History of Thought:
2. Ancient Greece, India and China

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What the Greeks knew

• Greek Philosophy
  – The universe makes systematic sense, and we can make sense of it (rationality and intelligibility of the world)
  – Problem of the nature of the world: an original substance must be the source of everything that is in the world today
  – Problem of change: what is it that does NOT change when we say that something “changed”? What persists so that we can say that “it” changed?
What the Greeks knew

• School of Miletus, Ionia
  – Thales (active 60x BC, Ionia):
What the Greeks knew

- School of Miletus
  - Anaximander (active 62x BC):
    - The fundamental substance is not one of the known substances
    - “Apeiron” (the absolute) generates the world and its elements (it turns successively into wind, steam, water, earth, stone)
    - Animals evolved from more primitive forms of life, a primeval soup heated by the Sun (proto-evolutionary theory)
    - The earth (shaped like a drum) is floating in the vacuum, surrounded by concentric spheres (first cosmological model)
What the Greeks knew

• School of Miletus
  – Xenophanes (Colophon, active 5xx BC)
    • Gods are not anthropomorphic, in fact there is only one God (proto-monotheism) and God is the entire universe (proto-pantheism)
    • What we know, how we know it and what we can know (proto-epistemology)
    • It is up to humans (their genius and their discipline) to acquire knowledge (no help from gods): knowledge comes from human endeavour
    • Wisdom (not athletic fitness) is the only virtue
What the Greeks knew

- Pythagoras (southern Italy, active 530 BC)
  - Contemplating is more important than acting
  - Contemplation leads to logic/mathematics
  - Mathematics is evidence of eternal truths/divine truths beyond the human mind
  - Geometry is evidence of perfect forms beyond the forms of nature,
  - Ecstatic revelation of the essence of nature (Logic becomes religion)
  - Note: mathematics leads the Pythagoreans to spirituality
What the Greeks knew

• Pythagoras
  – The fundamental substance is not a material substance, but an abstract principle (number)
  – Dualism: distinction between matter and spirit
  – Immortality of soul and metempsychosis: the soul is a fallen god, trapped in a body, and doomed to a perpetual cycle of rebirth
  – Ascetic life, vegetarianism
  – The earth is a sphere (shape of the earth during a lunar eclipse)
What the Greeks knew

- Irrational numbers
  - square root of 2
  - circumference/diameter of a circle (pi)
  - Pythagoras’ theorem

\[
3 \times 3 + 4 \times 4 = 5 \times 5
\]

\[
1 \times 1 + 1 \times 1 = ? \times ?
\]
What the Greeks knew

• Herakleites/Heraclitus (Ephesus, act. 53x BC)
  – Change & movement
  – Everything changes all the time ("you can't enter the same river twice")
  – Even we ("we are and we are not")
  – Everything flows
  – Identity is defined by the process, not by the thing
  – Identity is a pattern (of flow, of growth, etc)
What the Greeks knew

• Herakleites
  – Humans are both body (soma) and soul (psyche)
  – Body and soul are different substances
  – One of the attributes of soul is its “logos”
  – Logos permeates everything (proto-pantheism)
  – Logos as the personification of cosmic justice and distinct from the gods
What the Greeks knew

- Parmenides (southern Italy, active 470 BC)
  - First dialectic philosopher (justifies his beliefs)
  - Nothing ever changes.
  - Time and change are illusion.
  - Reality is eternal and timeless
  - Only one substance which is "the one”, indivisible and infinite (monism)
  - Reality is a changeless whole (not the plurality that we perceive)
  - The (changing) world of the senses is an illusion
What the Greeks knew

- Zenon/Zeno (southern Italy, active 47x BC)
  - Change is impossible
  - The world as we see it is an illusion
  - Proof: three paradoxes

Motion between two points requires going through an infinite number of points, which requires an infinite amount of time
What the Greeks knew

