A History of Knowledge

Oldest Knowledge
What the Sumerians knew
What the Babylonians knew
What the Hittites knew
What the Persians knew
What the Egyptians knew
What the Indians knew
What the Chinese knew
What the Greeks knew
What the Phoenicians knew
What the Romans knew
What the Barbarians knew

What the Jews knew
What the Christians knew
Tang & Song China
What the Japanese knew
What the Muslims knew
The Middle Ages
Ming & Manchu China
The Renaissance
The Industrial Age
The Victorian Age
The Modern World
"shi shi shi shi shi shi shi shi shi shi shi shi shi shi shi"
= "the master is fond of licking lion spittle"
(Chinese tonguetwister)
What the Chinese knew

• Bibliography:
  – Charles Hucker: “China’s Imperial Past” (1975)
  – Wolfgang Bauer: China and the Search for Happiness (1976)
  – Joseph Needham: Science and Civilisation in China (1954)
What the Chinese knew

• Insert pictures of Asian Art Museum
Chinese dynasties

- Xia Dynasty 2070-1766 BC
- Shang Dynasty 1766-1122 BC
- Zhou 1122 - 403 BC
- Warring States
- Qin 256-210 BC
- Han Dynasty 206 BC - 220 AD
  - Tang Dynasty 618-907
  - Song 960-1279
  - Mongol Yuan 1279-1368
- Ming Dynasty 1368-1644
- Manchu Qing 1644-1911
- Republic 1912-1949
- Communists 1949-present
The Chinese Empire

• 611: Sui inaugurates the Grand Canal
• 645: Hiuan-tsang (Xuanzang) brings sanskrit manuscripts from India to China
• 650: the Tang dynasty extends the boundaries of China from Afghanistan to Vietnam
• 751: the Chinese are defeated by the Muslims at the battle of the Talas river in Central Asia
The Chinese Empire

- 960: Song Tai-tsu founds the Song dynasty
- 1115: the Jurchen (Manchu) invade from the north and establish the Jin/Chin dynasty with capital in Beijing, leaving only the south to the Song
- 1264: the Mongols invade China and Kublai Khan founds the Yuan dynasty with capital in Beijing
- 1266: the Polo brothers travel from Venezia to China
- 1330: Bubonic Plague
The Yuan/Mongol empire

http://www.artsmia.org/arts-of-asia/china/maps/yuan-map.cfm
What the Chinese Knew

• Sui
  – The Grand Canal
    • From Beijing to Hangzhou: unites Yellow River and Yangtze River and triggers transport, agricultural and industrial revolution
    • Runs north to south connecting the Yangtze, Huaihe, Haihe and Qiantang (Beijing, Tianjin, Hebei, Shandong, Jiangsu, Zhejiang, Hangzhou)
    • The oldest and longest man-made waterway in the world (1,795 Km)
    • Started in 486 BC but completed under the Sui dynasty (610)
What the Chinese Knew

- Sui
  - Tower ships
What the Chinese Knew

- Tang (618 - 907)
  - Tripartite division of power (ministers, army, censors)
  - Rule by law (legalism)
  - Statutory punishment: death by strangulation, exile, forced labor, beating with bamboo cane
  - Capital at Xian
    - Largest and most cosmopolitan city in the world
    - Mostly Buddhist
    - One million people
    - Mongols, Indians, Arabs, Malays, Persians, Koreans, Japanese
What the Chinese Knew

• Tang (618 - 907)
  – Government posts require education
    • National universities at Xian and Luoyang
    • Only sons of nobles and bureaucrats admitted to the universities
    • Degrees (in order of importance): chin-shih degree (literary talent), classical scholarship, law, calligraphy and mathematics
    • A student’s competence is judged by the state. Meritocracy, but stifling of independent thought (unlike European universities)
What the Chinese Knew

• Tang (618 - 907)
  – Sui’s examination system expands beyond the Confucian classics to math, calligraphy, painting and poetry
What the Chinese Knew

• Tang (618 - 907)
  – The Yangtze valley becomes the economic center of the nation
What the Chinese Knew

• Tang (618 - 907)
  – Printing
    • Woodblock printing in China (7th c)
    • First printed book in 770 in Japan (one million copies of a Buddhist text commissioned in Japan by empress Koken)
    • Tang government's official gazette
    • Paper money issued by emperor (early 9th c)
    • Complete 130-volume edition of Confucian classics commissioned by Chinese official Fang Tao (932-53)
    • The Chinese people are the first people to become familiar with printed matter
What the Chinese Knew

