## HISTORY OF ARCHITECTURE I ARC 2313 - SPRING 2022

### LECTURE-20 11 MARCH 2022

For Monday, 21 March

*Ingersoll*: 424-436

Reminder: Test #2

### Wednesday, 23 March 2022

(Lectures 12-21)

### ANCIENT CHINA

# The Chinese had architectural traditions and written language as far back as **7000** BCE

Little remains, however, due to the use of non-permanent materials (mud bricks and wood)

**Zhou Dynasty** dominated off and on until about 256 BCE and establishes capital city at **Chang'an** (City of Everlasting Peace)

Later they moved their capital to Luoyang

### Three big ideas:

WANGCHENG DIAGRAM

MANDATE OF HEAVEN

FENG SHUI // QI

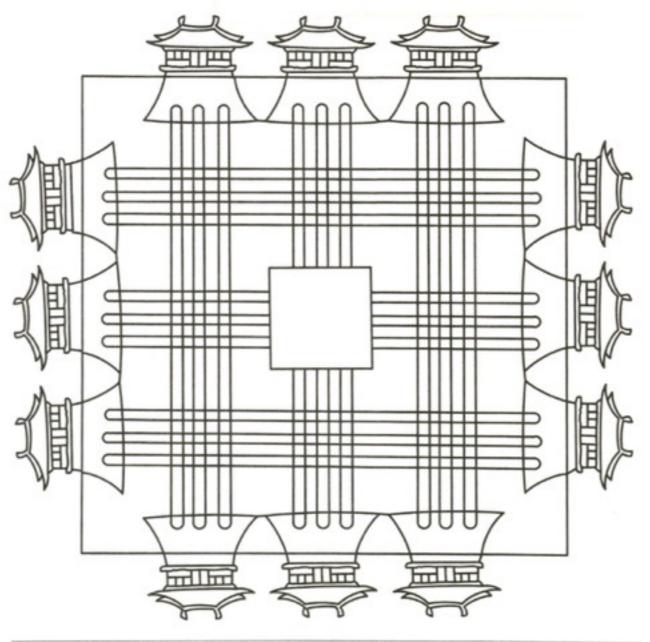


Figure 5.2-3 Wangcheng diagram for the "ruler's city."

## When the **Zhou Dynasty** moved their capital city they used the **wangcheng diagram**

(a *nine-square grid* with three gates on each side with Emperor in center)

### Do you recall the

### NINE-SQUARE-GRID

diagram from Islamic and Mughal architecture?

What was it called?



The *Mandate of Heaven* was bestowed upon the emperor in the first millenium BCE as the Chinese emperor was considered semi-divine and a "Son of Heaven"

### FENG SHUI

(fong-schway)

Ancient Chinese practice of finding a spiritual or psychological connection between human activity and its orientation to a physical environment (connection to universe)

QI

(chee)

The energy of the soul. Good *feng shui* leads to good *qi* 

### Cardinal directions very important in the ancient Chinese architecture:

South: palace faced south to the Red Phoenix

East: region of the Blue Dragon - growth - upright tree

West: region of the White Tiger - autumn - harvest

North: region of cold winds - invaders - destruction

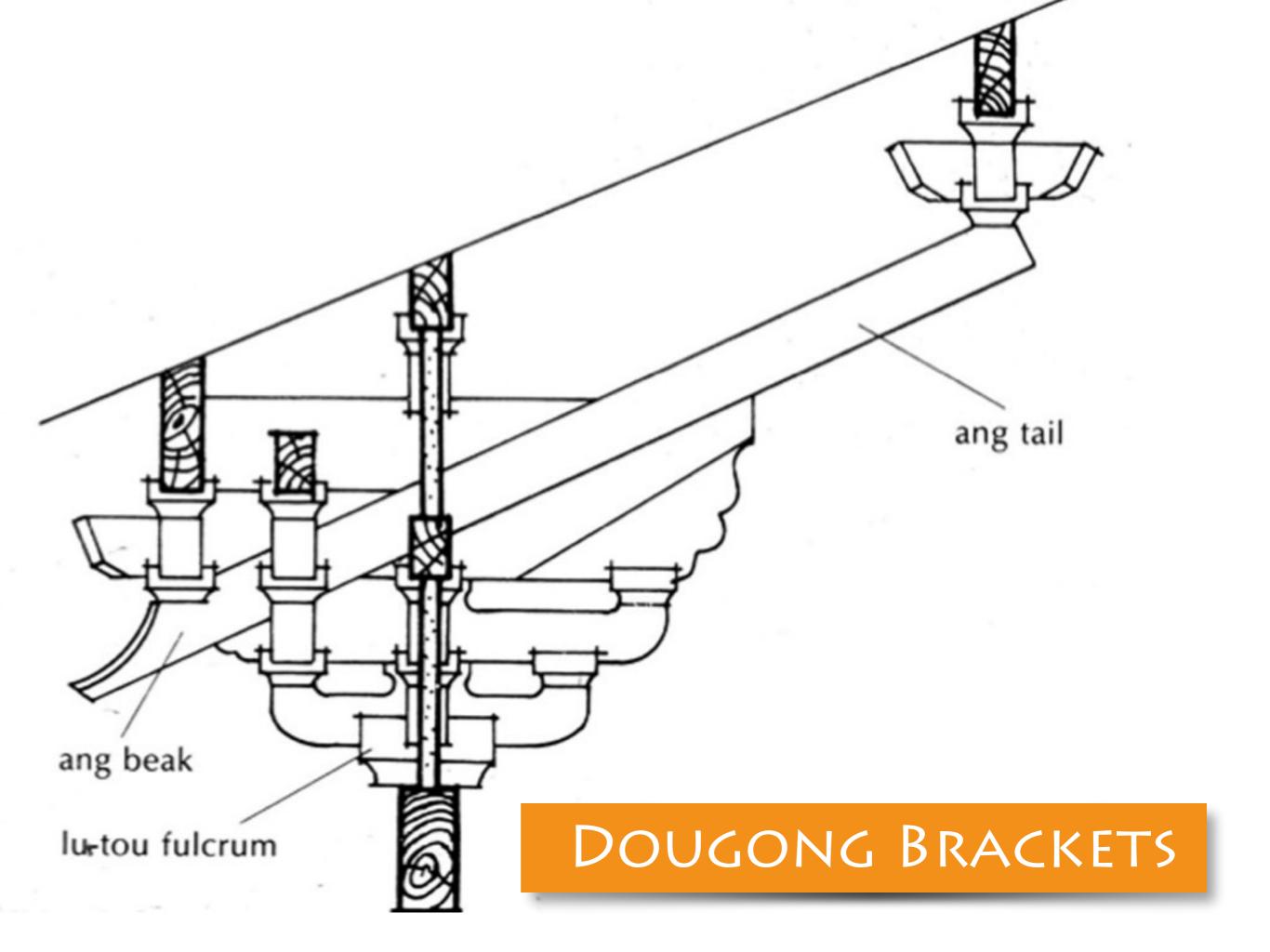
# Jian proportional bays used in Chinese buildings.