• Anaxagoras (Ionia, active 450 BC)
  – First openly atheistic philosopher
  – "Mind" (nous) as the organizing principle of the universe
  – Nous (intelligence, thought, mind) gives the atoms an order
  – Life was dispersed as seeds in the universe and eventually landed on Earth ("panspermia")
What the Greeks knew

• Sophistes/Sophists of 5th century BC
  – Sophia = wisdom (Philo-sophia: “love of wisdom”)
  – Itinerant teachers
  – A by-product of the rise of the middle class that needs a practical philosophy
  – Champions of liberty, equality and pacifism
  – Protagoras, Gorgias, Hippias of Elis
What the Greeks knew

• Protagoras (b 485 BC)
  – The gods do not exist or are irrelevant
  – The only reality is subjective knowledge
  – Judgments are relative to speakers
  – "Man is the measure of all things"
What the Greeks knew

- Sokrates/Socrates (Athens, b469BC)
  - (Disclaimer: Sokrates is a character in Platon’s socratic dialogues)
  - A philosophy of man not of cosmos
  - A practical philosophy not a theoretical one
  - Moral preoccupations instead of ontological speculations of pre-Socratic philosophers
  - Courage, piety, virtue, justice
What the Greeks knew

• Sokrates/Socrates (Athens, b469BC)
  – Virtue is knowledge, and ignorance is the cause of all evil
  – Wisdom is knowing what one does not know
  – All learning consists in being reminded of what we already know
  – Not what is true, but what is Truth?
  – Not what is the world made of, but why do we want to know what the world is made of?
  – Not answers to old questions, but new questions
What the Greeks knew

• Philosophy after Sokrates/Socrates
  – Philosophy is a guide to living your life
  – Philosophy is to be lived
  – Philosophy is a way of life
  – Philosophy starts with ethics
What the Greeks knew

- Demokritos/ Democritus (Thrace, b460BC)
  - Nothing comes from nothing
  - Everything is divisible in atoms
  - Atoms cannot be further divided
  - The motion of atoms causes the creation of complex bodies such as our universe
  - There are many such universes (galaxies)
What the Greeks knew

• No unified view of the self
  – Psyche, pneuma, logos, nous, thymos…
  – A person can be identified in many different ways (like in ancient Egypt)
What the Greeks knew

- Platon/Plato (Athens, b427)
  - Imaginary dialogues between Socrates and various interlocutors (sophists, poets, politicians, aristocrats, believers)
  - A new literary form (part drama and part narrative)
  - All the talking is done by Socrates
What the Greeks knew

• Platon/Plato
  – Senses are the problem, not the solution
  – Ideas/forms (such as “circle”, “beauty”, etc) are eternal and unchangeable
  – An idea/form (eidos) exists independently of the mind that thinks it and of the object that instantiates it.
  – Objects and phenomena are like shadows on the walls of a dark smoky cave
  – Knowledge is “remembering” innate knowledge (anamnesis)
What the Greeks knew

• Platon
  – Body-soul dualism: immortal soul in mortal body
  – The human body decays like an animal but the soul lives forever like a god
  – The soul pre-existed the body, like all other forms
What the Greeks knew

• Platon
  – The soul grows just like the body
  – Through proper training, the soul can become one with the ultimate idea of the universe
  – “Salvation” of the soul is an individual process
  – “Last of all, he will be able to see the sun, and not mere reflections of it in the water, but he will see it in its own proper place, and not in another; and it will contemplate it as it is” ("Republic")
What the Greeks knew

- Platon
  - Anti-democratic: contempt for ordinary people’s ability to choose the best system
  - Ordinary people judge based on their senses, which are misleading
  - Social and political problems are caused by the ignorance of ordinary people
  - Only philosophers can find out the truth
  - Need for a new form of government, not based on ordinary people but on philosophers
  - Poets and artists banned from the republic: they are useless and misleading
What the Greeks knew