• Tang (618 - 907)
  – Printing
    • The scroll is replaced by the paged format (9th/10th c) which makes manuscripts more portable
    • Bi Sheng invents the printing press with movable type (1045) but the large numbers of characters of the Chinese alphabet makes it less practical than woodblock printing
What the Chinese Knew

• Tang (618 - 907)
  – World’s first escapement (Xian, 725)
  – Porcelain (7th c)
  – Compass on ships (9th c)
  – Gunpowder (9th c)
  – Toilet paper

• “The Chinese do not wash themselves with water but only wipe themselves with paper”, Arab traveler (851)
What the Chinese Knew

• Tang (618 - 907)
  – Trade along the seacoast following the monsoon winds
  – Muslims from the Middle East take care of international trade
What the Chinese Knew

• Tang (618 - 907)
  – Buddhism ("Indianization of China"): state control of Buddhist monasteries (607)
  – Daoism
    • Dissolution of Daoist church and independence of individual monasteries
    • Deification of Confucius and Lao-tsu
    • Jade Emperor presiding over a hierarchy of deities
    • Apex of Daoism influence (notably the Highest Clarity sect)
  – Confucianist revival
What the Chinese Knew

• 621: First Zoroastrian temple in China
• 635: First Christian missionaries in Xian
• 694: Manicheism in China
• 742: Mosque of Xian
• Jewish traders in Canton
• Most shipping handled by Arabs and Persians
What the Chinese Knew

• Tang art dominated by Buddhist themes
What the Chinese Knew

Travels of Buddhist pilgrim Hsuan-tsang/Xuanzang 627-643 to Central Asia and India

Hsuan-tsang returning with Sanskrit scriptures
What the Chinese Knew

• Fazang/ Fa-Tsang (b643 AD)
  – Hua-yen Buddhism
  – Avatamsaka sutra (Garland sutra, first sutra)
  – Dharmadhatu: multi-dimensional space-time of human experience
  – Fourfold view of the Dharmadhatu: phenomena (the world as we see it), the void (the essential nature of everything), the links between phenomena and the void, the web of all phenomena (whereas a phenomenon alone makes no sense, it is part of a web)
  – There is a fundamental reality/truth
  – Everything is connected
Statue of Buddha at Leshan (near Chengdu), the largest stone sculpture of Buddha in the world, completed in 803 AD
What the Chinese Knew

• Tang emperor Xuanzong (712-756) patronizes painting and poetry
What the Chinese Knew

• Jingang Jing/ Diamond Sutra (868AD)
  – Oldest (extant) printed book
What the Chinese Knew

• Tang (618 - 907)
  – Poetry
    •lushi: an eight-line poem with five or seven words in each line
    •zi: verse following strict rules of prosody
    •jueju: a four-line poem with five or seven words in each line.
What the Chinese Knew

• Tang (618 - 907)
  – Fiction
    • Shen Yazhi and Bai Xingjian (9th-century)
What the Chinese Knew

• Tang (618 - 907)
  – Poetry
    • Golden age of poetry (peaked in the reign of Hsuan-tsung 712-56)
    • All gentlemen are expected to produce poetry daily
    • Wang Wei (699): greatest landscape poet
    • Li Po/Bai (701): 20,000 poems, passionate, lyrical
    • Du Fu (712): erudite, compassionate
    • Po Chu-i (772): simple, reflective
    • Li Shang-yin (813): word-painter (complex, metaphorical)
    • Birth of tzu, poetry of lines/stanzas of irregular length written for songs
• Wang Wei (699)
  The autumn hills hoard scarlet from the setting sun.
  Flying birds chase their mates,
  Now and then patches of blue sky break clear --
  Tonight the evening mists find nowhere to gather.

• Li Po/ Li Bai (701)
  “You ask me why I dwell in the green mountain;
  I smile and make no reply for my heart is free of care.
  As the peach-blossom flows down stream and is gone into the unknown,
  I have a world apart that is not among men.”

• Li Shang-yin (813)
  The candle casts deep shadows on the screen,
  The Milky Way dims and morning stars fade.
  Chang-O must regret stealing the elixir,
  As she broods in loneliness night after night.
What the Chinese Knew

• Tang (618 - 907)
  – Fiction
    • Chuan-chi (fantastic tales), written in wen yen (formal prose)
What the Chinese Knew

• Tang (618 - 907)
  – Copper reserved for coin minting, and porcelain becomes a major industry for household items
  – 725: Yi Xing, a Buddhist monk, builds the first mechanical clock (driven by a water wheel)
What the Chinese Knew

