samarkand



Tomb of Timur

Tomb of Timur





MUQARNA





MUQARNA

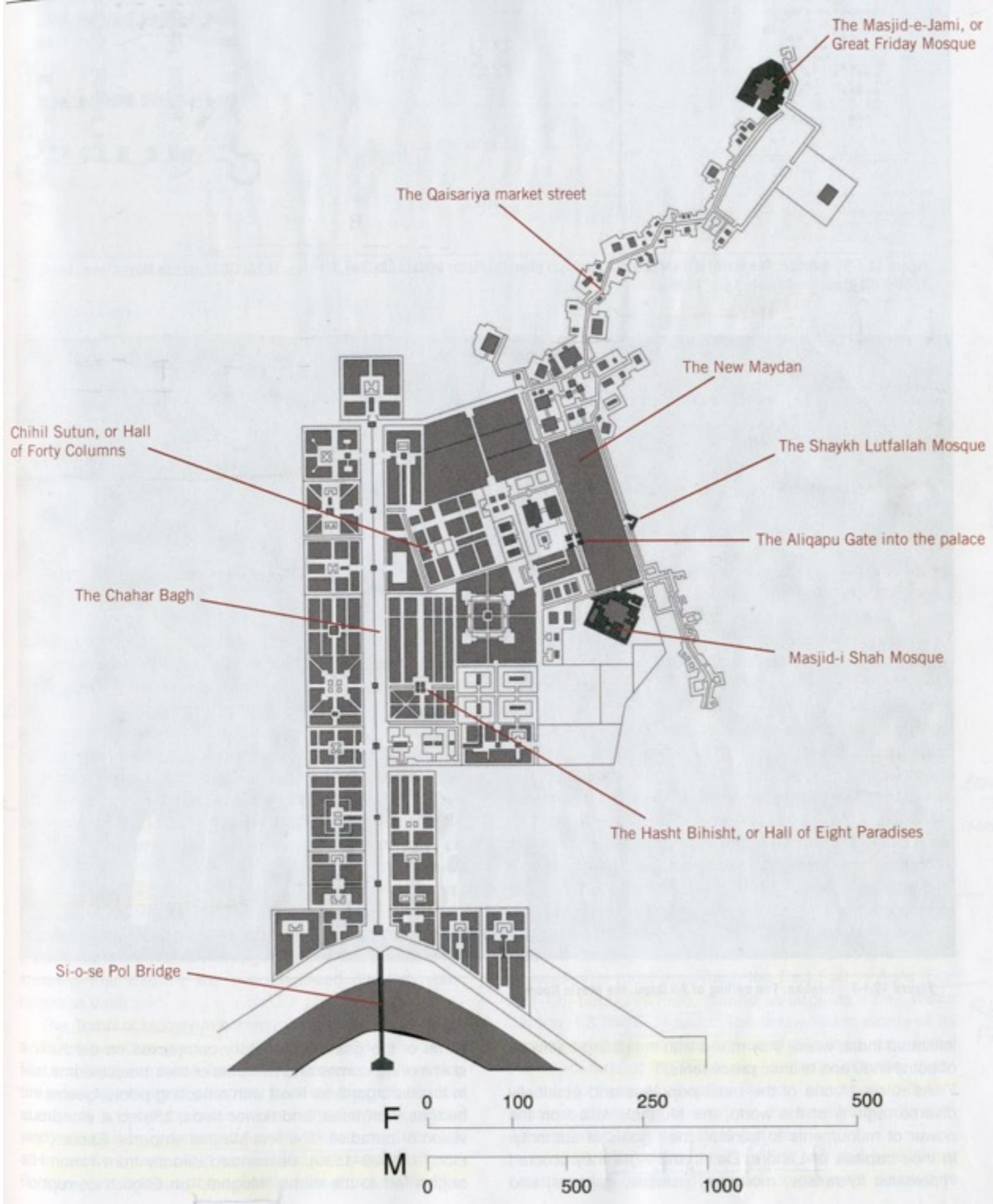
SAFAVID DYNASTY

(Persians)

Shah Abbas

Ruled **1587-1629**

Establishes capital at ***Isfahan***



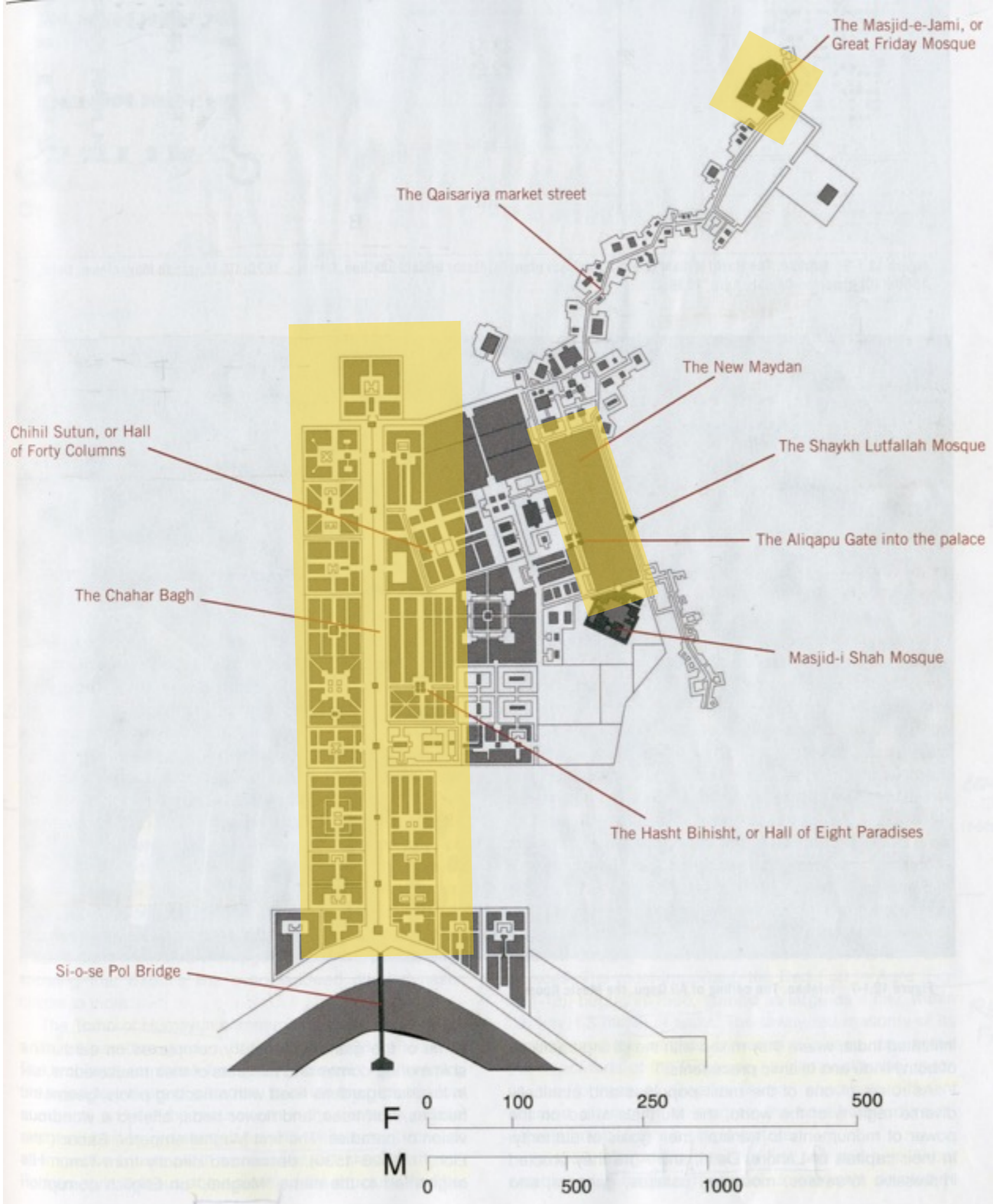
Isfahan

(ESS-fa-han)

Persia

Modern-day Iran

Urban Plan featuring markets, mosques, water features, palaces, and a bridge



Isfahan

(ESS-fa-han)

