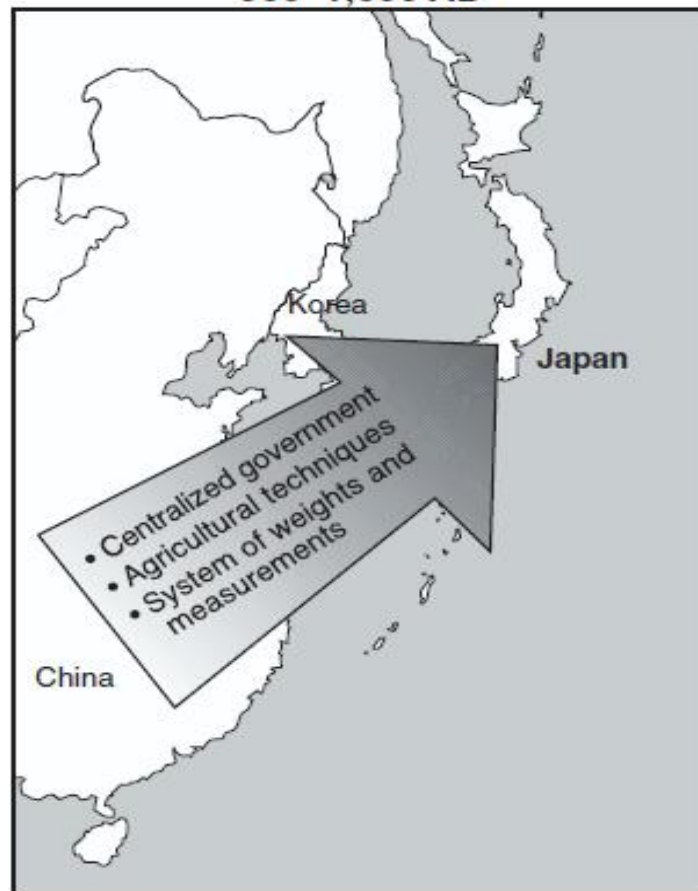


# TANG AND SONG DYNASTIES

Period 3

# AGRICULTURE

**Cultural Diffusion from China  
500–1,000 AD**



# NEW TECHNIQUES

- ◉ beasts of burden (ox, water buffaloes)
- ◉ fertilizer (manure)
- ◉ irrigation

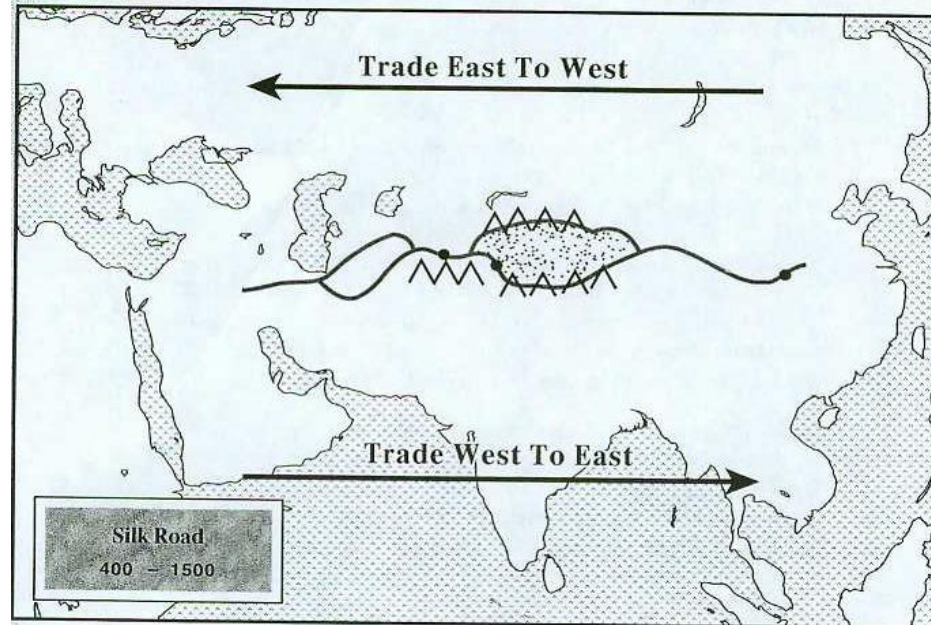


# CHAMPA

- ◉ fast growing rice (Vietnam)
  - two crops per year
  - expansion of food supply