• Tang (618 - 907)
  – Painting
    • Yen Li-pen (7th c)
    • Wu Tao-tzu (8th c, possibly greatest painter of China's history but no painting survived)
    • Li Ssu-hsun (651, colorful representational landscapes)
    • Wang Wei (699, “inventor” of monochrome landscape, but no painting survived)
    • Zhang Xuan/Chang Hsia (8th c, figure painting)
    • Zhou Fang/ Chou Fang (780?, set the standard for representation of female aristocracy)
    • Zhang Yanyuan: "Li-dai ming-hua ji" (847) a history of Chinese painting
What the Chinese Knew

• Zhang Xuan/Chang Hsia: “Ladies Preparing Newly Woven Silk” (9th c)

(Boston Museum of Fine Arts)

• Zhou Fang/ Chou Fang:

(Nelson-Atkins Museum, Kansas City)
What the Chinese Knew

- Yen Li-pen/ Yan Liben (7th c)
  - Portraits of the emperors (handscroll 51x 531 cm)

(Boston Museum of Fine Arts)
Li Chao-tao: “Emperor Ming Huang’s Journey to Shu” (8th c)
What the Chinese Knew

- Tang sculpture

China/Tang: Ceramic sculpture (7th c) (Tokyo Museum)
China/Tang: Buddhist triad (8th c) (Tokyo Museum)
What the Chinese Knew

Qianling, mausoleum of Tang emperor Gao Zong (705) and empress Wu Zetian
40 km circumference - Tomb of princess Yong Tai
What the Chinese Knew

• Tang (618 - 907)

Clay-clothed mummy (zhenshen baogu xiang 真身包骨像), Master Siben (d. 751), at Zhengguo Monastery, Shanxi
What the Chinese Knew

• Tang (618 - 907)
Dunhuang Caves

- Cave 39 (Tang)
Dunhuang Caves

- Cave 57 (Tang)
- Cave 130 (Tang)
Dunhuang Caves

Cave 139A: Paradise of Amitabha
(Tang, 9th c AD)
Dunhuang Caves

Cave 206 (Sui)
Cave 419 (Sui 7th c AD)
Cave 206 (Sui 7th c AD)
Cave 420 (Sui)
Cave 419 (Sui)
Dunhuang Caves

Cave 46 (Tang)
Cave 45 (Tang, 750)
Cave 194 (Tang)
Cave 194 (Tang)
Cave 194 (Tang)
Dunhuang Caves

Cave 45 (Tang)
Cave 45 (Tang)
Cave 322 (Tang)
Cave 220 (Tang, 642)
Cave 194 (Tang)
Dunhuang Caves

Cave 159 (Tang)
Cave 194 (Tang)
Cave 46 (Tang)
Cave 328 (Tang)
Cave 328 (Tang)
Cave 45 (Tang)
Cave 159 (Tang)
Longmen Caves

See china/longmen.html
What the Chinese Knew

• Decline of Tang
  – Equal-field system collapses
  – Foreign mercenaries (e.g. Turks) fill the highest positions in the army
  – Battle of Talas (751): Arabs defeat the Tang
    • China loses control over Central Asia
    • Islam gains control of Central Asia
What the Chinese Knew

• Decline of Buddhism
  – 844/45 Mass persecution of Buddhism (40,000 temples are destroyed)
  – Ku-wen movement to restore the “old style”
    • Han Yi/Yu (b768)
      • Only one doctrine can preserve (Chinese) civilization: Confucianism
What the Chinese Knew

Song (960 - 1279)

Map of the world in 1200

Taiwandna.com
What the Chinese Knew

• Song (960-1279)
What the Chinese Knew

• Song (960-1279)
  – Northern Song 960 - 1127
    • Kaifeng
  – Southern Song 1127 - 1279
    • Hangzhou (2 million people)
What the Chinese Knew

• Song (960-1279)
  – Song reunifies China but loses control over Vietnam and loses control over Central Asia
  – The capital Kaifeng is located near the junction between the Grand Canal and the Yellow River
What the Chinese Knew

Song (960-1279) – Kaifeng
What the Chinese Knew

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Song (960–1279) – Kaifeng
What the Chinese Knew

Song (960–1279)

Kaifeng
What the Chinese Knew

• Song (960-1279)
  – Kaifeng
What the Chinese Knew

• Song (960-1279)
  – Transition from the highly aristocratic society of pre-Tang China to the egalitarian society of Song China via the Tang meritocracy
  – Scholar-officials become the dominant class in Chinese society
  – Autocratic meritocracy (chin-shih degree in letters indispensable for government career)
  – Aristocracy depends on education for obtaining power not on wealth or land
  – Exceptional competence by government officials
  – Eunuchs and the family of the empress are stripped of political influence
What the Chinese Knew