Persia

Modern-day Iran

Urban Plan featuring markets, mosques, water features, palaces, and a bridge



Mirdamad Blvd

Tayebs

Chaharbagh Paei

Masjed Hakim

Kaisaria Bazar

Sepah

Sepah St

Naqsh-e Jahan Square

Chehel Sotoun Palace

Imam Hossein

Taleghani St

Rajayi Park

Shah Mosque

Hasan Abad

amin

Ostandari St

Farshadi St

Amadegah St

anvari

Sayed Ali Khan St

Adi

Pasdarani St

CHARKHAB

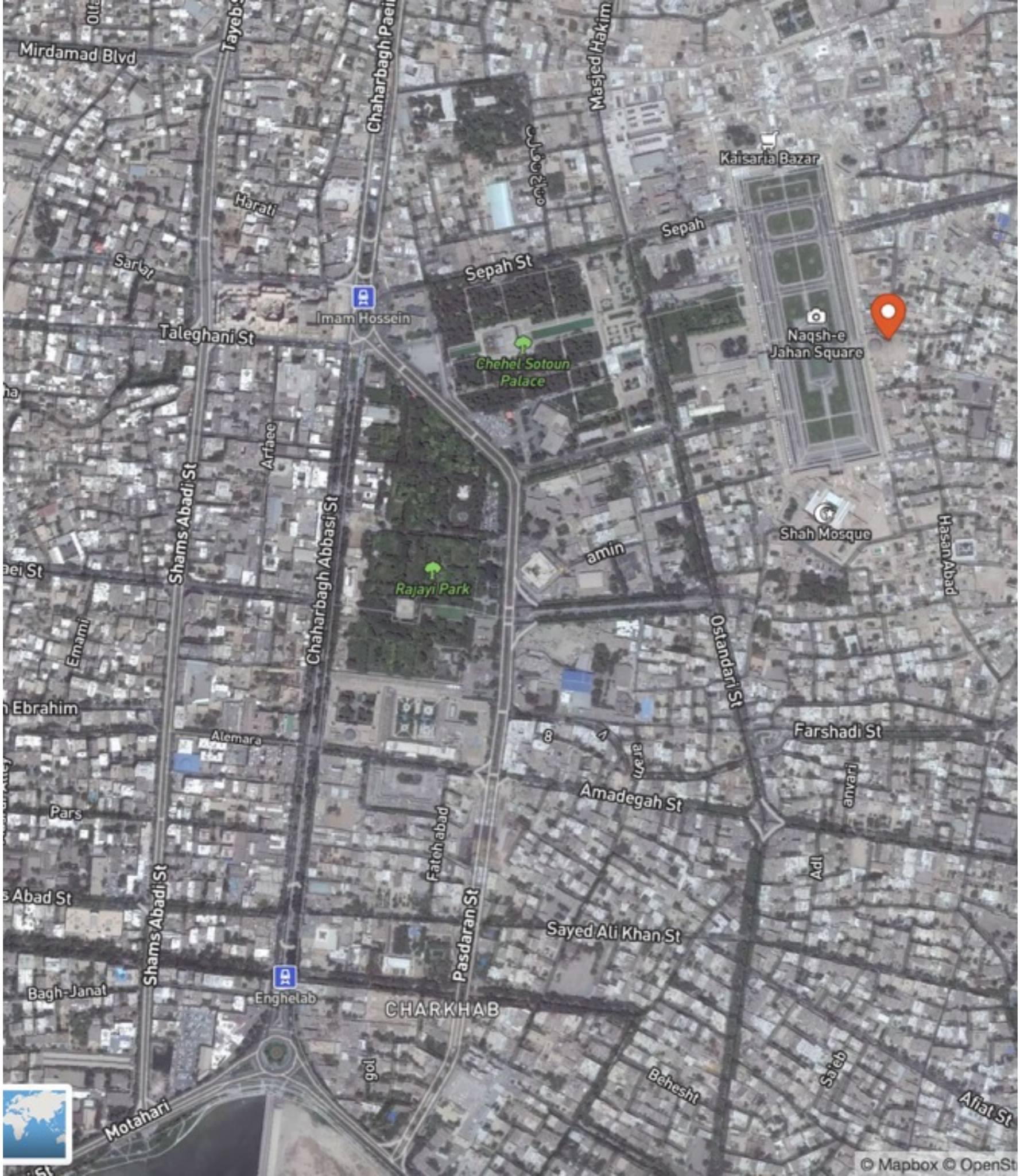
Behesht

Safab

Afshar St

Motahari





Mirdamad Blvd

Tayebs

Chaharbagh Paei

Masjed Hakim

Kaisaria Bazar

Harati

Sepah

Sarbi

Sepah St

Imam Hossein

Chehel Sotoun Palace

Naqsh-e Jahan Square

Taleghani St

Arfaee

Shah Mosque

Hasan Abad

amin

Rajayi Park

Shams Abadi St

Chaharbagh Abbasi St

Ostandari St

pei St

Emami

Ebrahim

Alemara

Farshadi St

Pars

Amadegah St

anvari

s Abad St

Fatch abad

Adi

Shams Abadi St

Pasdaran St

Sayed Ali Khan St

Bagh-Janal

Enghelab

CHARKHAB

gol

Behesht

Safab

Motahari

Afshar St





Masjid-e-Jami or the ***Great Friday Mosque*** in the Old City



Masjid-e-Jami or
the *Great Friday Mosque*

Masjid-e-Jami or the *Great Friday Mosque*





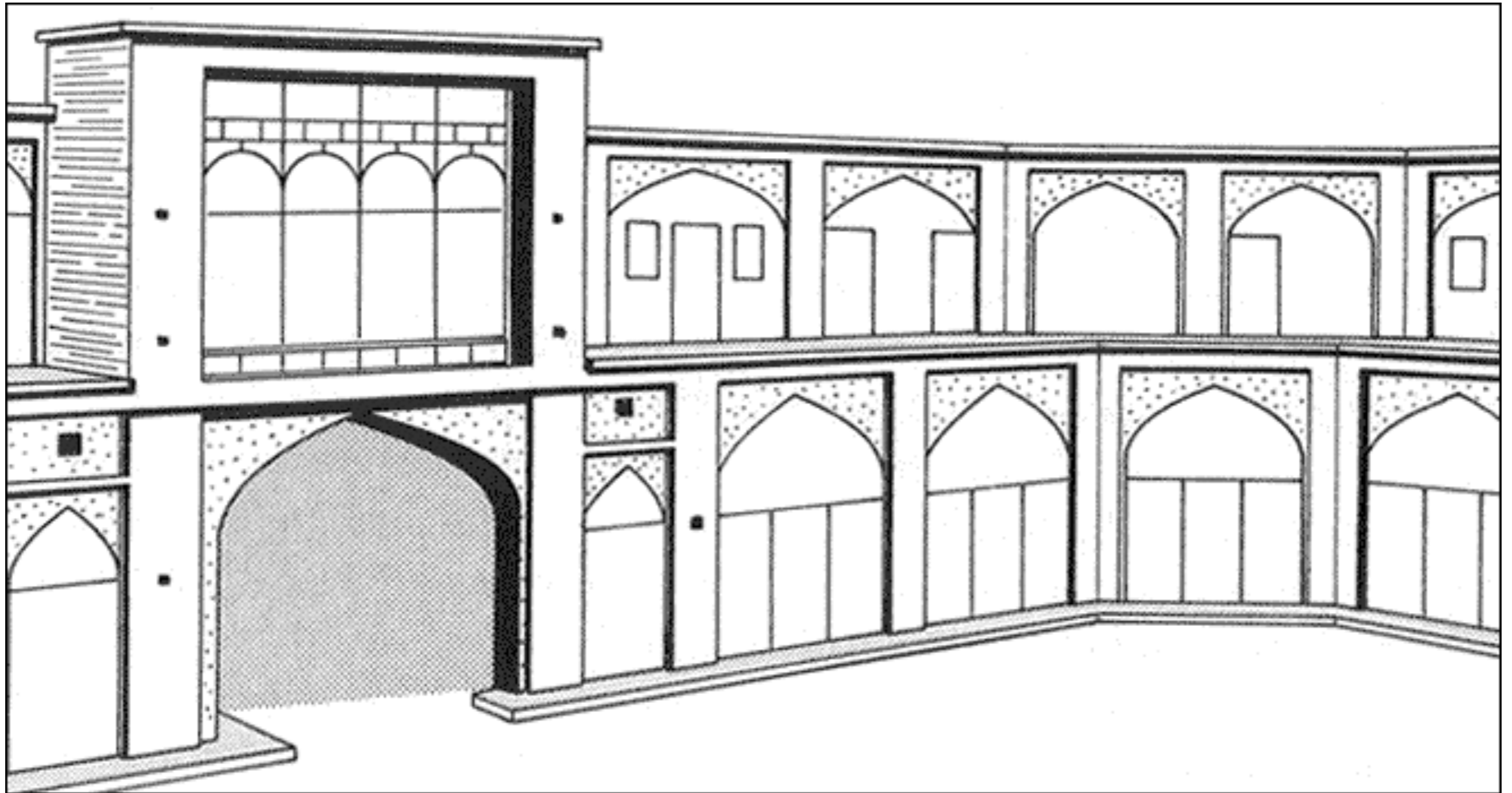
Masjid-e-Jami or
the *Great Friday Mosque*