• Aristoteles/Aristotle (Macedonia, b384)
  – Senses are the solution, not the problem
  – “There is nothing in the intellect that was not first in the senses”
  – Knowledge is attained via observation and logic (“Organon”)
What the Greeks knew

• Aristoteles/Aristotle (Macedonia, b384)
  – Form/eidos is part of an object, it does not pre-exist it
  – Form does not belong to a separate world, but is simply a feature of an object
  – Form is inseparable from the object
  – The soul is inseparable from the body
What the Greeks knew

• Aristoteles
  – Logic: how to obtain knowledge from observed facts
  – Syllogism: inference rules that can be chained together to create truth
  – “All humans are mortal” and “All Greeks are humans” imply “All Greeks are mortal”
  – Modus pones: if you know that A causes B and that B causes C, then you can also assume that A causes C
  – Modus tollens: \((A\rightarrow C \& \neg B\rightarrow C) \Rightarrow \neg (B\rightarrow A)\)
  – Excluded middle: It cannot be that P and \(\neg P\)
What the Greeks knew

• Aristoteles
  – Physics
    • There is a reality that exists apart from anyone experiencing it, and human senses are capable of accessing it
    • The heavens are made of 55 concentric spheres with the Earth at its center
    • Four elements: earth, air, fire, and water
    • The natural state of earthly matter is rest
What the Greeks knew

• Aristoteles
  – Physics
    • Celestial bodies are made of a “quintessence”
    • Natural state of the heavens is uniform circular motion
    • The universe is eternal (has always been, will always be)
What the Greeks knew

- Aristoteles
  - Metaphysics
    - Theos/God as the first cause of motion (the motor that does not move)
    - The thought of thought
    - Theos/God is form without matter (pure thought, immutable)
Alexander’s Empire

http://www.history.com/maps.do?type=view&catId=59&letter=A&mapId=1015
The Hellenistic world (3rd c BC)

Source: http://www.abu.nb.ca
What the Greeks knew

• The Hellenistic Age (331 BC)
  – Revolution in trade routes and trade practices
    • E.g., Egypt: spices from Arabia, silk from China, carpets from Asia Minor, silver from Spain, gold from India, tin from Britain, etc
  – Trade boom spawns economic boom
What the Greeks knew

• Books
  – Parchment made of animal skin instead of papyrus (190 BC)
  – Parchment codex instead of papyrus scroll (1st c AD),
    easier to consult and safer to transport
  – Parchment codex enables more sophisticated
    illustrations

• Library of Alexandria (307 BC)
  – Founded by Ptolemy I
  – Papyri in Greek, Hebrew, Aramaic, Nabatean, Arabic,
    Indian, Egyptian
What the Greeks knew

- Hellenistic Science
  - First major scientific boom in the history of humankind
  - Largely at Alexandria: mathematicians, scientists, inventors, philosophers
What the Greeks knew

• Eukleides/ Euclid (Alexandria, b300BC)
  – Geometry
  – Postulates (parallel lines)
  – A theory of space
  – All the truth that can be deduced from a handful of axioms

• Erarosthenes (Alexandria, b276BC)
  – Calculates the circumference of the Earth
  – Founds geography

• Aristarchus (Alexandria, b270BC)
  – The Earth is a planet
  – Planets revolve in circles around the Sun (heliocentric theory)
  – Calculates the distance of the Moon
What the Greeks knew

• Archimedes (Siracusa/Syracuse, b287BC)
  – Mathematics and Mechanics
  – Principle of the lever
  – Law of hydrostatics
  – Physics becomes a separate discipline from Philosophy

The Antikythera mechanism, the world’s first computer
What the Greeks knew

- Time-keeping
  - Late adoption of Egyptian “outflow” water clocks (325 BC)
  - Ctesibius of Alexandria (3rd C BC): the inflow water clock
  - Large-scale water automata
- Athens' "Horologion" by Andronikos (1st C BC), comprising both sundials and 24-hour water clocks, indicators for the eight winds and the seasons, and astrological data
What the Greeks knew