- Song (960-1279)
  - The Confucian examination system acquires its classical form
    - Held triennially
    - Consisting of three tournament tiers
      - Provincial Examination (anonymous, held in the provincial capitals in August)
      - Metropolitan Examination (anonymous, held in the national capital in February)
      - Palace Examination (held in March at the palace court), which confers the academic title “jinshi” on all the candidates ranked according to performance
What the Chinese Knew

• Song (960-1279)
  – The Confucian examination system further erodes the influence of the aristocracy on government
  – Royal decree by Song emperor Taizong (939 – 997): “In the past, most of the people who passed the Imperial Examinations were descents of those aristocratic families. This blocked the path towards serving the court for those people with humble backgrounds. [The old imperial examination system] is thus meaningless and worthless. Nowadays, I personally preside over the exam, and decide who can pass the exam.”
What the Chinese Knew

• Song (960-1279)
  – Examination stele from Confucian temple Kong Miao (1306)
What the Chinese Knew

- Song (960-1279)
  - Rapid diffusion of printing
    - An evolution of Buddhist practices to make scriptures available to pilgrims
    - First printed book: a Buddhist text (868)
    - Publication of the entire Buddhist canon, the Tripitaka, for a total of 130,000 pages (983)
    - Flourishing industry (both government and private printers)
      - Rapid increase in literacy
      - Private academies (shu-yuan)
      - Ordinary folks become officials
      - Greatly expanded urban literate class
What the Chinese Knew

• Song (960-1279)
  – Population boom (from 60 million in 1050 to almost 100 million in 1100), particularly in the south (northern Barbarians)
  – China world's most populous, prosperous and cultured nation in the world
  – Highest standard of living in the world
What the Chinese Knew

• Song (960-1279)
  – Agrarian innovations
    • Optimization of wet-rice fields
    • Organized distribution of human waste from cities to the countryside
    • Water-control systems (dams, canals, pumps)
    • Terracing of southern China's hills
    • Experimentation with rice seed breeding to shorten growing season
What the Chinese Knew

• Song (960-1279)
  – Boom of commerce
    • Increased number of merchants and craftsmen in cities
    • Entire streets devoted to same merchandise (hang)
    • Guilds
    • Social mobility
    • The manor as a self-sufficient economic unit becomes obsolete
    • Urbanization
What the Chinese Knew

• Song (960-1279)
  – Boom of commerce
    • Paper money is introduced by the government (1024) to help merchants who need to carry a lot of money over long distances
    • Silver and gold transactions banned around 1280
What the Chinese Knew

- Zhang Zeduan (b 1085)

“The Spring Festival Along the River” a fresco of Kaifeng (25.5 cm × 5.25 m - Palace Museum, Beijing
What the Chinese Knew

- Zhang Zeduan (b 1085)

“The Spring Festival Along the River” (25.5 cm × 5.25 m - Palace Museum, Beijing)
What the Chinese Knew

• Zhang Zeduan (b 1085)

“The Spring Festival Along the River”
(25.5 cm × 5.25 m - Palace Museum, Beijing)
What the Chinese Knew

Zhang Zeduan (b 1085): “The Spring Festival Along the River”
What the Chinese Knew

- Song (960-1279)
  - Boom of foreign trade
    - Overseas trade encouraged by Song government
    - The southeastern coast replaces the western lands as the main contact zone with foreign traders
  - Canton is the main port until 1125
  - Quanzhou/Zayton is the main port after 1126 (southern Song)
  - Foreigners are confined to designated areas of the port cities
  - Competition with Arab traders for control of East-West sea routes
What the Chinese Knew

- Song (960-1279)
  - Boom of foreign trade
    - China imports only raw materials (and mainly horses, that come from the steppes and not from the seas)
    - China exports manufactured goods (silk, books, porcelain)
    - Chinese copper coins used all over East Asia
What the Chinese Knew

• Song (960-1279)
  – Boom of the iron and steel industry (about 50% in Kaifeng)
  – Large supply of cheap human labor
  – Yen Su (11th c): Leonardo-like genius
What the Chinese Knew

- Song (960-1279)
  - Technology
    - Chang Ssu-Hsun’s astronomical clock (976)
    - Su Song's astronomical water-driven clock-tower at Kaifeng (1092, destroyed in 1126): a heavenly clockwork for the emperor (the “son of Heaven”) designed as a five-story pagoda
    - Mechanical clocks are only for the royalty, and mainly viewed as cute novelties (in Europe clocks are built to regulate the life of the townfolks)
    - Su Song’s clock destroyed within two years by next emperor
Astronomy stela from 1190, one of the oldest astronomy charts in the world (Suzhou, Wenmiao)
Astronomy stela from 1190, one of the oldest astronomy charts in the world (Suzhou, Wenmiao)
What the Chinese Knew