# ECONOMIC EXCHANGE



Items Traded West to East		Items Traded East to West
Garlic	Herbal medicines	Silk
Grapevine	Horses	Porcelain
Spices	Camels	Technology and Inventions
Spinach	Gems, gold and silver	◆ Compass
Cotton	Ivory	◆ Paper
		◆ Gun Powder

# GRAND CANAL

- built during the Sui Dynasty





## ◎ Purpose

- facilitate trade b/t North and South
  - bring Champa rice to the North



## Reason

- rivers run east/west

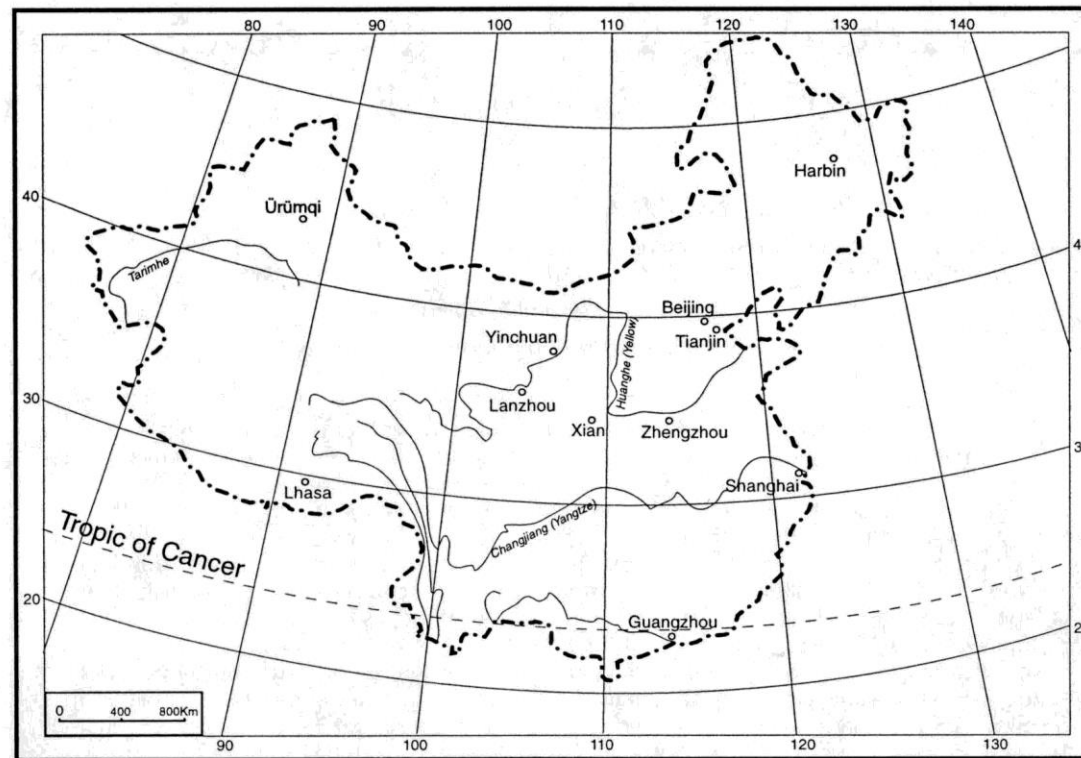


Figure 1 The location of China's two major rivers: Huanghe (Yellow River) and Changliang (Yangtze River)

## ◎ Results

- integrated economies of China
- established political and cultural unity



# LETTERS OF CREDIT

- “flying money”
  - deposit goods at one location
  - receive voucher
  - redeem at next location



# PAPER MONEY

- ◉ resulted from shortage of coins



# TEA

- ◉ compressed into bricks and used as money



1   Wars force farmers to move south, where they grow rice,

       Commercial (business) centers in China grow into large cities.