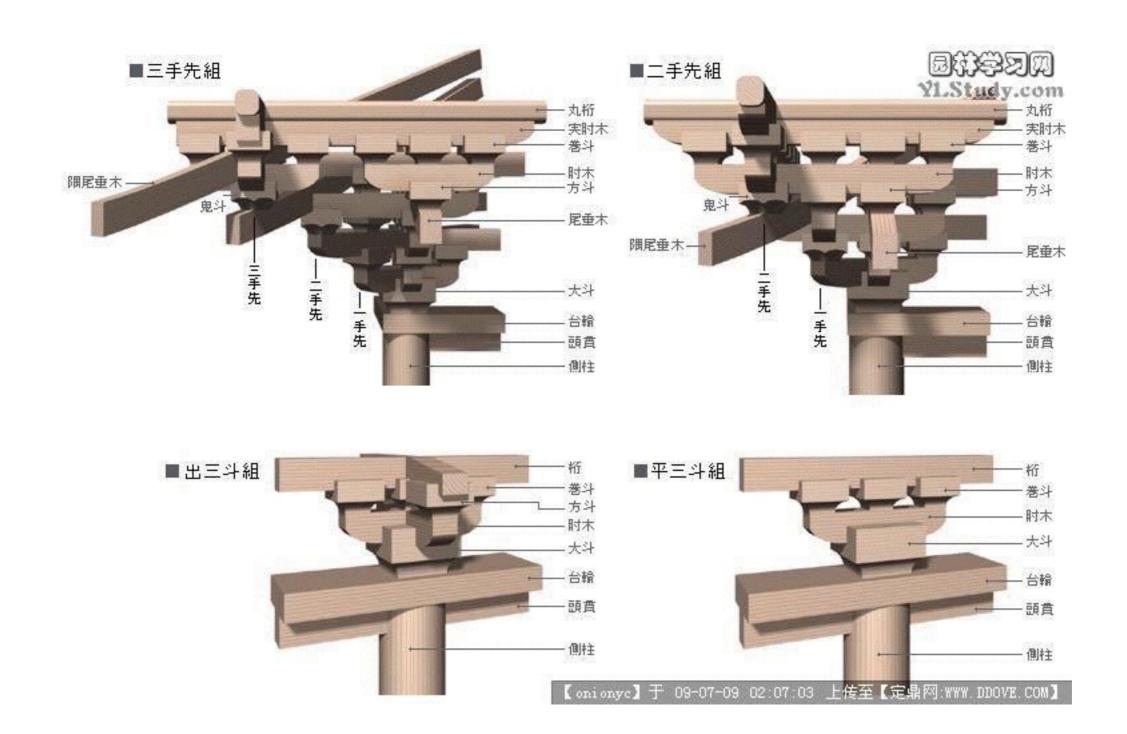
### JIAN

gee-EN

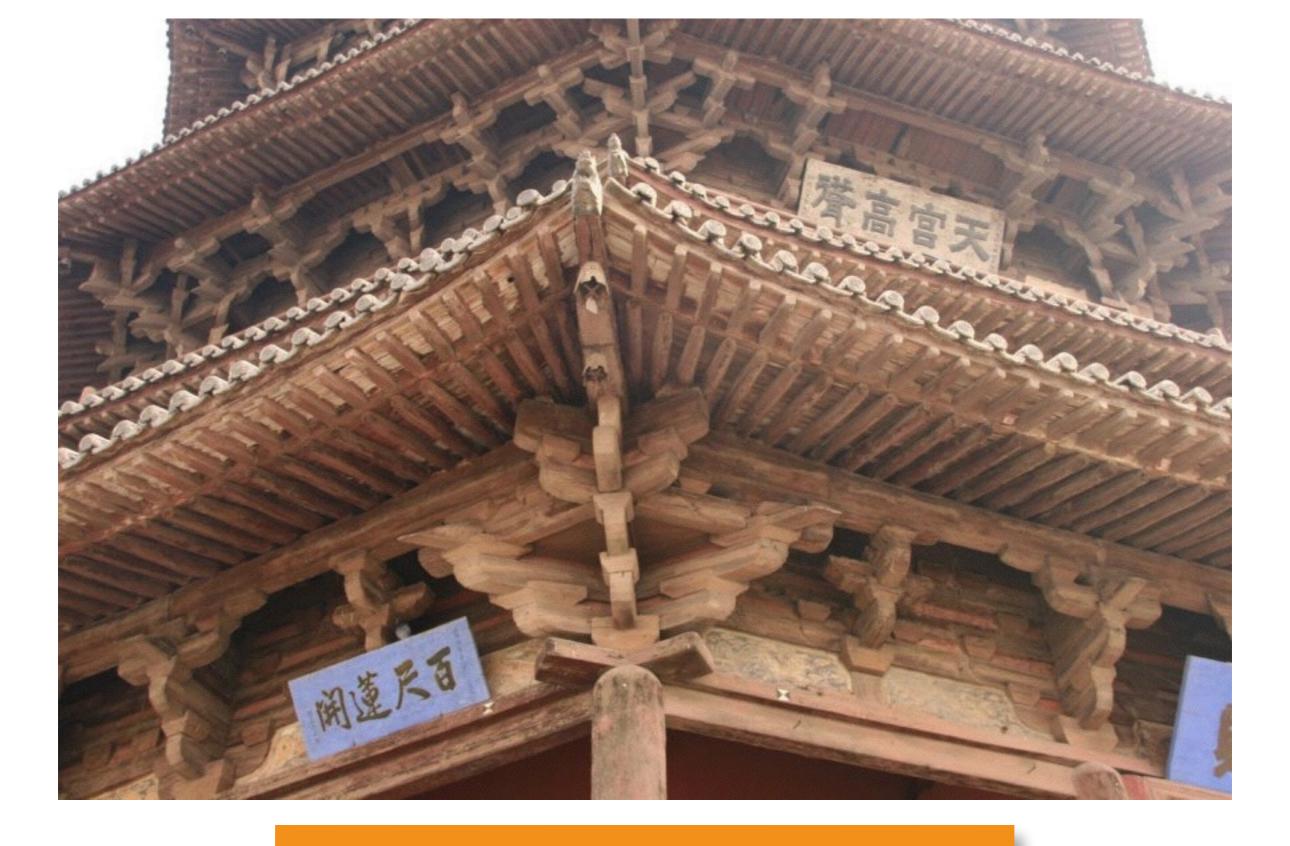
Building systems:

- foundation platform
- timber frame
  - -jian proportions
  - -10' x 20' bays
  - -dougong bracket
  - decorative roof





### DOUGONG BRACKETS



### DOUGONG BRACKETS

diffused loads, absorbed forces



### Qin dynasty (cheen)

consolidated by

5HI HUANGDI (221-210 BCE)

(she-WONG-dee)

reputation as ruthless military leader

- national written language
- universal currency
- national straight highways
- Great Wall

### GREAT WALL OF CHINA

- ¶ World's first great public works project
- ¶ The Great Wall continued to be built and consolidated during later empires the most photographed parts are from the Ming dynasty c 1600 CE
- ¶ Defense from the northlands
- ¶ Protection, tribute, tolls along Silk Road
- ¶ Symbol of Chinese identity