- Song (960-1279)
  - Technology
    - Gunpowder (first used against the Mongols)
    - Also landmines, poison gas, grenades
What the Chinese Knew

• Song (960-1279)
  – Technology
    • 1041: Printing press with movable type is introduced and thousands of books are printed in large numbers but it does
What the Chinese Knew

• Song (960-1279)
  – Technology
    • 1000: Cast iron from coke blast furnaces using coal instead of charcoal
    • 1012: the Sung import Champa rice from Vietnam, and yields multiply, causing population boom in the south which overtakes the north for the first time (75 million vs 45 million in 1200)
    • 1086: The magnetic compass enables long-distance sea travel that always eluded the Chinese (mentioned in Shen Kuo’s “Dream Pool Sketches”)
    • Water-powered textile machines
What the Chinese Knew

• Song (960-1279)
  – Science
    • The scientist works for the emperor
    • This reduces the motivation for competition among scientists and the motivation to upset preexisting theories
    • The scientist’s main job is astronomy (the calendar)
    • While Western scientists argue about everything, Chinese scientists are bureaucrats at the service of the emperor
What the Chinese Knew

• Song (960-1279)
  – Urbanization both
    • in the north (Kaifeng, northern capital, Luoyang, Taiyuan, Ta-ming)
    • and in the south (Changsha, Chi-an, Hangzhou/Hangchow, southern capital, Shao-hsing, Foochow, Chuanchou)
  • Kaifeng has 1.4 million people in 1100
  – Most of the population now lives in the south (by the end of the 13th c, 85% of the total)
What the Chinese Knew

- Song (960-1279)
  - Most advanced agriculture, industry and trade in the world... but no industrial revolution (governmental control of large-scale business)
  - Accelerated monetization causes chronic shortage of coins which leads to paper money
What the Chinese Knew

- Song (960-1279)
  - The world's technological leader
  - Navy of armored warships propelled by paddle wheels
  - Still a mono-cultural/linguistic/ethnic empire
What the Chinese Knew

- Song (960-1279)
  - Women
    - Less essential than in the agricultural society
    - Foot binding
What the Chinese Knew

• Song (960-1279)
  – 13-story 56m-tall octagonal Iron Tower of Kaifeng (1049)
What the Chinese Knew

• Song (960-1279)
  – Economic decline of Song
    • 1021: Peak of tax revenues
    • Population boom stresses the agricultural land
    • Military budget is 80% of government budget
    • Emperor Hui Tsung (1100-1125) patron of the arts but eccentric expenses
    • Southern capital of Hangzhou (1138) is even more luxurious than the previous capital Kafeng
What the Chinese Knew

• Song (960-1279)
  – Northern barbarians: Chitan/Liao (916-1125)
    Jurchen/Chin (1115-1234), Mongols/Yuan (1264-1368)
  – Barbarian invasions intensify southern urbanization
  – Huge standing army, but only for defense purposes
What the Chinese Knew

• Song (960-1279)
What the Chinese Knew

• Song (960-1279)
  – Revival of Confucianism (China's ideological orthodoxy) as a xenophobic/nationalist reaction to foreign cultural influence
    • Han: Daoist
    • Tang: Buddhist
    • Song: Confucian
  – Confucian reformers:
    • Han Yu criticizes Buddhism (9th c)
    • Fan Chung-yen (989) scholars must care about the world's affairs
What the Chinese Knew

• Song (960-1279)
  – Neo-Confucianism ("tao-hsueh/ study of the way" or "xin lixue/ school of human nature and universal order")
    • Confucian sociopolitical theories + Tao-Buddhist cosmological/metaphysical theories to explain both morality and matter
      – The tao as the "Supreme Ultimate" (tai-chi), aggregate of perfect forms/principles (li) and the primordial matter (chi)
      – Tai-chi (form) and chi (matter) combine to create objects, people, etc
      – Yang/yin and heaven/earth as cosmic forces
      – Properties of things depend on the cosmic forces that operated on them at birth
What the Chinese Knew

• Song (960-1279)
  – Neo-Confucianism (tao-hsueh, "study of the way")
    • Study, editing and annotation of the classics as the main occupation of the intellectuals
  – Buddhism and Daoism as folk superstitions
  – Sao-chiao ("the three doctrines"): fusion of Buddhism, Daoism and Confucianism
What the Chinese Knew