       Growth of trade and commerce opens up job opportunities.

       Farmers take time away from farming to make other products to sell.

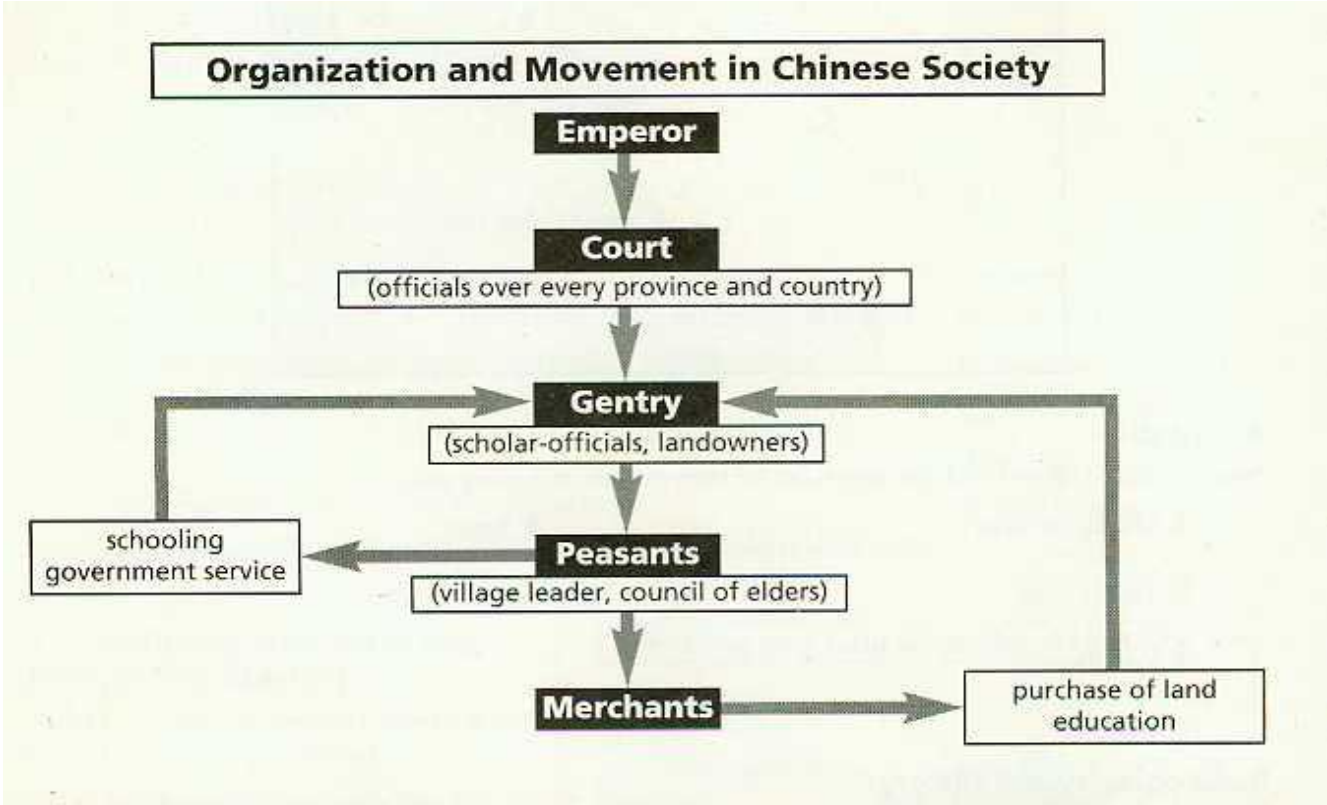
       A food surplus is generated and sold at market.

       Landowners become rich enough to buy luxury items.

       Better farming technologies and quick-ripening rice increase crop production.