Masjid-e-Jami or the *Great Friday Mosque*



Covered bazaar or market leading from the Old City to the ***New Maydan*** (new market)

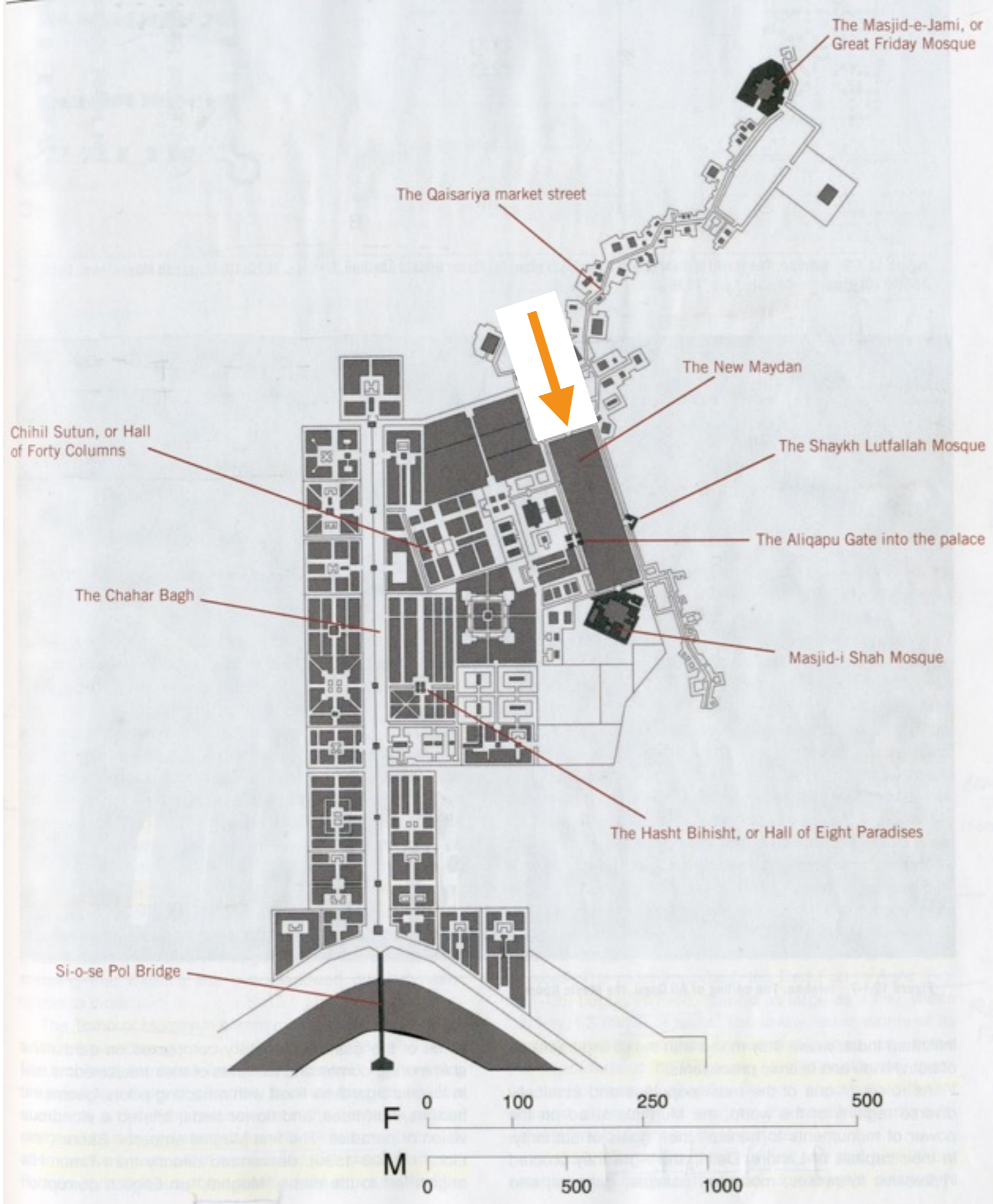


caravanserai

A hostel or stopping place for caravans on the Silk Road
(basically think of it as a Motel-6)



caravanserai



Isfahan

(ESS-fa-han)