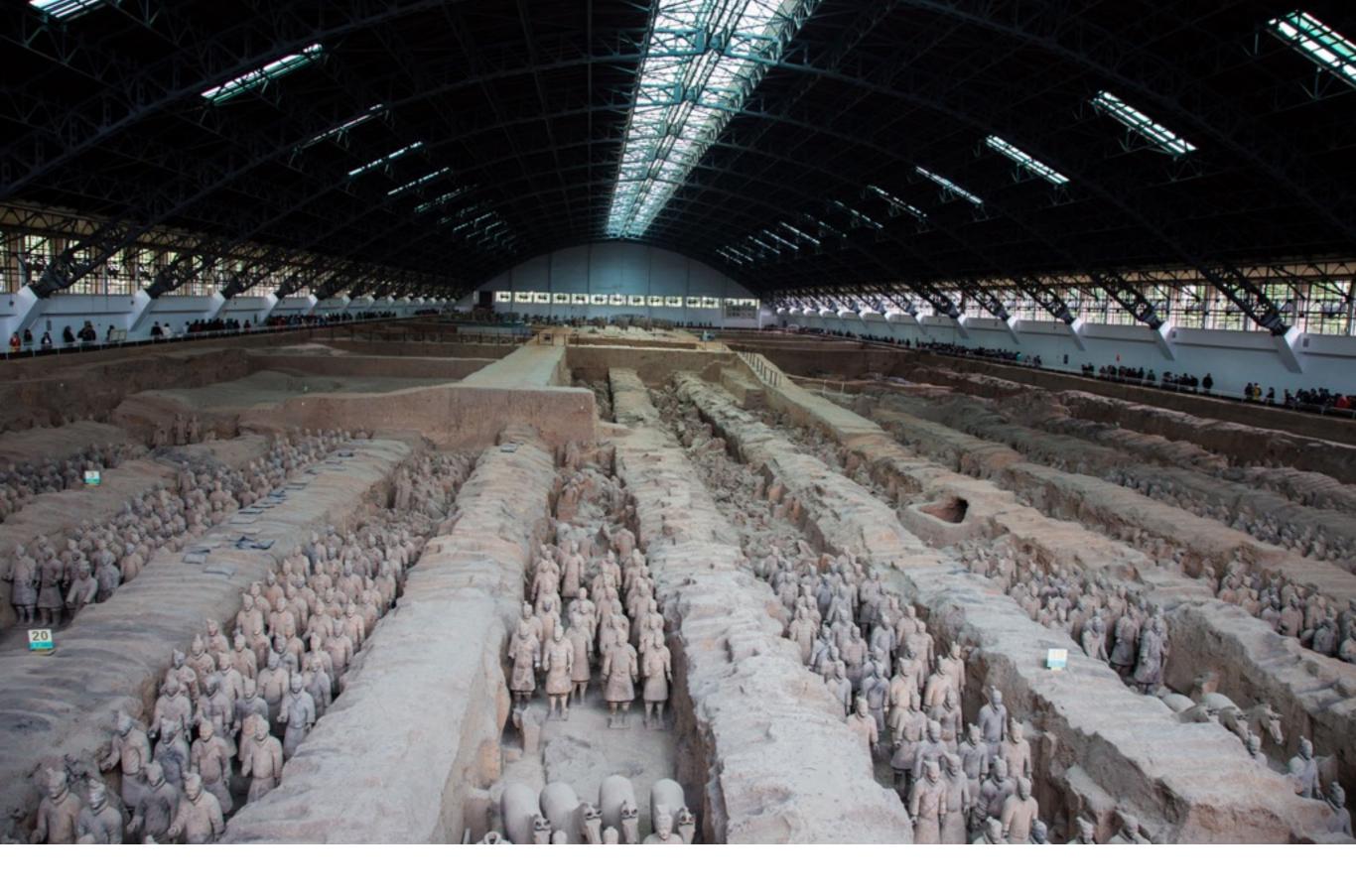




#### SHI HUANGDI'S ARMY

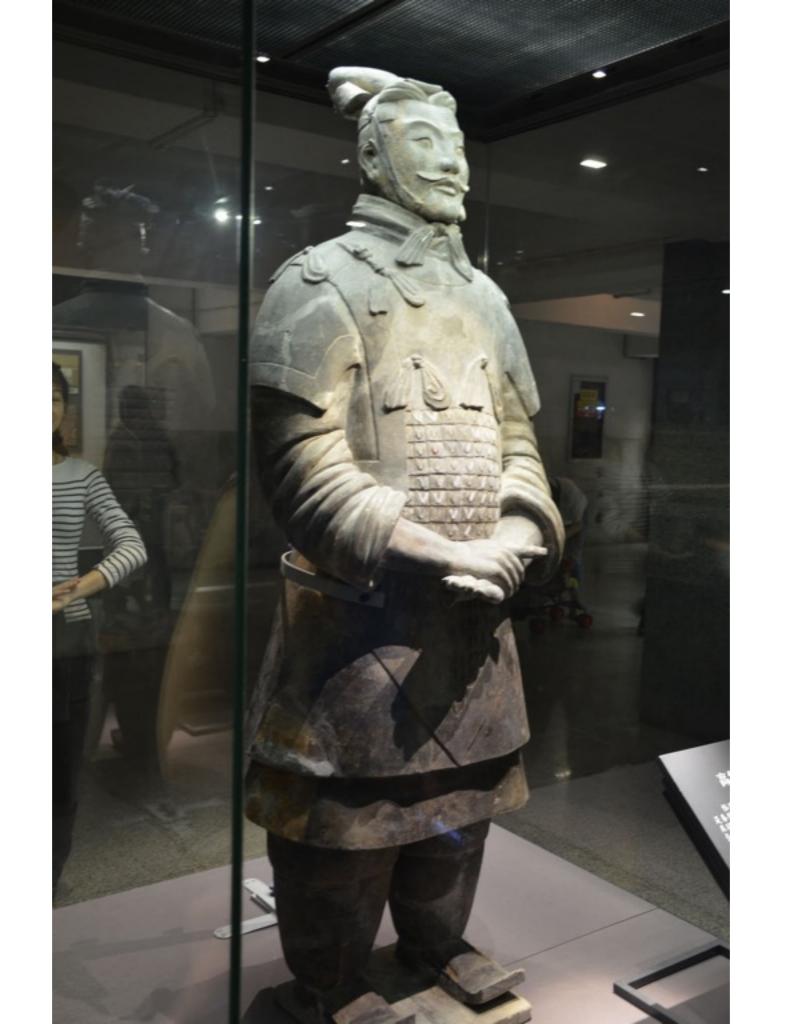
Shi Huangdi's burial mound - **tumulus** - was discovered in 1974. It was 33% bigger at the base than Khufu's pyramid in Egypt but only half as high

Archeaologists discovered 8000 terra cotta soldiers in nine cohorts (210 BCE)