- Song (960-1279)
  - Speculative Neo-Confucian schools of the 12th c
    - Rationalistic "Study of Principles" (Cheng-Chu school, originated from Cheng I, born 1033)
    - Monistic/idealistic "Study of the Mind" (Lu-Wang school, originated from his brother Cheng Hao, 1032)
What the Chinese Knew

- Song (960-1279)
  - Zhou Dunyi/Chou Tun-i (1017)'s "Diagram of the Supreme Ultimate"

- Yang and yin and the five elements derive from the Supreme Ultimate

(University of Washington)
What the Chinese Knew

• Song (960-1279)
  – Cheng-chu's ethics
    • The self is one with the supreme ultimate (perfection), but li is contaminated by chi and achieving perfection requires "dusting off one's mirror" (resisting worldly desires)
    • Making one's intention sincere by extending one's knowledge by investiganting nature (understanding the principles of the supreme ultimate)
What the Chinese Knew

• Zhao Ji, Emperor Huizong (reigned from 1100 to 1126)
  – Love of art (poet, painter, calligrapher)
  – Faith in Daoism
  – Allies with the Jurchen but his empire is later destroyed by them (1125)
What the Chinese Knew

- Shen Kuo (b1031)
  - Mathematician
  - Astronomer
  - Meteorologist
  - Scientist
  - Cartographer
  - General
  - Inventor
  - Statesman
  - Poet
  - Musician
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  • Synthesis of Confucianism, Buddhism, Daoism
  • Synthesizer of the Cheng-Chu school: one's nature is li (in harmony with the supreme ultimate) but one's mind is mixed with qi which distorts the li
  • Li (pattern, principle) is the underlying structure of the universe. Qi is the spatio–temporal matter that make up objects.
  • The universe is good (permeated by “ren/goodness”) and wisdom consists in attuning to the natural pattern (“lixue”)
  • Very clear qi = a person of many virtues
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  • Selects the four classics of Confucianism ("The Great Learning" and "The Doctrine of the Mean" become two of the four books of the canon)
  • Zhu Xi’s Confucianism is accepted by all subsequent Neo-Confucian philosophers and becomes the standard of Chinese higher education
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  – Everything is endowed with both transcendent reality (form/principle, Li) and actual reality (matter/ether, Qi)
  – Li-Qi dualism: reality is made of Li (form) and Qi (matter)
  – All humans share the same Li, and all dogs share the same Li, etc
  – All humans share the same Li, but each human has his own Qi
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  – There is an Absolute (Supreme Ultimate, Taiji), the Li of all Li’s, that facilitates the harmony of all things in the universe
  – Everything is in contact with the Taiji via its Li
  – Agnostic: Taiji is a rational principle, not Heaven/Tien
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  – Human nature (Xing) is only form (Li), that exists before physical form, and it is good
  – Humans acquire Qi through interaction with the environment, which may lead to evil
  – Interaction with the environment causes the difference between principle and physical nature
  – The physical aspect of human nature (the Ch’i) is not good, it is just an approximation of its ideal (good) aspect
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  – Education should try to restore the original nature by removing the pollution of the Li caused by interaction with the environment
  – There is a super-Li, a principle of all principles, the form of all forms, that is part of everything and that governs the entire universe: the Tai-ji
  – The more we learn the better we understand the ultimate principle of the universe
  – Individual and political morality are linked by Li
  – Natural order and social order are linked by Li
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b. 1130 AD)
  – The world is perfect
  – Unhappiness is caused by misunderstanding the principles of the world
  – We can understand the world by studying
  – Opposite to Buddhist renounce of world affairs
What the Chinese Knew

• Zhu Xi/ Chu Hsi (b 1130AD)
  – Four classics of Confucianism become the core curriculum for aspiring scholar officials.
  – the Great Learning,
  – the Doctrine of the Mean,
  – the Analects of Confucius,
  – the Mencius
What the Chinese Knew

- Song (960-1279)
  - Lu Chiu-yuan/ Lu Xiangshan (1139)
    - Synthesizer of the Lu-wang school
    - One's nature and one's mind are the same thing, and they are one with the supreme ultimate ("the universe is my mind and my mind is the universe")
    - "It is my mind that generates space and time"
    - Zen-like introspection
  - Chen Liang (1143)
    - Lu-Wang school: material reality is the only reality
What the Chinese Knew

• Song (960-1279)
  – Daoism: monastic sect Quanshen Dao/ The Way of the Immortals/ Complete Realization
  – Mizong: esoteric school of Buddhism
    • Combination of Tantric Buddhism, Daoism and Confucianism and magic
    • Tang emperor Xuanzong (8th c) was an early supporter
    • Favored by emperors and kings from 10th to early 13th centuries
What the Chinese Knew