Persia

Modern-day Iran

Urban Plan featuring markets, mosques, water features, palaces, and a bridge



New Maydan - 1598



MASJID-I-SHAH

SHAYKH LUTFALLAH

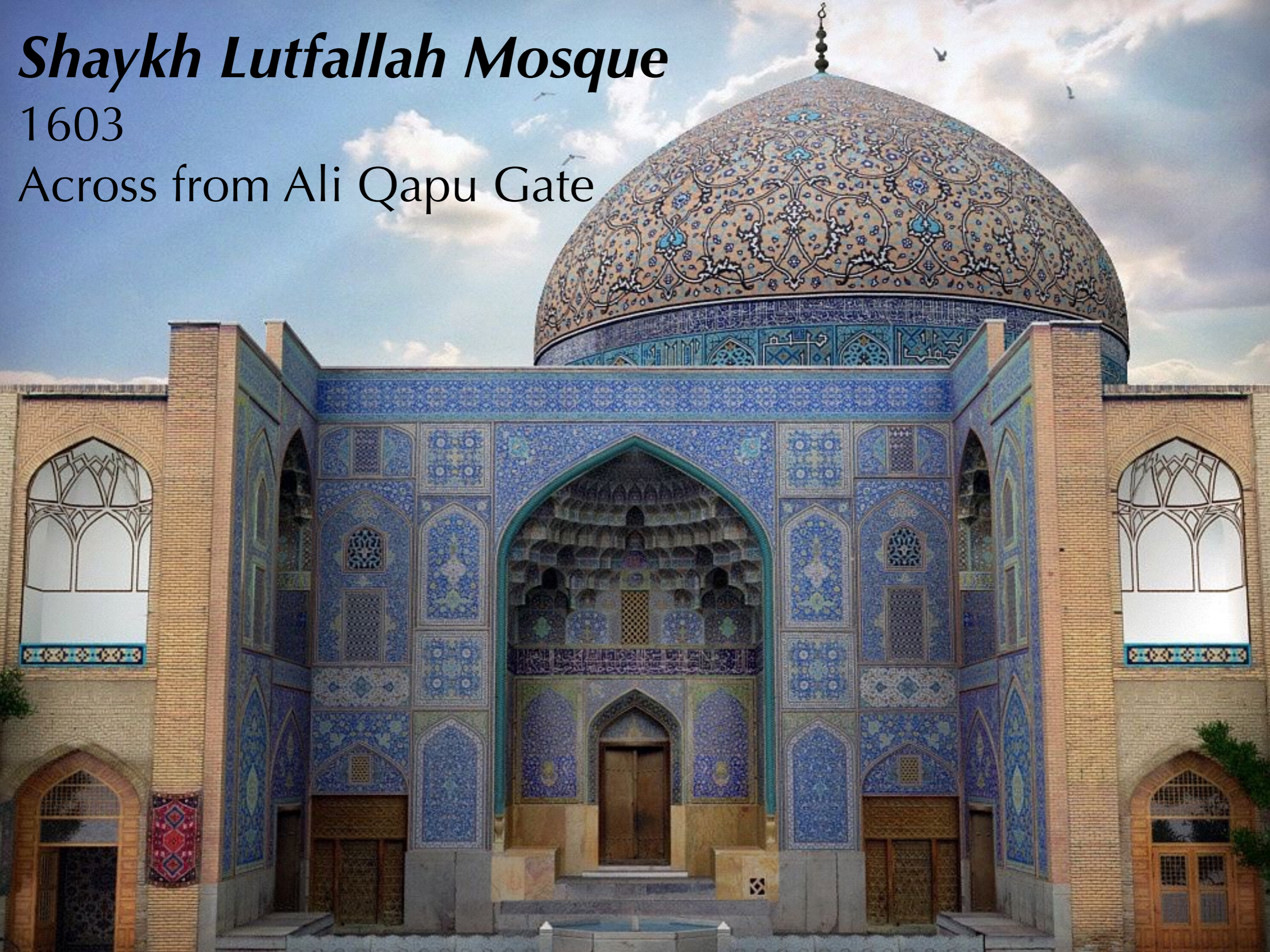
ALI QAPU GATE

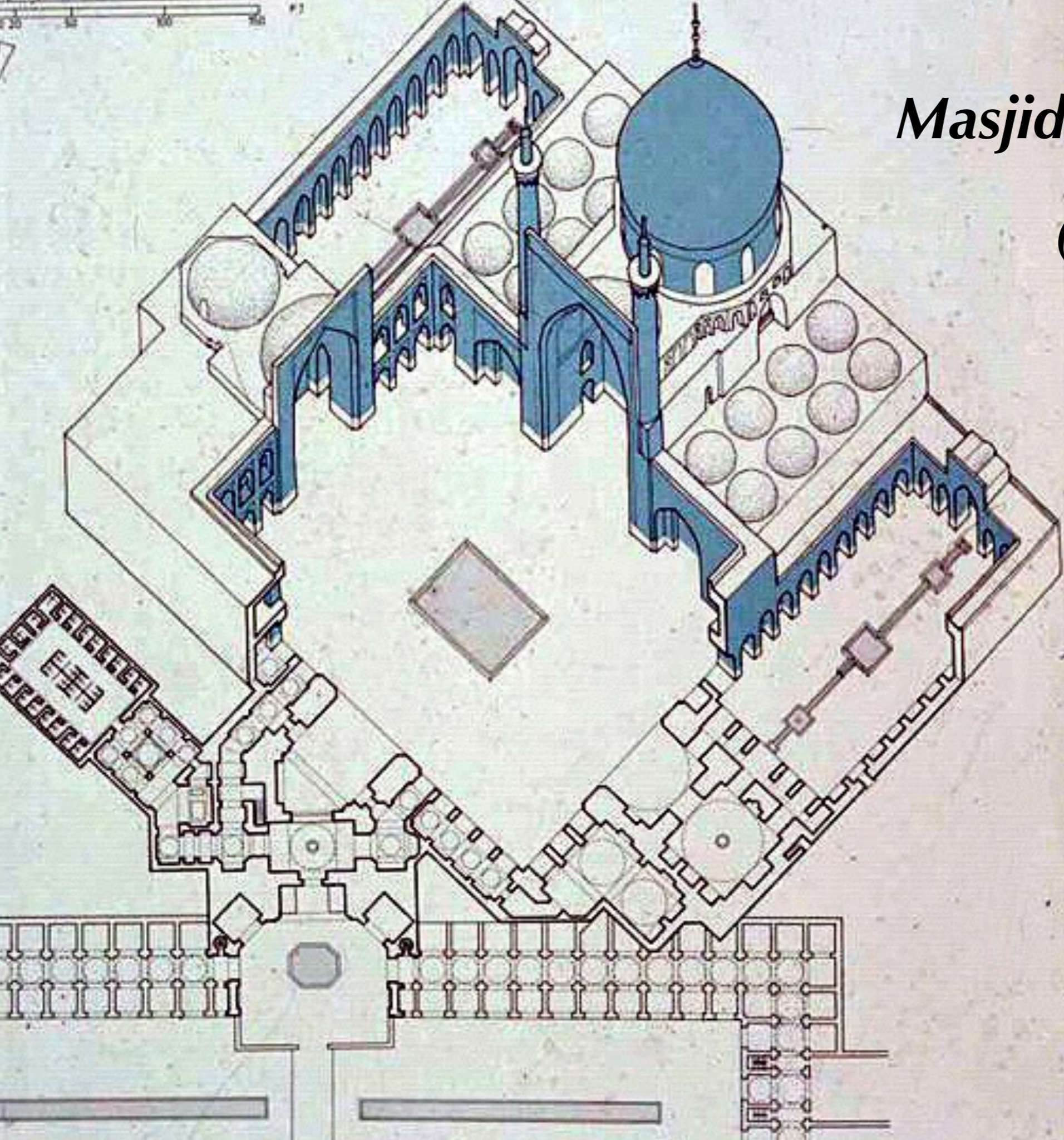
New Maydan - 1598

Shaykh Lutfallah Mosque

1603

Across from Ali Qapu Gate



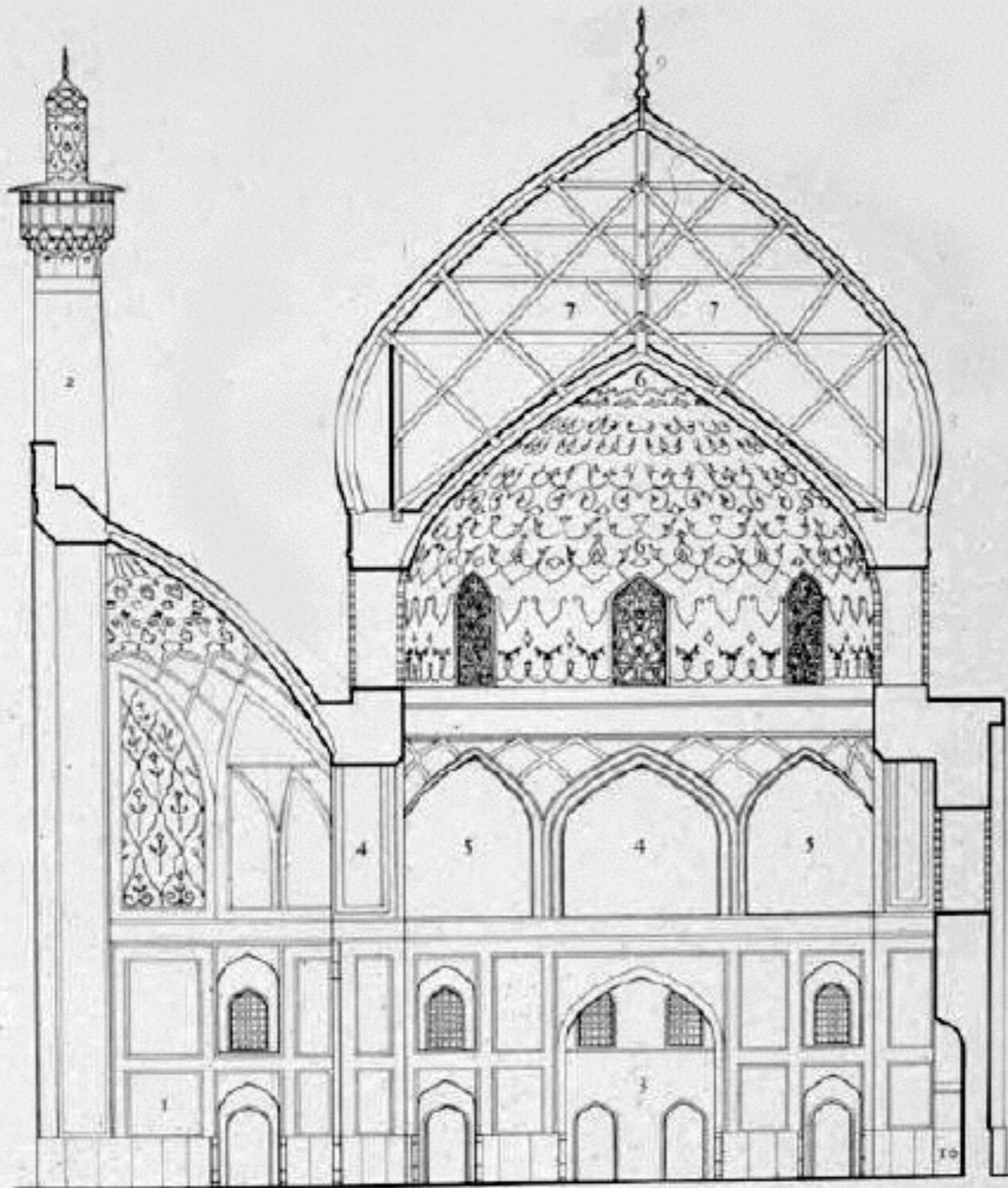


Masjid-i-Shah Mosque
(Shah's Mosque)