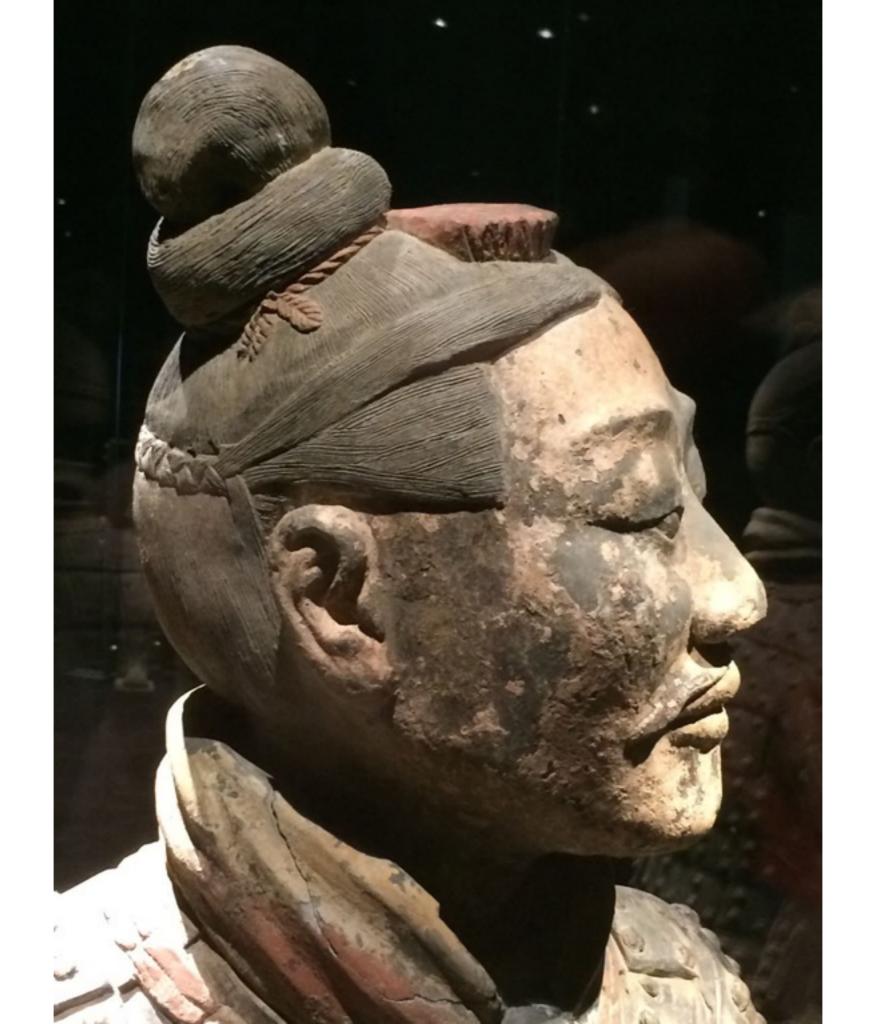
Shi Huangdi's Army near Xi'an (shee-an)











### SUI DYNASTY

581 - 605 CE

(su-way)