SOCIETY/GOVERNMENT





## Document 6

“The basic justification for the Chinese Imperial (civil service) Exams was that appointees to civil service positions were not to be chosen through special or inherited privilege, but through an individual's own abilities. For centuries, the might of China was established militarily, often by emperors from humble origins who had toppled existing dynasties. However, once in control, these emperors soon realized that the actual governance of China would require the administrative services of thousands of bureaucrats. The civil service examination was thus a means for creating such a body of men...”

<http://www.csupomona.edu/~plin/ls201/confucian3.html>

## Document 7

“The examination system also helped to maintain cultural unity and agreement on basic values. The fact that the content of the examinations were uniform (did not vary) meant that the local scholars and ambitious would-be scholars across the whole of China were taught with the same values. Even though only a small fraction (about 5 percent) of those who attempted the examinations passed them and received titles, the studying and the hope of eventual success on a another examination sustained the interest of those who took them. Those who failed to pass—most of the candidates at any single examination—did not lose wealth or local social standing; as dedicated believers in Confucian ideals, they served, without the benefit of state appointments, as teachers, [patrons](#) (supporters) of the arts, and managers of local projects, such as irrigation works, schools, or charitable foundations.”

[http://en.wikipedia.org/wiki/Imperial\\_examination](http://en.wikipedia.org/wiki/Imperial_examination)

CITIES

# CHANG'AN

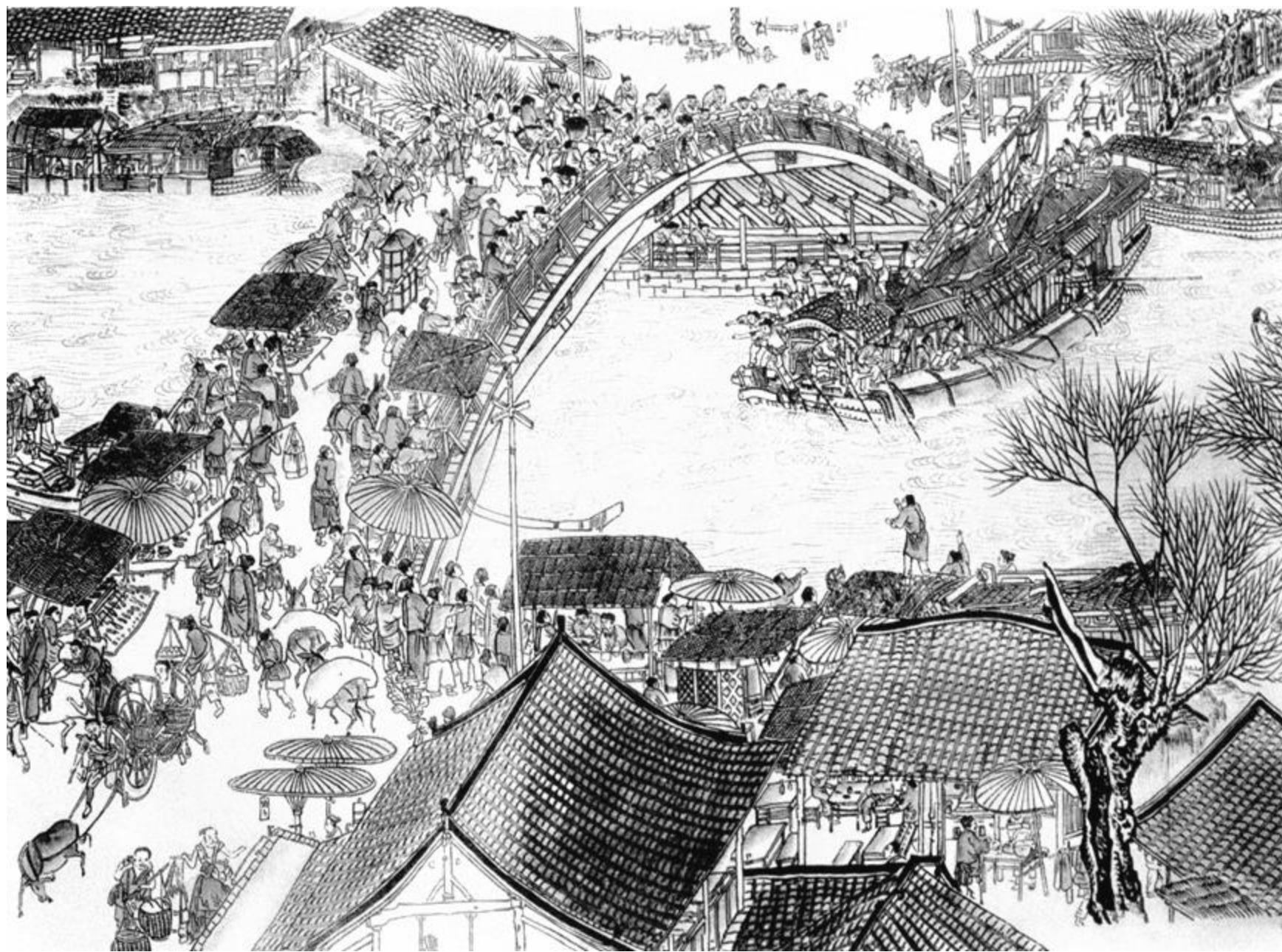
- ◉ capital of Tang
- ◉ world's most populous city (2 mil.)