qibla

Masjid-i-Shah Mosque
1611

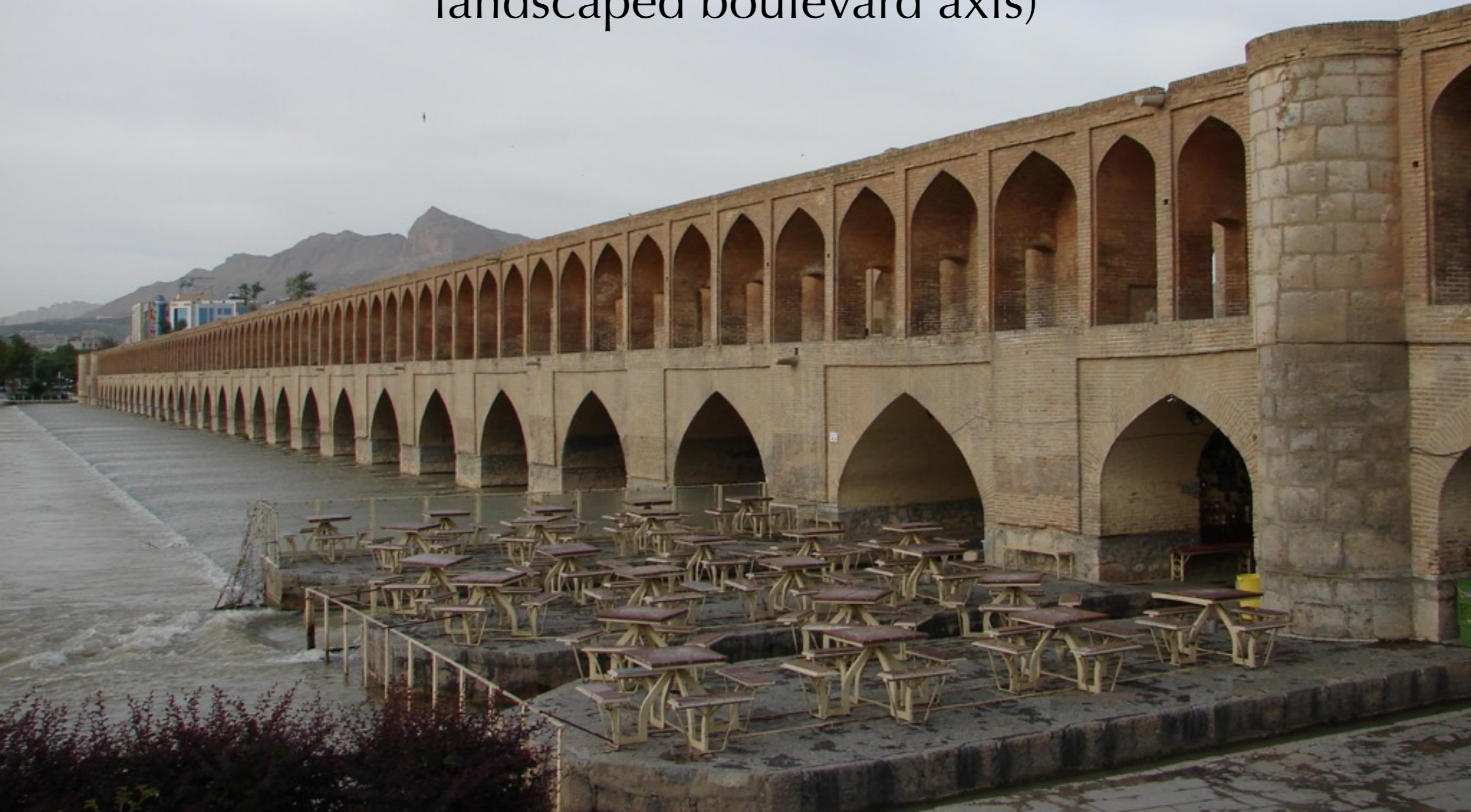




*Masjid-i-Shah
Mosque*

Si-o-se-Pol Bridge in Isfahan on axis with
Chahar Bagh Avenue (1602)

(**Chahar Bagh** means “four gardens,” but in Isfahan it’s the landscaped boulevard axis)





MUGHAL DYNASTY

Akbar the Great - Ruled 1556-1605

- 1) Hindu plus Islamic features
- 2) Mughals intermarry w Persians
- 3) Shared in bureaucracies

Akbar builds tomb for his father:

Humayun in **Delhi** c **1562**



Humayun Tomb in Delhi (1562)
chhatris on top (domed kiosks)

Humanyun Tomb in Delhi (1562)

chahar bagh is the four-square garden setting for the building





Inside the chahar bagh (four gardens)

CHAHAR BAGH



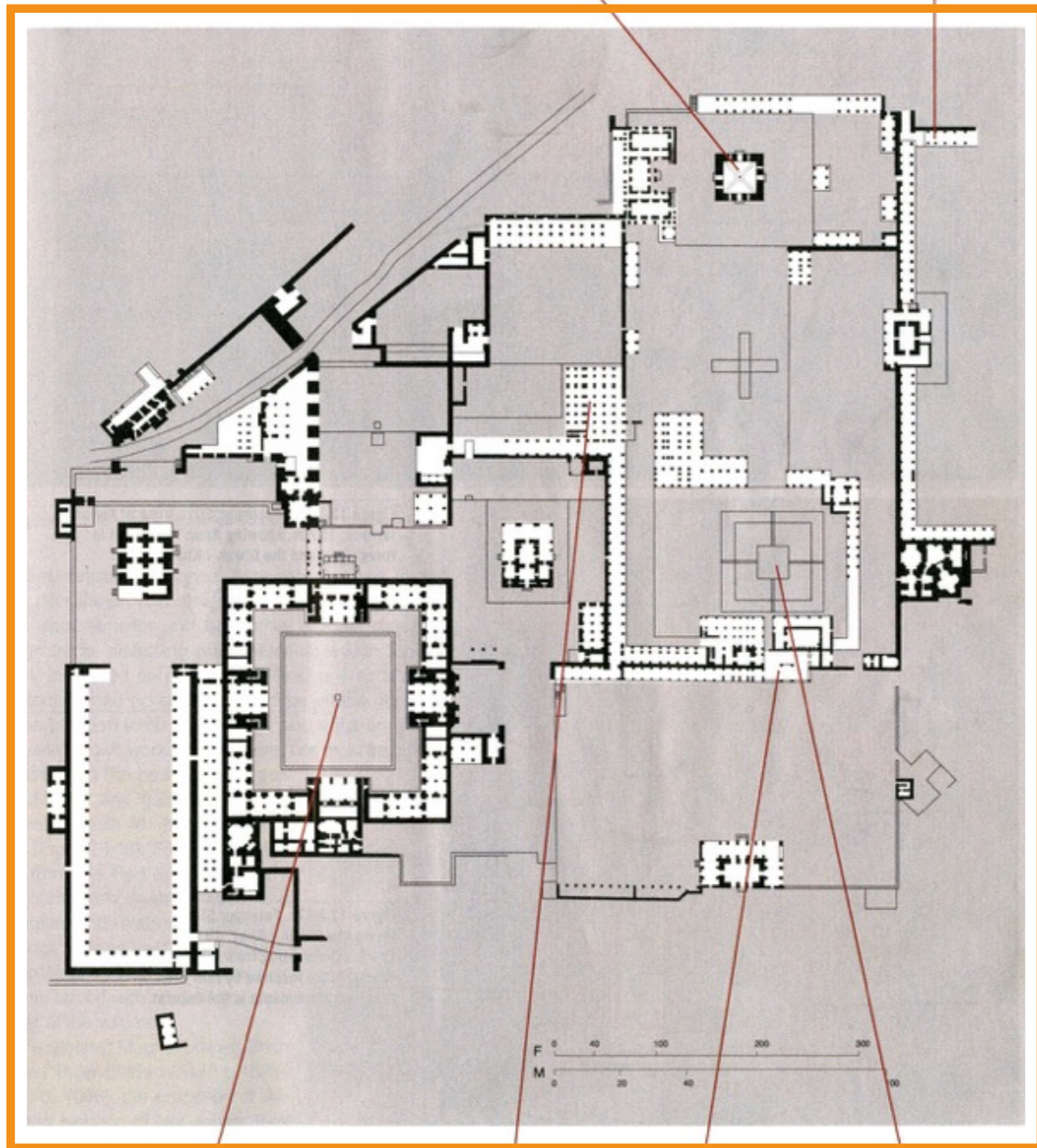
Red Fort in Agra (1566)