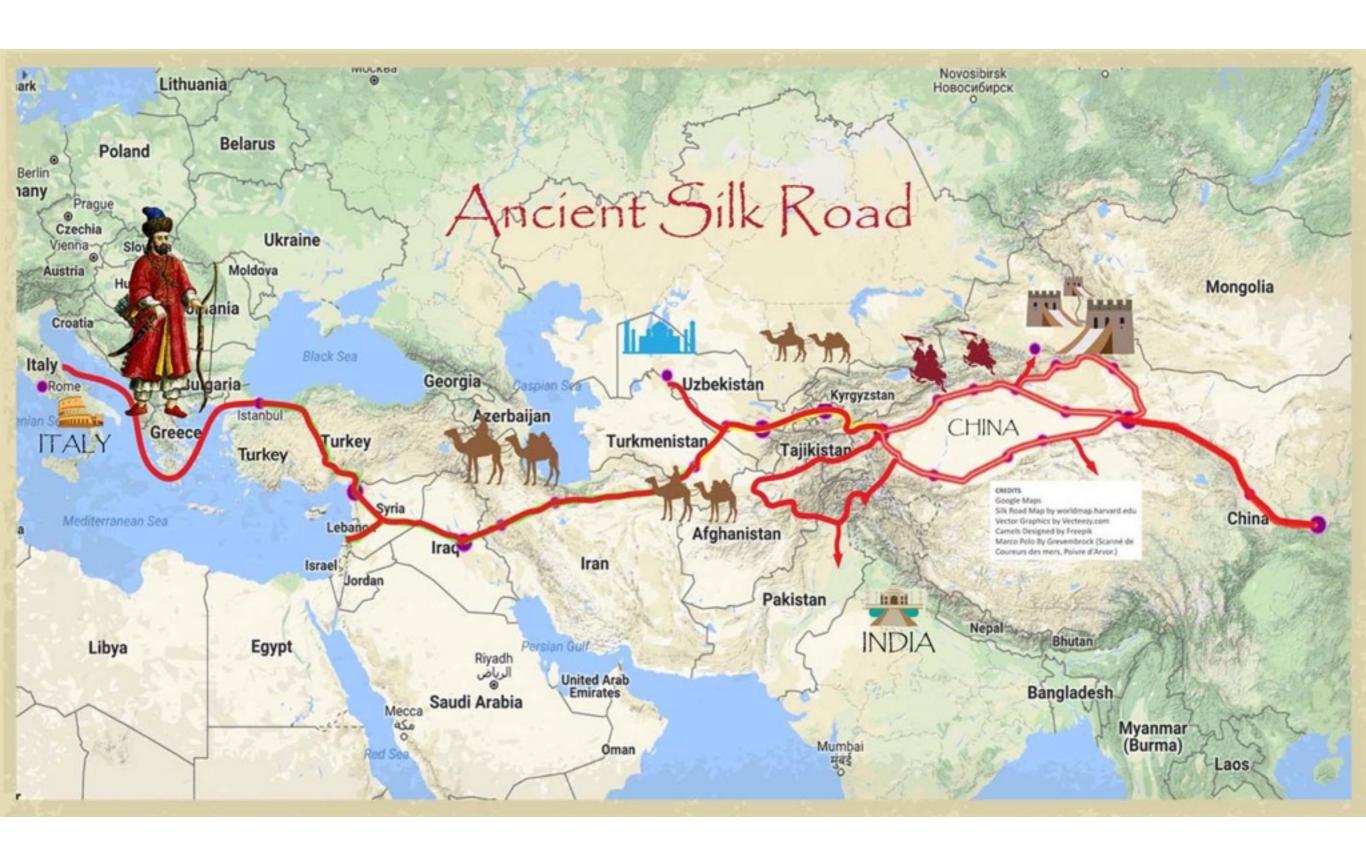
### Sui dynasty led to Tang dynasty

Sui built the longest canal system in world

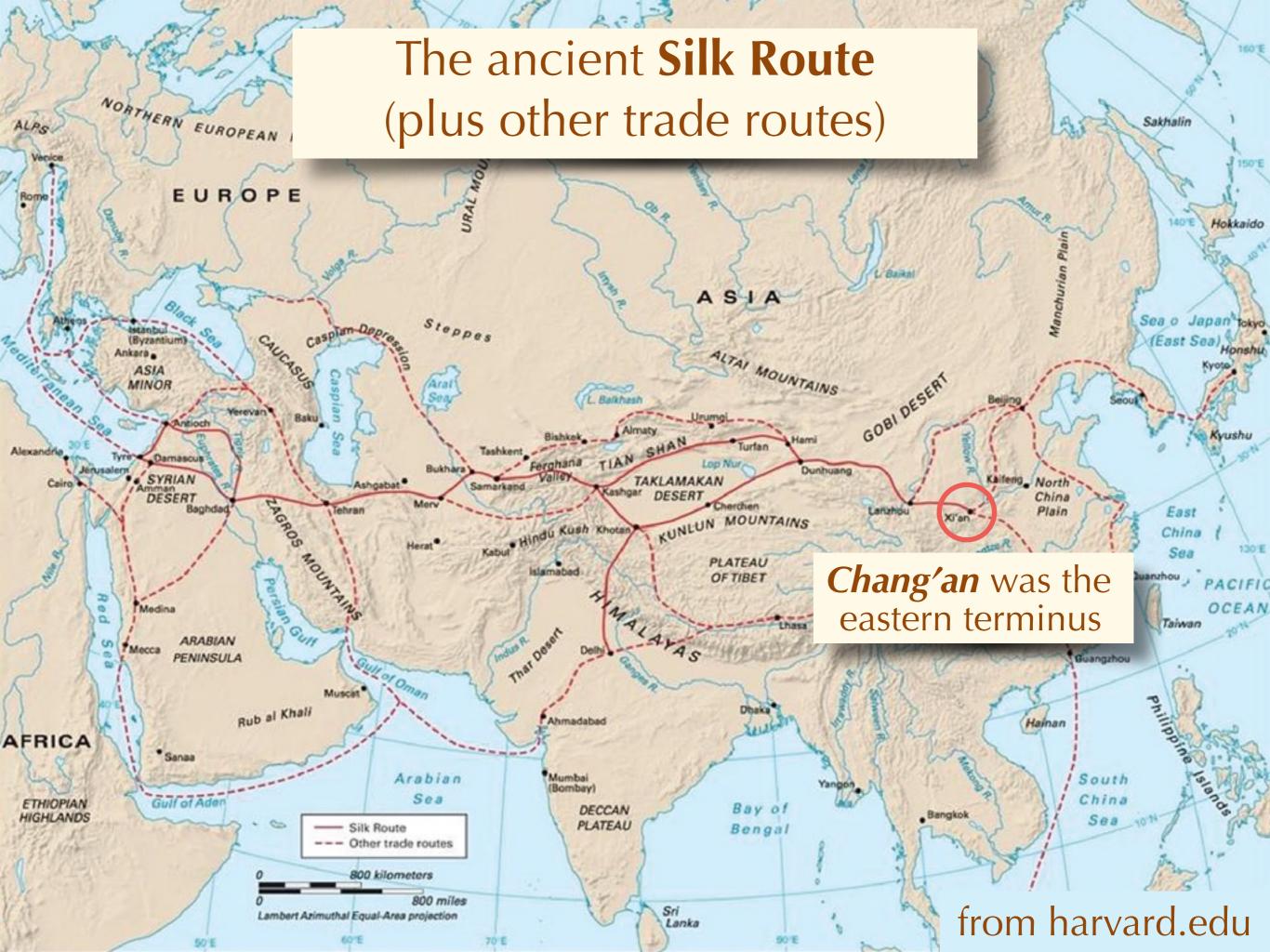
Sui rebuilt **Chang'an** as capital which Tang continued - making it largest city in the world

Chang'an today is called Xi'an (shee-an)

# Chang'an as established by Sui was the eastern terminus of the Silk Route



Remember the Silk Road?





Chang'an (chang-anne)

(Today Chang'an is called Xi'an)

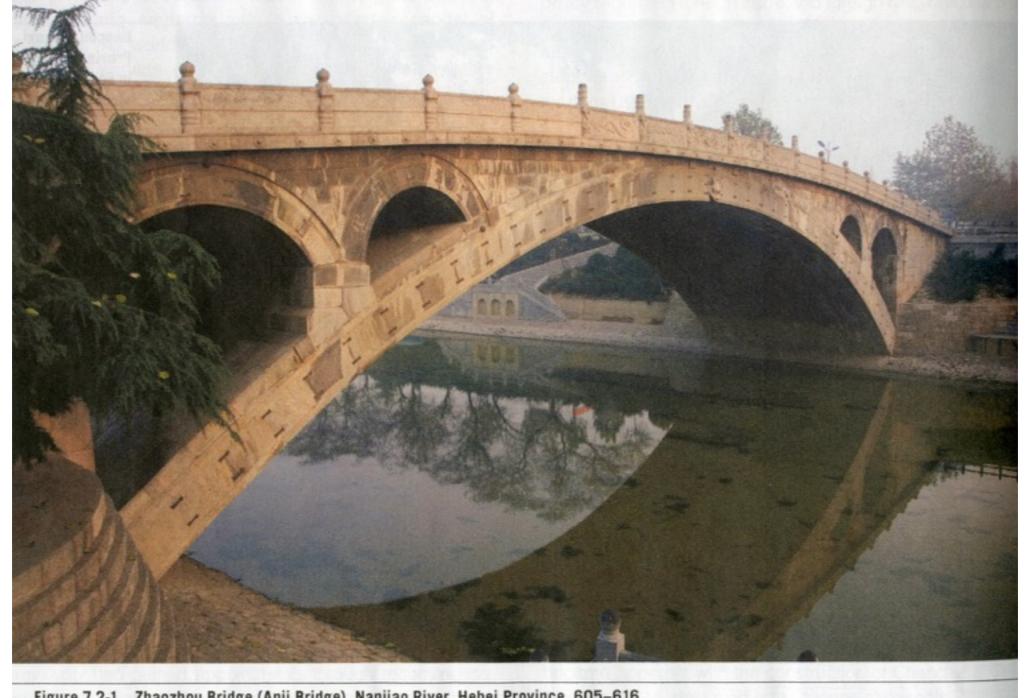


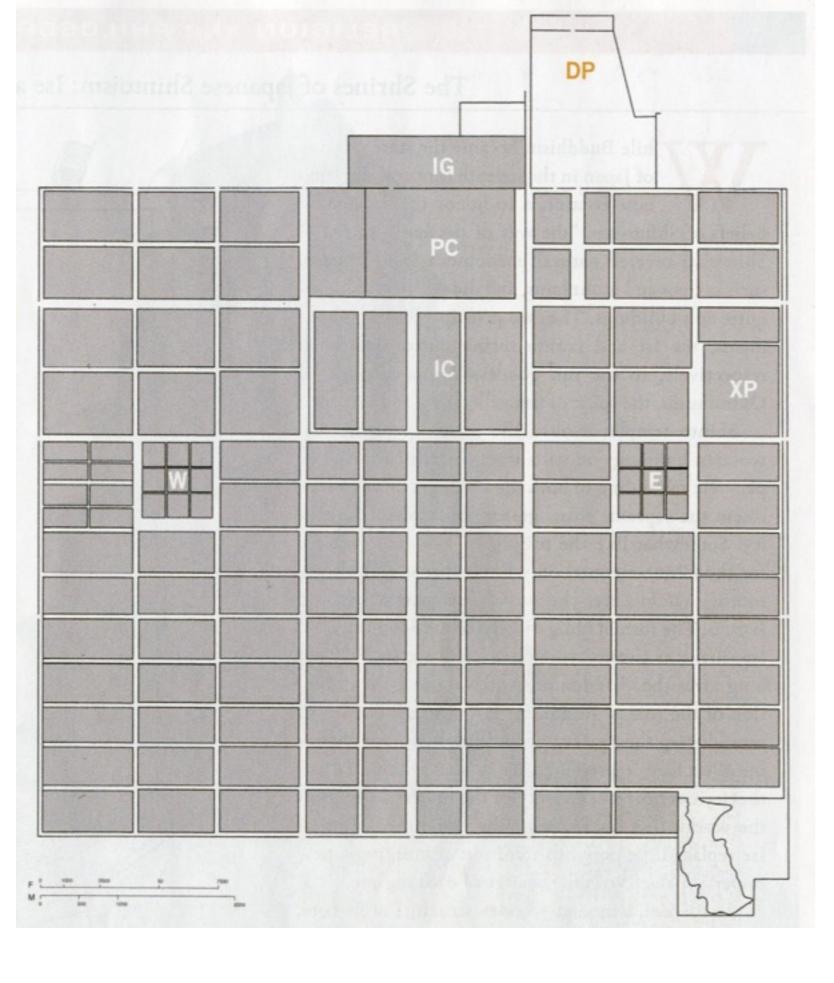
Figure 7.2-1 Zhaozhou Bridge (Anji Bridge), Nanjiao River, Hebei Province, 605-616.