# HANGZHOU

- ◉ capital of Song
- ◉ over 1 million people
- ◉ south end of Grand Canal





# SPECIALIZATION

## ◉ Increased Urbanization

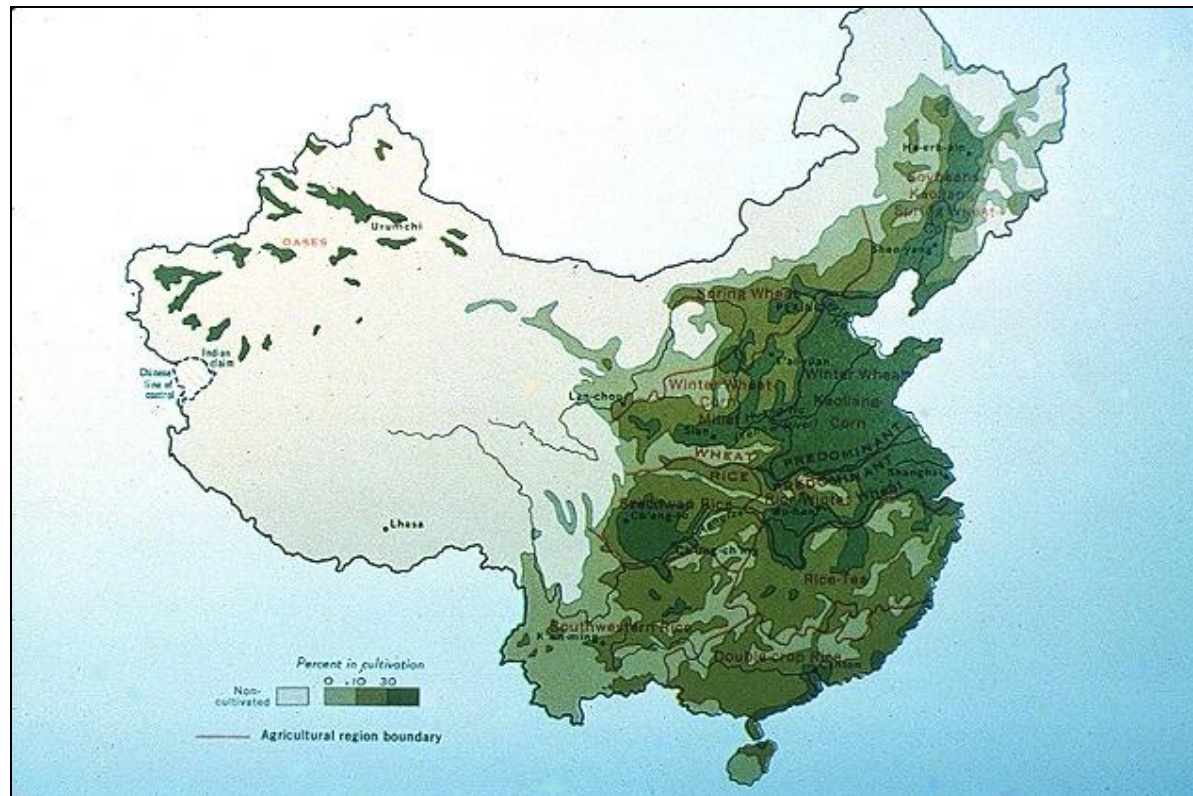
- merchants
- artisans, printers
- performers, restaurateurs