• Song (960-1279)
  – Buddhist caves of Dazu/ Baodingshan (1179-1249)
What the Chinese Knew

• Song (960 - 1279)
  - Buddhist caves of Baodingshan (1179 - 1249)
What the Chinese Knew

• Song (960-1279)
  – Arts
    • Rise of the scholar-official-artist (poet, painter): educated gentlemen are expected to be both statesmen and artists
    • Golden age of art and literature: ideal of the universal man, combining the qualities of scholar, poet, painter, statesman
What the Chinese Knew

- **Song (960-1279)**
  - Literature
    - Old-style prose (ku-wen)
      - Ou-yang Hsiu (1007) neo-Confucian
  - Historiography
    - Ssu-ma Kwang (1019)
    - Encyclopedic histories, such as "Shih-tung", begun by Cheng Chiao (1104), a monumental encyclopedic history of China
    - Diffusion of gazetteers (local histories)
What the Chinese Knew

• Song (960-1279)
  – Literature
• Poetry
  – Shih and fu only respectable poetic forms, but tzu widely popular (and now independent of songs)
  – Birth of Chu, colloquial erotic poetry
  – Li-yu/Hou-chu (937)
  – Su Shih/Tung-po/ Dongpo (1037, greatest tzu master), a polymath, also painter, calligrapher, pharmacologist, and statesman
Su Shih/Tung-po (1037)

A fragment moon hangs from the bare tung tree
The water clock runs out, all is still
Who sees the dim figure come and go alone
Misty, indistinct, the shadow of a lone wild goose?

Startled, she gets up, looks back
With longing no one sees
And will not settle on any of the cold branches
Along the chill and lonely beach

【卜算子】
缺月掛疏桐，
漏斷人初靜。
時見幽人獨往來，
縹緲孤鴻影。

驚起卻回頭，
有恨無人省。
揀盡寒枝不肯棲，
楓落吳江冷。
What the Chinese Knew

• Song (960-1279)
  – Birth of Chinese opera tsa-chu (recitation + singing + dancing + pantomime + acrobatics + string and percussion orchestra)
What the Chinese Knew

• Song (960-1279)
  – Arts
    • Monochrome porcelain
    • Chinese classical painting
      – No background
      – No details
      – No perspective (the viewer of the painting is not located in a specific point)
What the Chinese Knew

• Song (960-1279)
  – Arts
    • Landscape painting:
      – Early masters of the monumental style: Ching Hao, Tung Yuan, Chu Jan, Fan Kuan, Li Cheng
      – Kuo Hsi (1020)
      – Lyric style:
        » Ma Yuan (1190)
        » Hsia Kuei (12th c)
    – Spontaneous style: Mu Chi/Fa Chang, Liang Kai
Song Di (1015)

“Eight Views of Xiaoxiang” (original lost):
“Wild Geese Descending to Sandbar, Returning Sails off a Distant Coast, Mountain Market in Clearing Mist, River and Sky in Evening Snow, Autumn Moon over Dongting Lake, Night Rain on the Xiao and Xiang, Evening Bell from Mist-Shrouded Temple and Fishing Village in Evening Glow”
Ma Yuan (1190)

Ma Yuan: “The Yellow River Breaches its Course”
Xia Gui (1195)

“View of Streams and Mountains “  (46.5 × 8.9 meters scroll, National Palace Museum, Taipei)
Xia Gui (1195)

“Mountain Market, Clearing Mist”
What the Chinese Knew

- Su Shih/Tung-po (1037): “Wood and Rock”
Kuo Hsi (1020)
What the Chinese Knew

• Song (960-1279)
  – Arts
    • Scrolls
      – “Qingming Festival on the River”: 12th-century scroll painting (3m high and 9m long) depicting a festival scene in Kaifeng, eastern capital of China and displaying the city layout, architecture, commerce, costume and means of transportation.

Silk Museum, Beijing
What the Chinese Knew

• Song (960-1279)
  – Arts
    • Scrolls
      – Xu Daoning, “Fisherman's Evening Song” (1049), 48.3 x 209.6 cm
What the Chinese Knew

- Song (960-1279)
  - Representation of daily life

Portrait (12th c)
(National Museum of Taiwan)

Detail of a scroll (12th c)
(National Museum of Taiwan)
What the Chinese Knew

- **Song (960-1279)**
  - **Pagodas**

  Dingzhou City: Kaiyuan temple pagoda (1055 AD), tallest of all extant ancient buildings