In the **Sui dynasty** (c **616** CE) mason Li Chun designed the Bridge of Zhaozhou with its 121 foot span



Architect *Kai* laid out the rebuild of Chang'an in **580** CE using the wangcheng diagram and making the widest streets ever (500 feet wide for a central avenue)

This did not connect city but segregated it instead



### **Chang'an** c 580 CE **108 fangs** or wards

- (w) west market
- (e) east market
- (ig) imperial garden
- (pc) palace city
- (ic) imperial city
- (xp) xingqing palace
- (dp) daiminggoing palace

#### TANG DYNASTY

618 - 907 CE

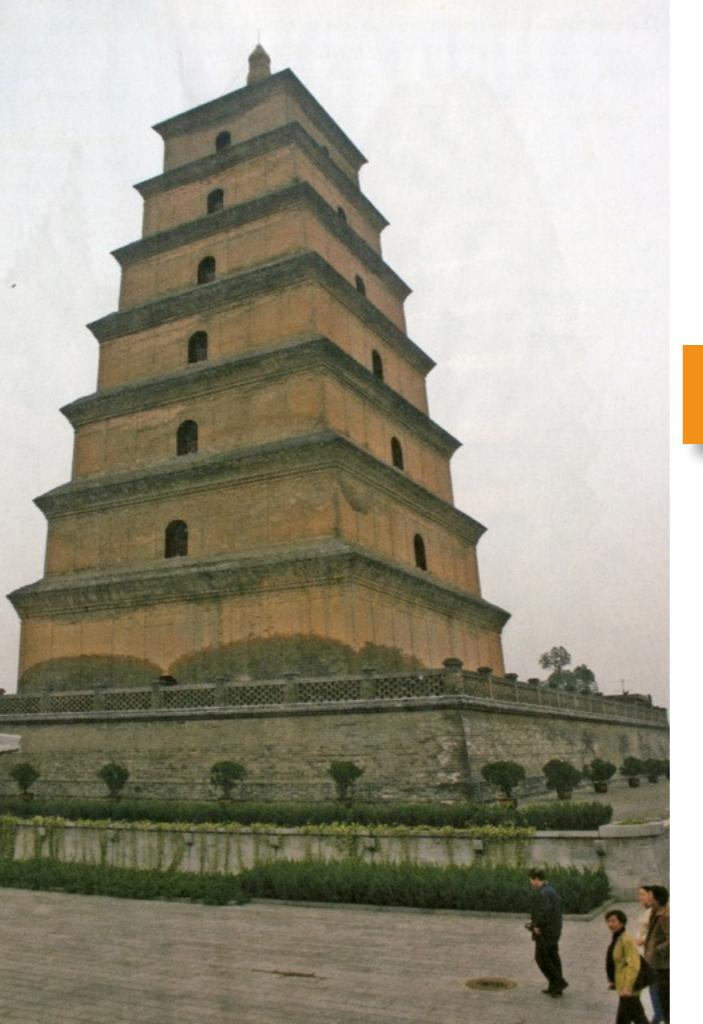
#### Buddhist monasteries and pagodas

# Buddhism comes to China along the trade route (Silk Road) circa **100** BCE

Buddhism developed into a very robust religious and economic power and built many monasteries

The height of the **pagoda** was linked to spiritual cosmology of the Buddhist tradition

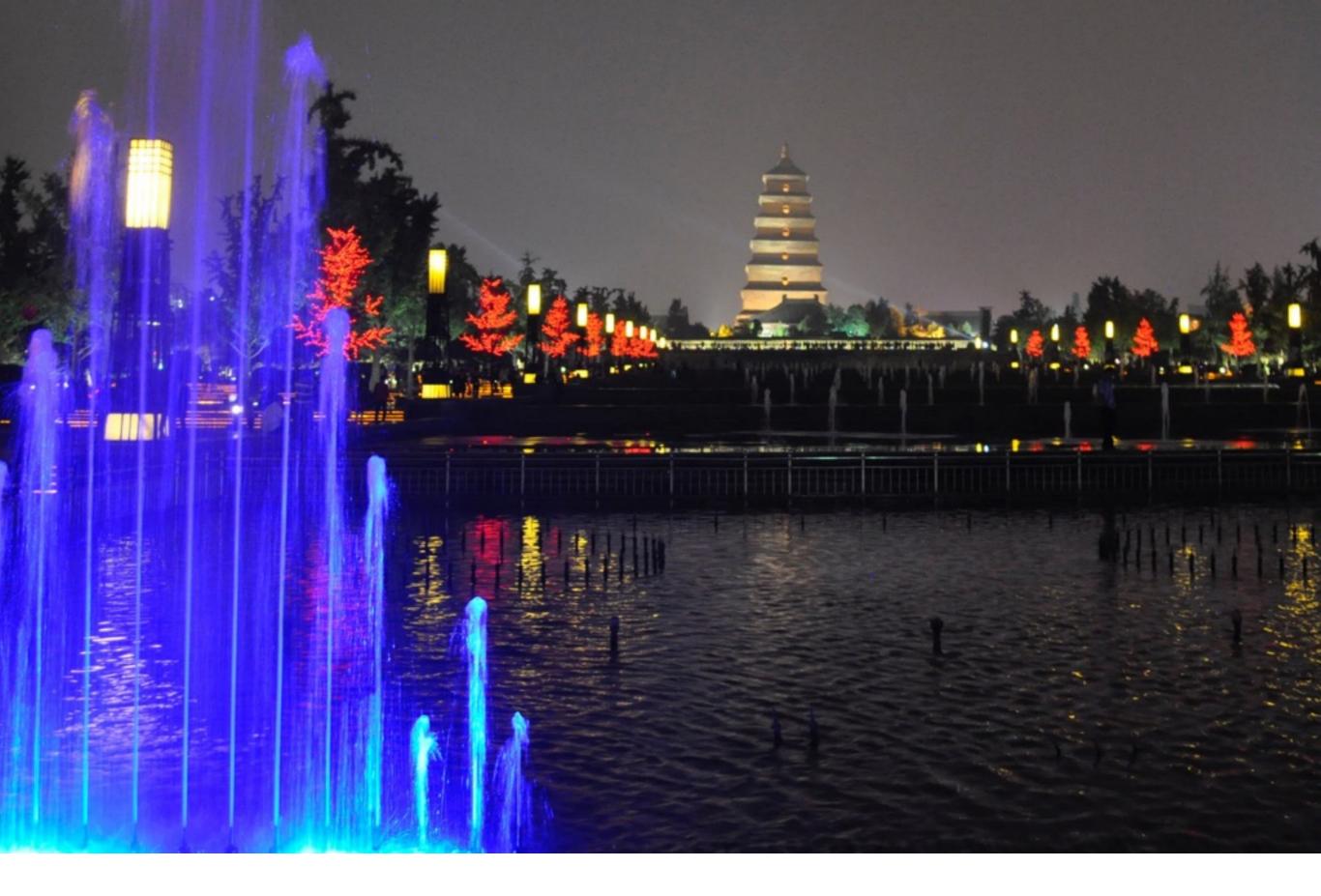
People enjoyed climbing them because of the great view