## ○ Agricultural Specialization

- each region focused on different crops



RELIGION

# TANG DYNASTY

## ◉ Buddhism

- strong social, economic, and political force
- Empress Wu...attempts to make it state religion



# SONG DYNASTY

- ◉ Rise of neo-Confucianism
  - morality is highest goal
  - hostile to outside influences
  - stifled innovation and critical thought
  - emphasized gender distinctions



TECHNOLOGY

Invention	Date	Description	Impact
Gun Powder	900 CE	Explosive powder made from mixture of saltpeter, sulfur, and charcoal	First used for fireworks, then weapons, technology spread west within 300 years.
Magnetic Compass (for navigation)	1100 CE	Floating magnetized needle that always points north-south; device had existed in China for centuries before it was adapted by sailors for use at sea	Helped China become a sea power; technology quickly spread west
Mechanical clock	725 CE	Clock in which machinery (driven by running water) regulated the movements	Early Chinese clocks short-lived; idea for mechanical clock carried by traders to medieval Europe
Paper money	960 CE	Paper currency issued by Song government to replace cumbersome strings of metal cash used by merchants	Contributed to development of large-scale commercial economy in China
Porcelain	600 CE	Bone-hard white ceramic made of a special clay and a mineral found only in China	Became a valuable export-so associated with Chinese culture that it is now called "china", technology remained a Chinese secret for centuries
Printing	Block printing: 735 CE	Block printing; one block on which a whole page is cut	Printing technology spread to Korea and Japan

<b>Summary of the Transmission of Mechanical and Other Techniques From China To the West</b>			
<b>Type of Device</b>	<b>Approximate Time-lag in Centuries</b>	<b>Type of Device</b>	<b>Approximate Time-lag in Centuries</b>
Silk-Manufacturing Machinery	3-13	Deep Drilling for Natural Gas	11
Wheelbarrow	9-10	Gunpowder	5-6 4 (for military use)
Efficient Harness For Draught-Animals: Breech Strap (Postilion)	8	Magnetic Compass	11 4 (with needle) 2 (for navigation)
Crossbow (as an individual arm)	13	Paper	10
Printing (Block)	6 4 (Movable Type) 1 (Metal Movable Type)	Shipbuilding Methods (including watertight compartments, efficient sails, and the rudder)	10

Source: Inner Asian and Uralic National Resource Center, "Journeys Along the Silk Road-Unit 1- Middle-High School."

[http://www.indiana.edu/~iaurc/content/journeys-along-silk-road-unit-1-middle-high-school#\\_ftnref1](http://www.indiana.edu/~iaurc/content/journeys-along-silk-road-unit-1-middle-high-school#_ftnref1)

# PORCELAIN

- ◉ lighter, thinner, more adaptable form of pottery
- ◉ reputation so high became known as “china”







凡欲讀經先念淨口業真言過  
循唎 循唎 摩訶循唎 循唎 娑婆訶  
奉請除災金剛 奉請辟毒金剛 奉請黃隨求金剛  
奉請白淨水金剛 奉請赤濟金剛 奉請定除厄金剛  
奉請紫賢金剛 奉請大神金剛  
金剛般若波羅蜜經

Book Printing c. 868 CE

- ◉ became common during Tang Era
- ◉ earliest = block printing
  - reverse image on block, inked block, pressed sheet on top of it



## ◉ mid 11<sup>th</sup> century

- started using frames (multiple blocks)
- speeded it up, allowed revisions
- larger quantities more quickly, cheaper



- ◎ Impact...mass production of
  - Buddhist books
  - Confucian works
  - calendars