  Yingxian: Pagoda (11th c), oldest extant wooden pagoda

  Quanzhou: one of the twin pagodas of Kaiyuan temple
What the Chinese Knew

- Song (960-1279)
What the Chinese Knew

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What the Chinese Knew

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What the Chinese Knew

• Song (960-1279)
What the Chinese Knew

• Song (960-1279)
What the Chinese Knew

- Song (960-1279)
  - 1267: The Mongol fleet and the Song fleet begin the six-year battle at Xiangyang and Fancheng on the Han river
What the Chinese Knew

• The Chinese world
  – North and west
    • Economic separation: pastoral nomadism in the steppes and deserts of Mongolia and Turkestan and in the plateau of Tibet
    • Linguistic separation: Mongolian, Turkish, Manchu and Tibetan are non-Chinese languages
What the Chinese Knew

• The Chinese world
  – South:
    • Vietnam has a Chinese-like language written in Chinese script and mimics Chinese literature
    • The rest of Southern Asia is influenced by Indian not Chinese civilization (the Chinese rarely travel south, less often than Indians, Arabs and even Europeans)
What the Chinese Knew

• The Chinese world
  – East:
    • Korea: political institutions borrowed from China (the legendary founder of Korea is a Shang) but Korean is an Altaic language
    • Japan: same as Korea plus it’s an island
What the Chinese Knew

• Mongols/Yuan (1279-1368)
  – Move the capital from Karakorum to Beijing
  – Ruthless Mongol oppression
  – Bleakest era in Chinese history
  – Chinese exploited by Mongol elite and their foreign clique (Jurchen, Chitan, Uighurs, Persians, Russians, Arabs and western Europeans)
  – Recruitment examination (chin-shih examination) tolerated but most posts go to Mongols
  – Population movement towards the south
  – Population decrease (60 million)
What the Chinese Knew

- Mongols/Yuan (1279-1368)
  - Increase in foreign trade
    - Silk Road across Central Asia terminating in Beijing
    - Indian Ocean route terminating in Guangzhou and Huangzhou
What the Chinese Knew

• Mongols/Yuan (1279-1368)
  – Mongols patrons of religions
    • Daoist monk Chang-Chun appointed by Genghis Khan patriarch of all religious orders of the Mongol empire
    • Tibetan lama Phags-pa appointed imperial mentor of Kublai Khan
What the Chinese Knew

• Mongols/Yuan (1279-1368)
  – Drama
    • Peak of Chinese opera tsa-chu and birth of nan-hsi or chuan-chi (a freer form of tsa-chu
    • Most famous tsa-chu is Wang Shih-fu: "Hsi-hsiang chi/ Romance of the West Chamber" (13th c)
What the Chinese Knew

• Mongols/Yuan (1279-1368)
  – Painting
    • Calligraphy integrated in the painting
    • Calligraphy: Chao Meng-fu (1254)
    • Landscape painting:
      – Huang Kung-wang (1269)
      – Ni Tsan (1301)
      – Wu Chen (1280)
      – Wang Meng (1309)
Dunhuang Caves

- Cave 465 (Yuan, 1311)
Chao Meng-fu (1254)
What the Koreans knew
What the Koreans knew

• 57BC-918AD: Silla kingdom (Kyongiu), contemporary of Han (206 BC - 220 AD) and Tang (618-907)
  – 372 AD: Introduction of Buddhism into Korea
• 918-1392: Goryeo kingdom, contemporary of Song (960-1279) and Yuan (1279-1368)
• 1392-1897: Joseon kingdom, contemporary of Ming (1368-1644) and Qing (1644-1911)
What the Koreans knew

- Wonhyo (b 617AD, Buddhist): universal interrelatedness of everything ("one mind")
- Chinul (b 1158AD, Buddhist): "no mind"
What the Koreans knew

- Goryeo Dynasty (918-1392)
  - Wang Kon, first ruler of the Goryeo dynasty, was a patron of Buddhist art, such as the "Tripitaka Koreana", the Buddhist scriptures (Tripitaka) carved onto 80,000 woodblocks and stored in Haeinsa
  - Invention of the world's first movable type
What the Koreans knew

Hwangnyongsa 8-storey pagoda of 553, tallest pagoda in East Asia, destroyed by the Mongols in 1238

Twin tortoise of 9-10th c.

Standing Buddha of the 9th c.

Kyongiu Museum

Bell of 771
What the Koreans knew

- Songgwanssa (founded 1190)
- Popchusa’s pagoda (6th c)
What the Koreans knew

- Jikjisa (founded 418 AD)
- Tongdosa’s Geumganggyedan (7th c)
What the Koreans knew

• Chomsongdae Observatory, Kyongiu (7th c)