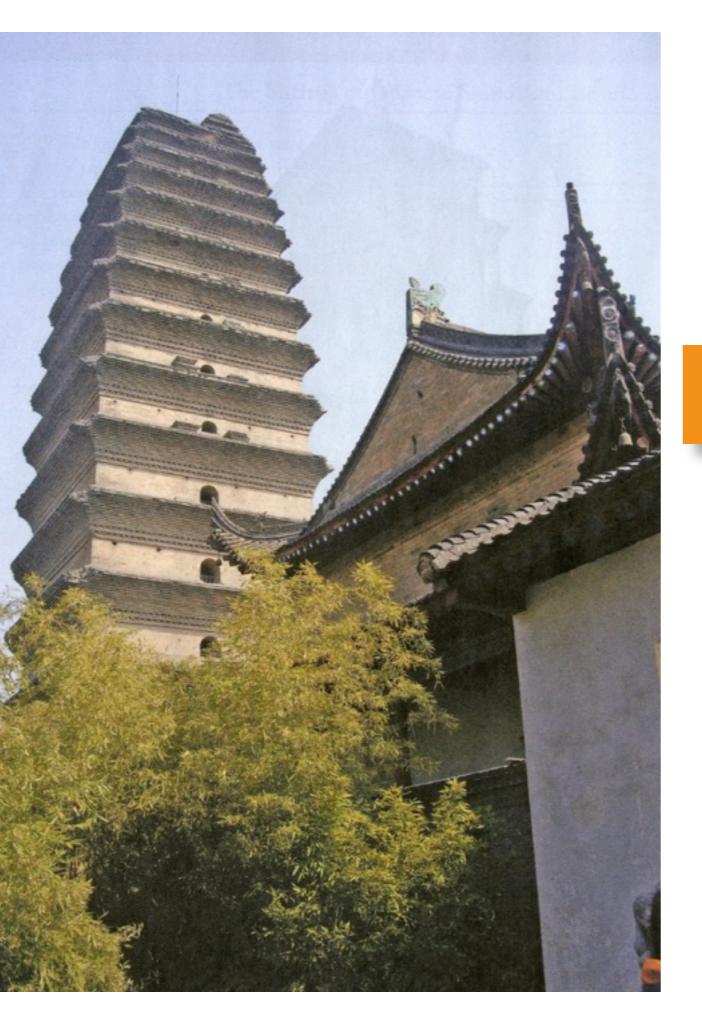
#### Tang Dynasty (707 CE)

GREAT WILD GOOSE PAGODA

**louge type** (stepped levels) built for Ci'en Monastery 197 feet tall



Great Wild Goose Pagoda



#### Tang Dynasty (707 CE)

SMALL WILD GOOSE PAGODA

*miyuan type* (hollow core) built for Yi Jing 148 feet tall



# Monasteries and their symbolic towers - the *pagodas* - were destroyed

They grew too powerful economically and threatened imperial power

Buddhist monasteries were outlawed, and by 845 CE 46,000 of them were destroyed

## Necropolis of *Empress Wu*623 - 705 CE

A very bad reputation in history

Wife of the 3rd Tang emperor Gaozong she was able to achieve the title emperor and gain legitimacy through architecture projects

Rose through the ranks of concubinage, to eventually become imperial consort (the queen concubine)

Historians claim she murdered her daughter to accuse her enemies, poisoned relatives, and forced her son to commit suicide to secure her power

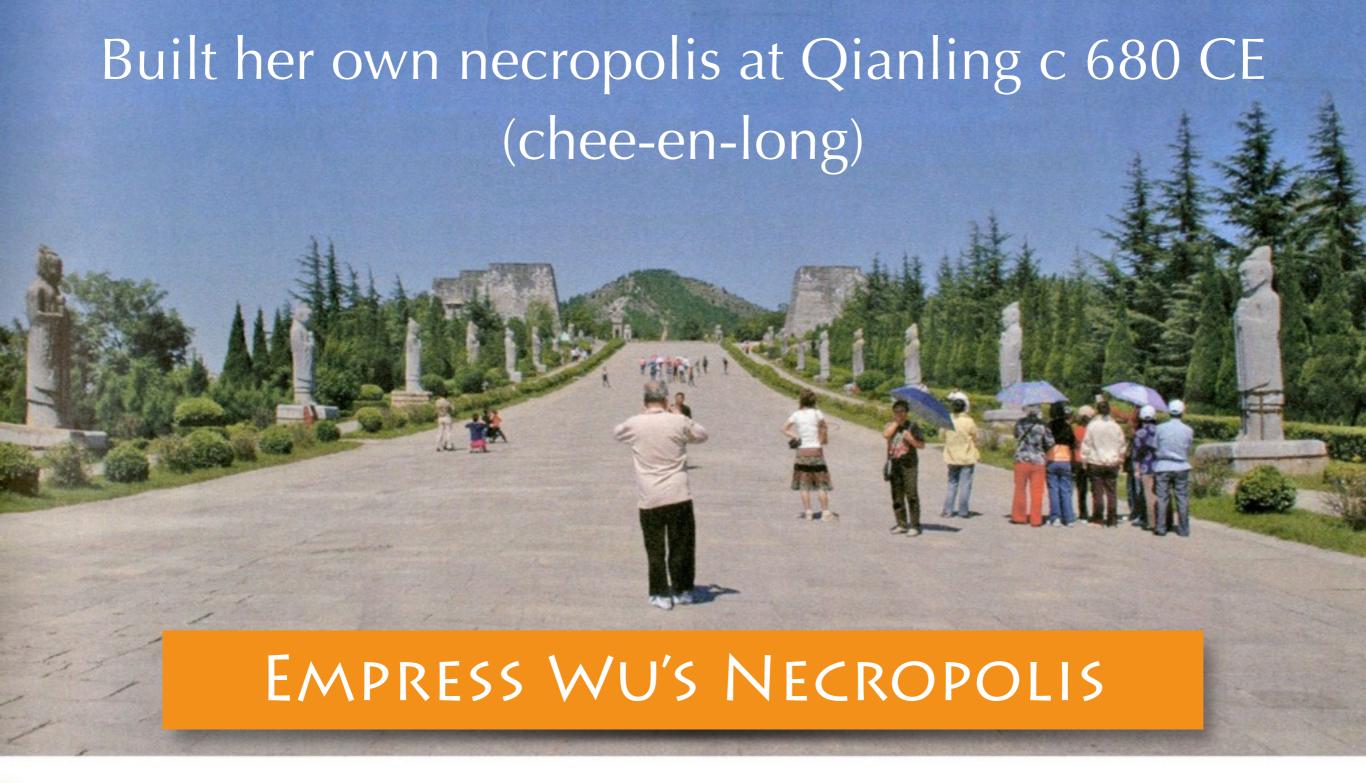


Figure 7.2-5 Qianling imperial necropolis, begun 680s under the patronage of Empress Wu.