Akbar built a religious memorial for his son in 1569, and a few years later turned the area *once called Sikri* into a city:

FATEHPUR SIKRI - 1571

Fatehpur means City of Victory

(City of Victory at Sikri)



Diwan-i Khas

Entry court to palace

Fatehpur Sikri

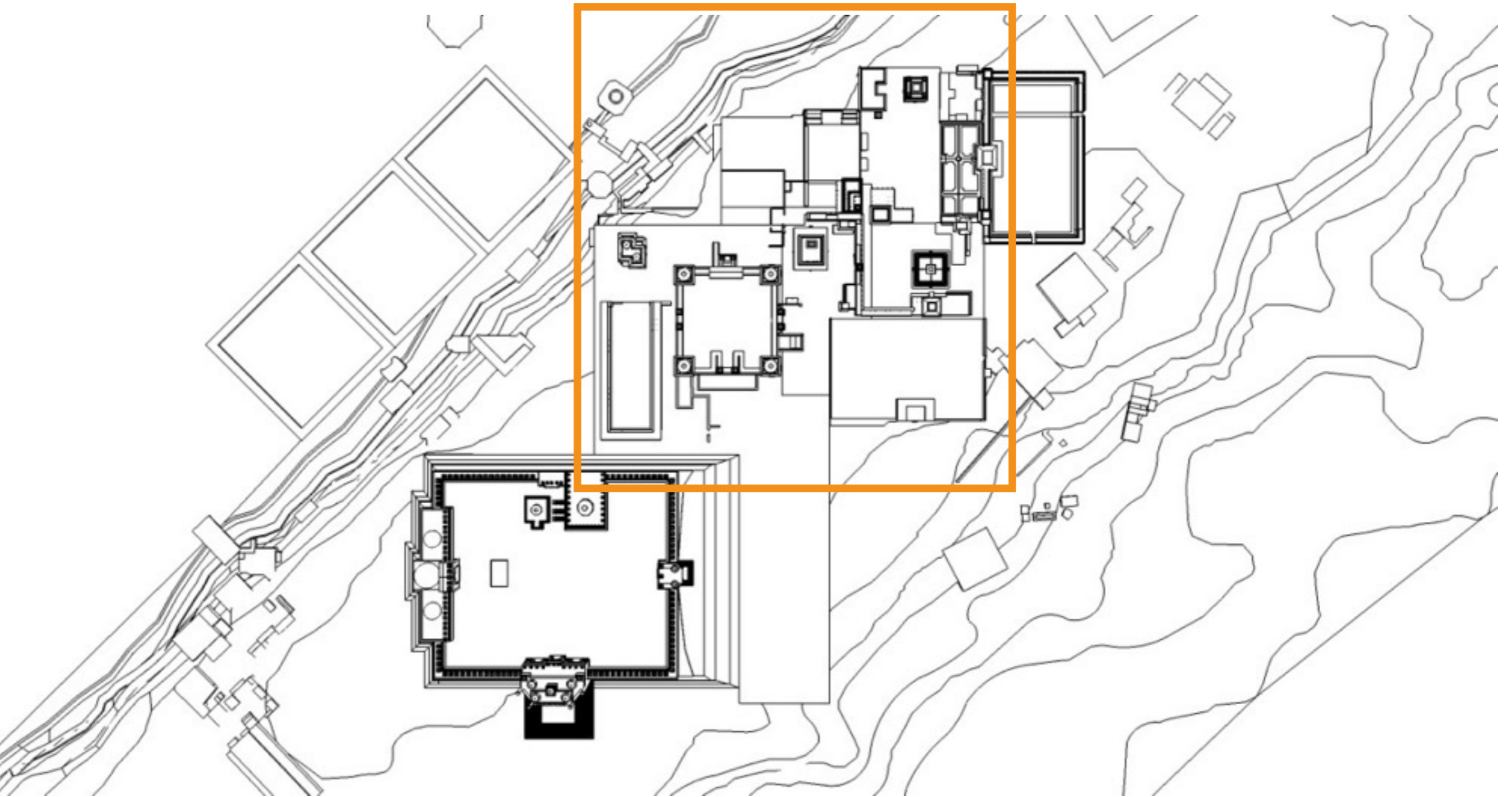
c 1571

Zenana, women's palace

Panch Mahal

Akbar's apartments

Anup Talao pool



***Fatehpur Sikri* in Agra - c 1571**

The best example of a mix of Islamic and Hindu



outside



inside

Main Gate - ***Buland Darwaza*** (1602)

chhatris on top (little domed kiosks)



mosque

khanqah

Main Entry Court



khanqah of Shaykh Salim (religious memorial or tomb)
chhatris on top (domed kiosks)



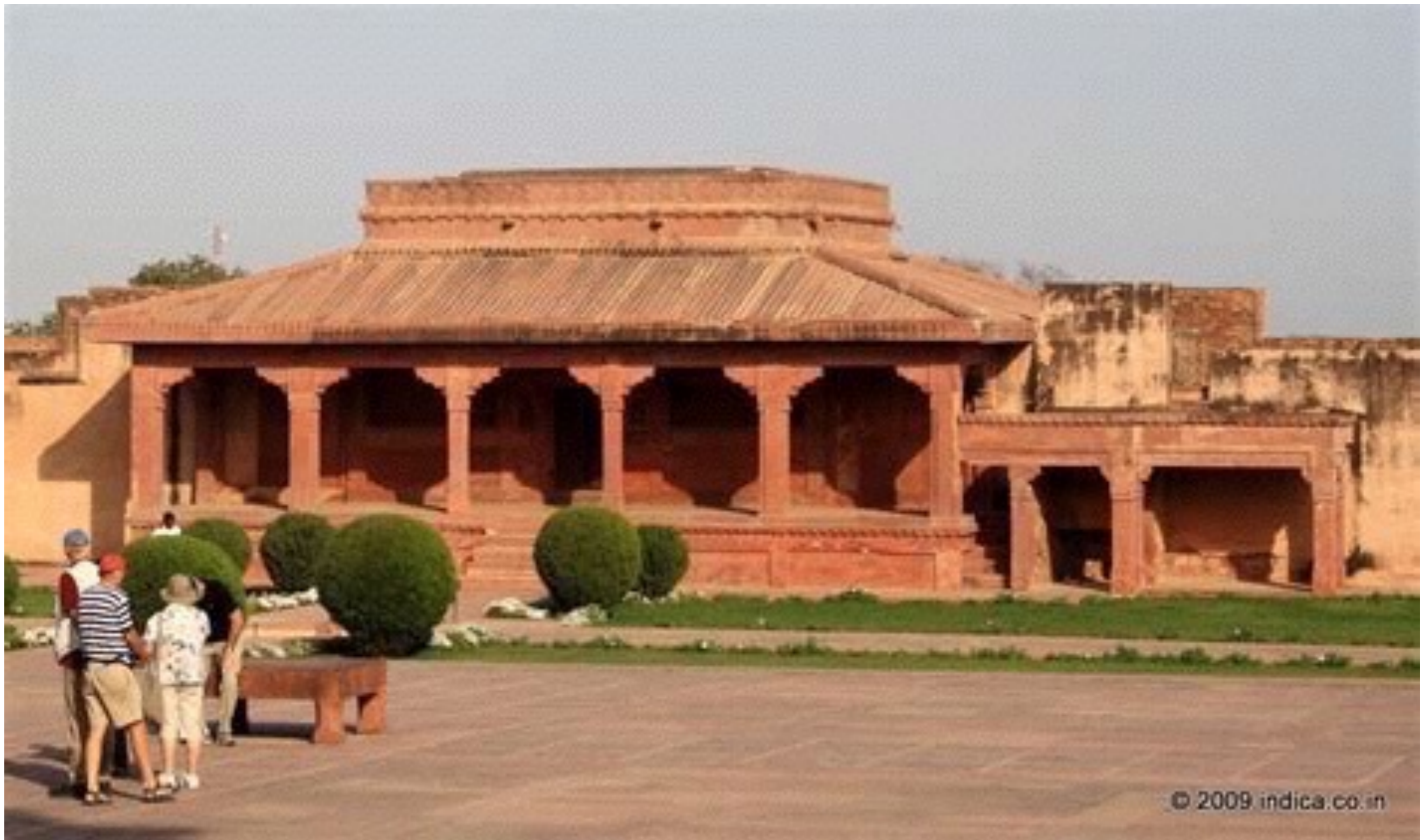
Panch Mahal is a multi-tiered hypostyle hall
Panch Mahal features jali screens