# GUNPOWDER

- “fireworks to flamethrower”

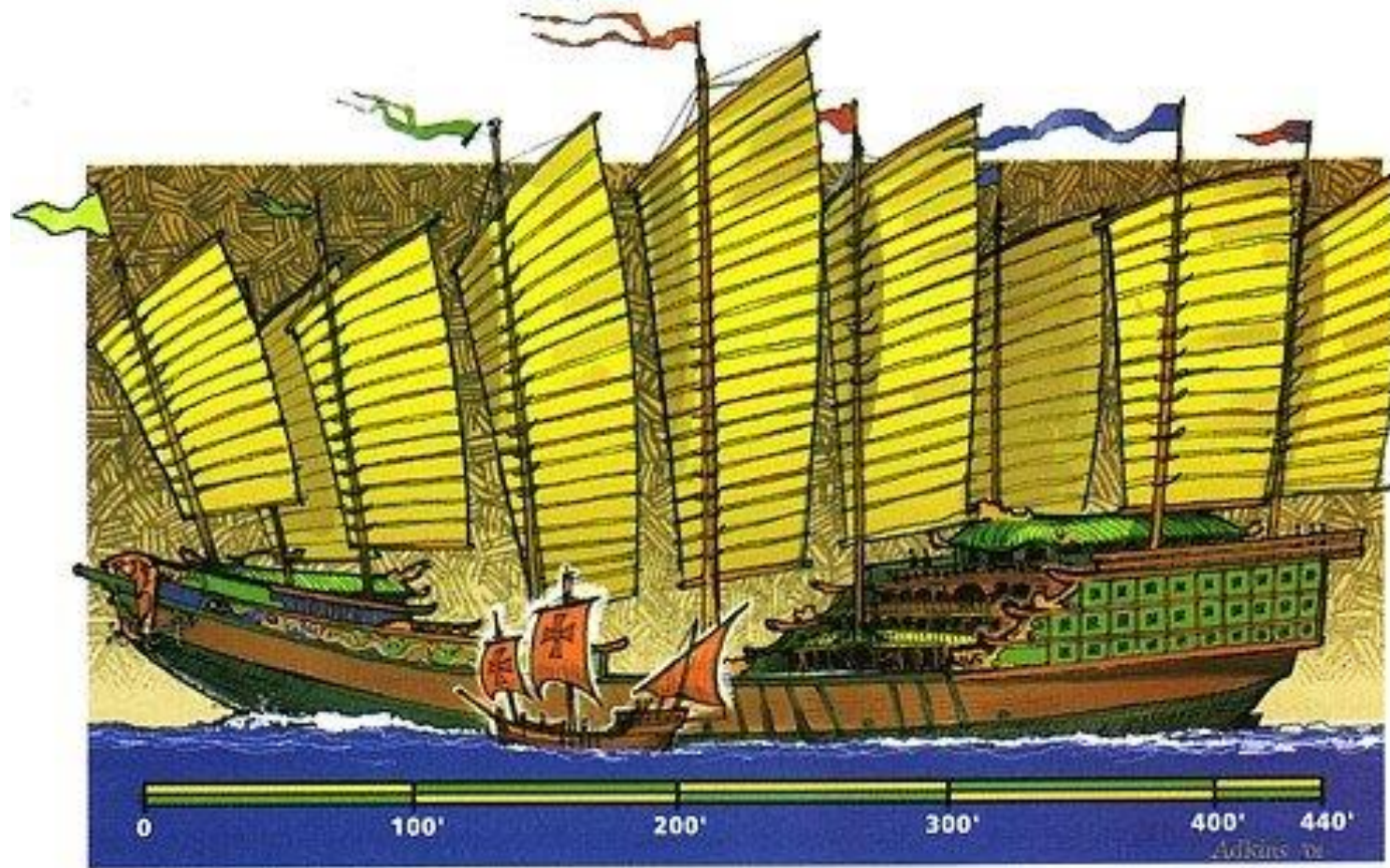


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RANDOM

# JUNKS





# FOOTBINDING