Three natural hills, grand boulevard, more than 100 colossal sculptures across vast landscape

end

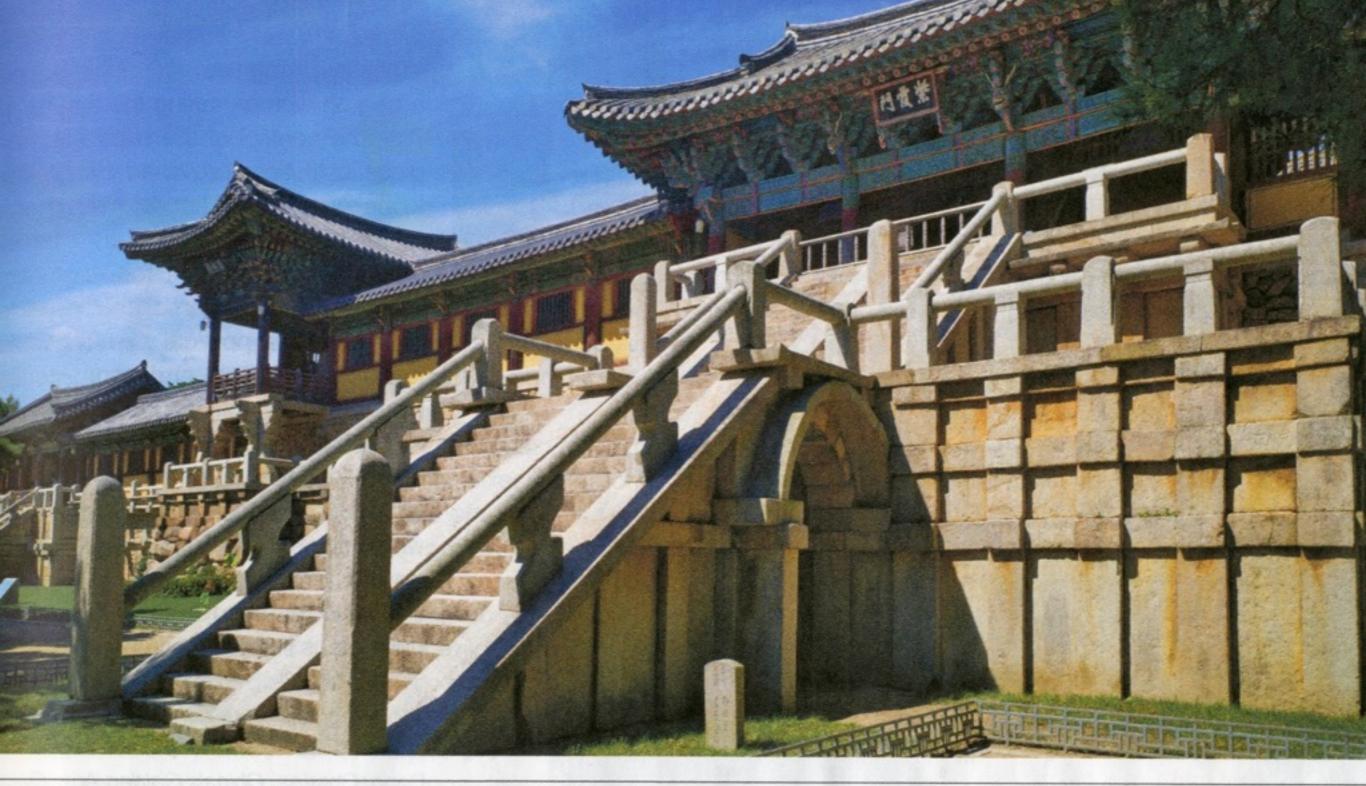


Figure 7.2-6 Bulguk-sa, Korea. Seventh-century Buddhist temple.

Silla dynasty in Korea c. 668-935 CE Bulguk-sa Temple influenced from China Tang dynasty

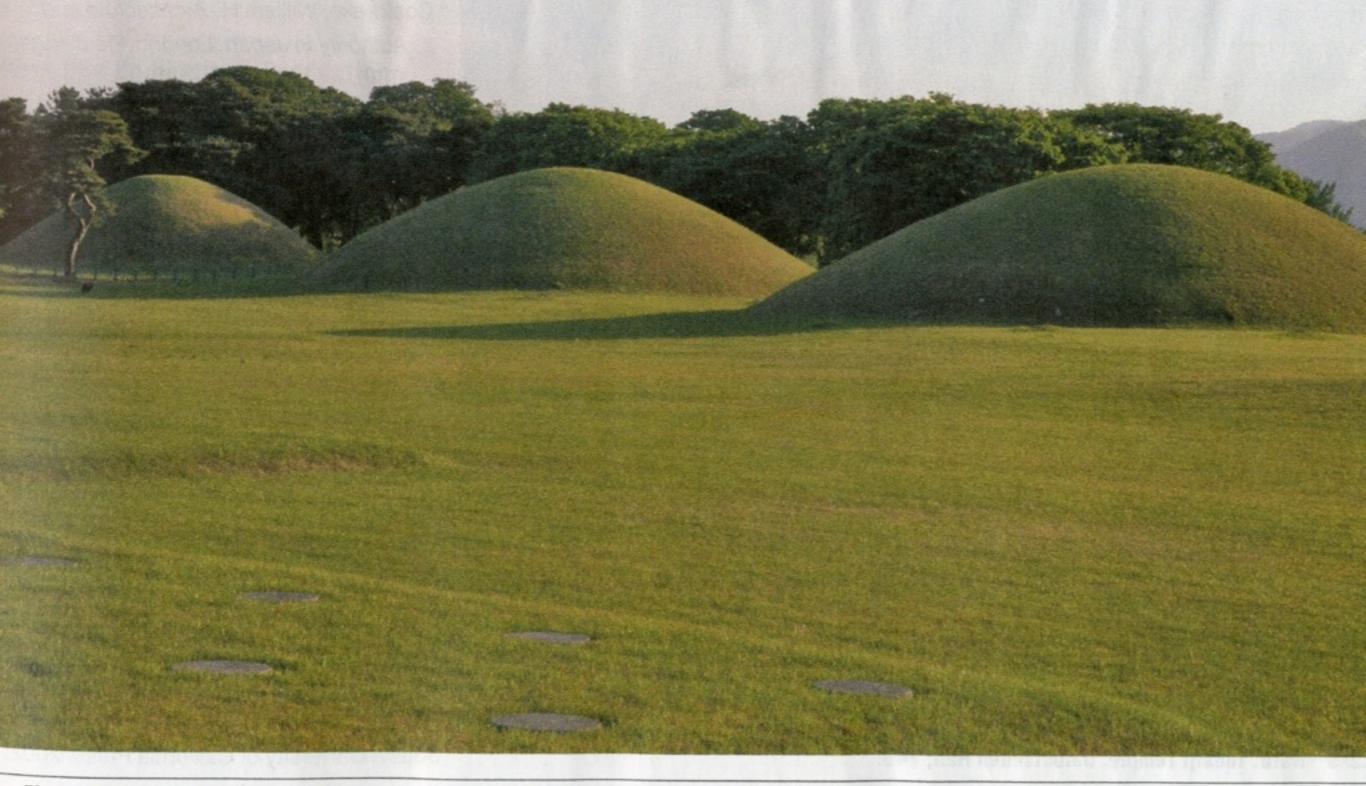


Figure 7.2-7 Kyongju, Korea. Daereungwon Tumuli Park of twenty-three Silla tombs, seventh to eighth centuries.

#### Silla tomb sites in Korea circa 750 CE