Anup Talao Pool



Diwan-i-Khas - the Hall of Private Audience



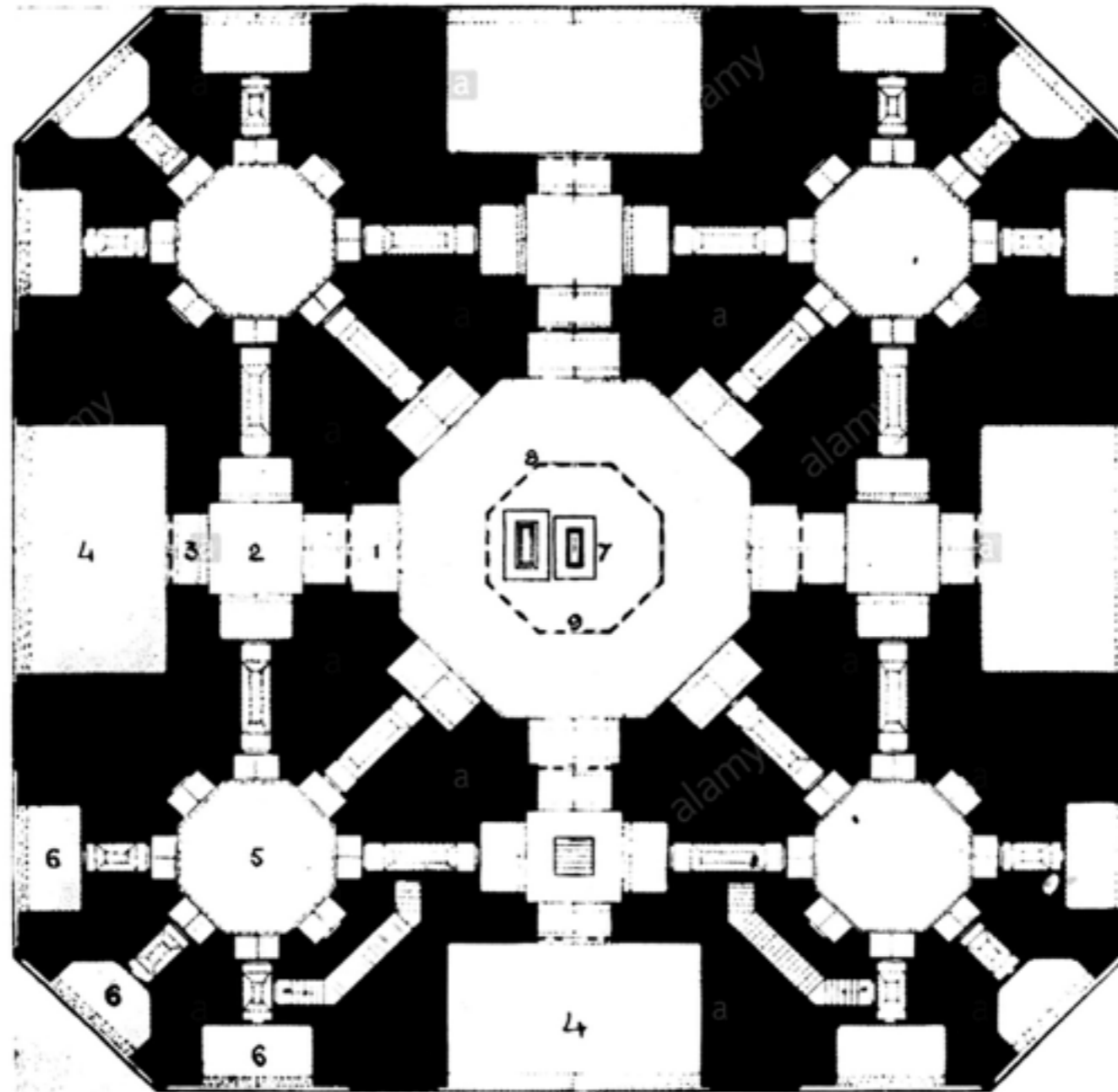
Diwan-i-Aam - the Hall of Public Audience

Fatehpur Sikri
Abandoned about 1610



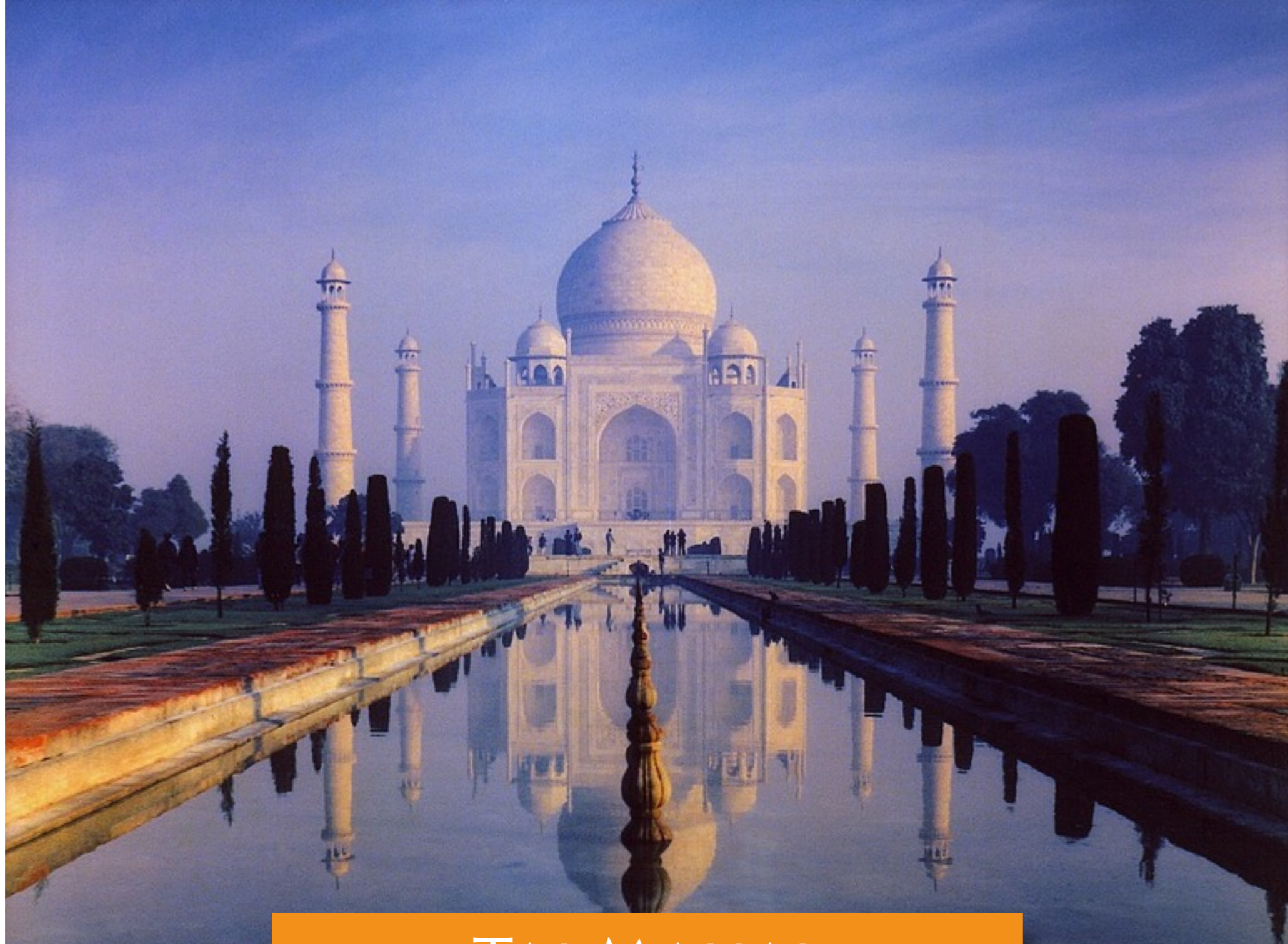
ITIMAR-UD-DAULAH

Agra 1628 — tomb for Nur Jahan's parents
Nur Jahan is the daughter-in-law of Akbar



TAJ MAHAL

Shah Jahan - Grandson of Akbar - Stepson of Nur Jahan
Shah Jahan Ruled 1628-1658



TAJ MAHAL

1632

for Mumtaz, Shah Jahan's favorite wife

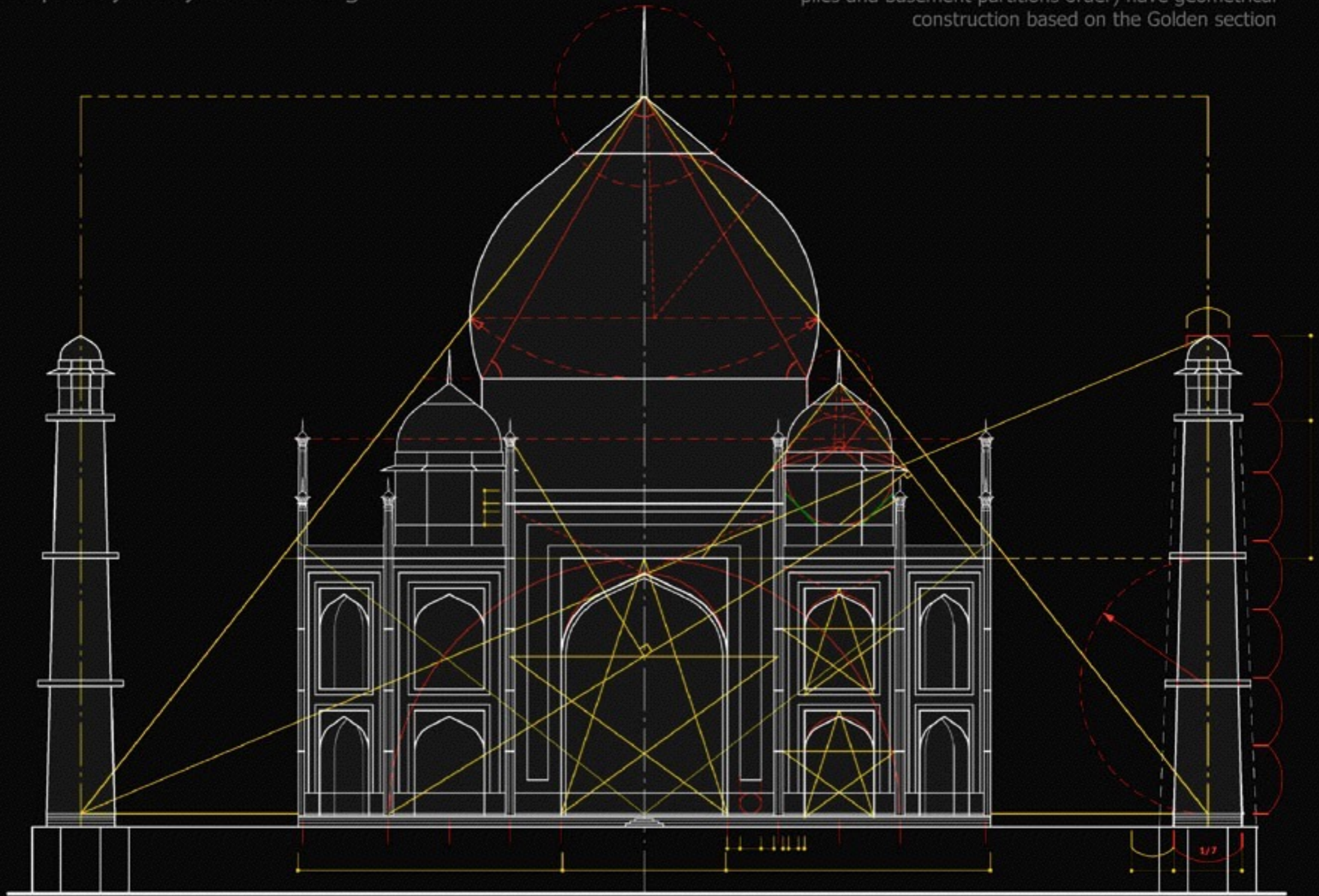


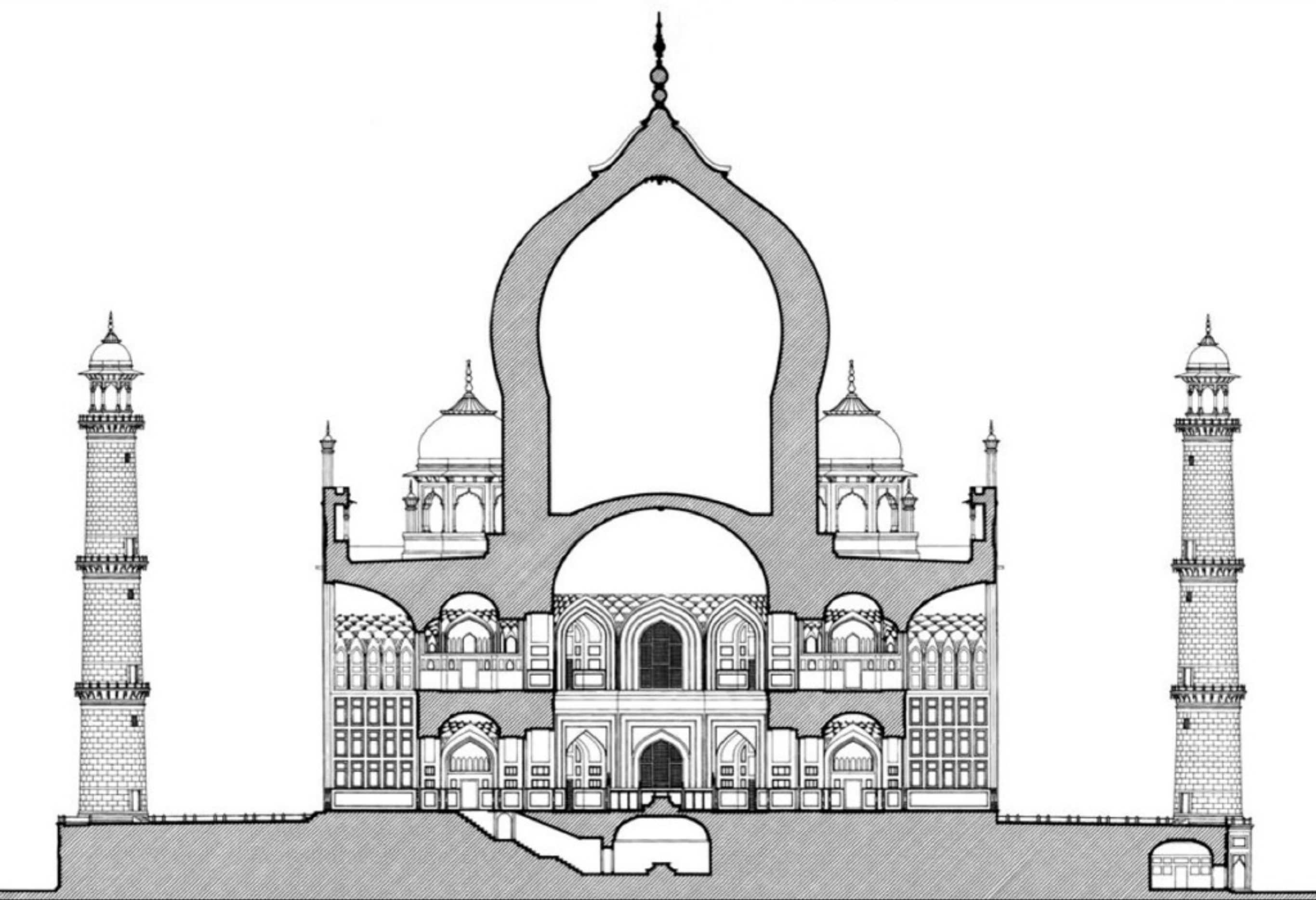


The ensemble façade

Completely analytical drawing

It was detected, that as overall composition so as discrete details (for example, lotus flowers on the piles and basement partitions order) have geometrical construction based on the Golden section





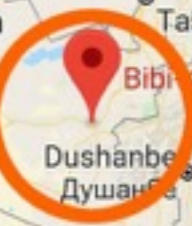
end



Istanbul

Samarkand

Isfahan



Bibi Khaym Mosque



Satellite

Google
Saudi Arabia