• Heron (Alexandria, 1st c AD)
  – Pneumatica (applications of steam power)
  – Dioptra (magnifying lenses)
  – Hydraulica (hydraulic lifting device)
  – Mechanica (mechanical inventions)
What the Greeks knew

- Hipparchus of Nicea (b146 BC)
  - Earth at the center of the universe (“geocentric theory”)
  - Catalogued 1,000 stars

- Klaudios Ptolemaios/Claudius Ptolemaeus/Ptolemy of Alexandria (145 AD)
  - Earth at the center of the universe (“geocentric theory”)
  - Uniform circular motion of the planets in their orbits and of their orbits around the Earth

- Diophantus of Alexandria (250 AD)
  - The "Arithmetica"
What the Greeks knew

• Hellenistic Philosophy
  – Emphasis on happiness of the individual

• Hellenistic Religion
  – Emphasis on salvation of the individual
  – Popularity of “mysteries” (Eleusinian, Dyonisian), whose deities are closer to humans and promise salvation

• Materialism
  – Cynicism
  – Epicureanism
  – Stoicism
What the Greeks knew

- Wonders

The Pharos of Alexandria (Egypt, 300 BC)

The Colossus (Helios) of Rhodos (290 BC)
What the Greeks knew

Old Market Woman (2nd c BC)
(Metropolitan Museum, New York)

Alexandros: "Aphrodite of Milo/
Venus de Milo” (150 BC)
(Louvre Museum, Paris)
What the Greeks knew

- Aphrodites and Pan of Delos (100 BC)

(Athens National Museum)
What the Greeks knew

• Three marble cities of Anatolia: Aphrodisias, Ephesus, Miletus

- Athena of Aphrodisias
  2nd AD
  (Archeological Museum, Istanbul)

- Oceanus of Ephesus
  2nd AD
  (Archeological Museum, Istanbul)

- Apollo of Miletus
  2nd AD
  (Archeological Museum, Istanbul)
What the Greeks knew

Petra (Jordan)
What the Greeks knew

Palmyra (Syria)
What the Greeks knew

Map of 300BC
Yellow River (Huang He) valley

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

• Geography
  – Three rivers: Yellow (Huang He), Yangtse, Xi (Western)
  – Great fertility of soil from north to south
  – Mountain ranges: Tien Shan, Kwanlun, Hingan, Himalaya
  – Mineral wealth from the mountains
  – Rivers: communications
  – Mountains: protection from "barbarians" (non-Chinese)
  – Nothern deserts (Gobi, Takla Makan)
What the Chinese Knew

- Geography

Both originate from Tibet
Chinese dynasties

Zhou 1122 - 403 BC
  900BC: I Ching/Yi Jing
  500BC: Confucius/Qufu
  500BC: Daoism

Warring States
Qin 256-210 BC
  221BC: Unification of China
  First Great Wall of China

Han Dynasty 206 BC - 220 AD
  106BC: the Silk Road
  2 AD: the Han empire has 57 million people, the most populous country in the world
  68AD: Buddhism is introduced in China
  608: Grand Canal
  645: Xuanzang brings sanskrit manuscripts from India to China
  650: Tang China extends from Afghanistan to Vietnam

Tang Dynasty 618-907
What the Chinese Knew

- Society as superior to the individual
- Government as a natural phenomenon
- Moral values
- Tolerance for other religions
- But belief in Chinese superiority over other civilizations
What the Chinese Knew

- Pseudo-monotheism: Heaven
- Worship of ancestors
What the Chinese Knew

Divination bones to ask ancestors questions

- Will it rain tomorrow?
- Will the eastern land enjoy a good harvest?
- King Hsin’ prayers for victory as he undertakes a punitive expedition against the Yu
## What the Chinese Knew

<table>
<thead>
<tr>
<th>Oracle Bone Script</th>
<th>Seal Script</th>
<th>Clerical Script</th>
<th>Semi-Cursive Script</th>
<th>Cursive Script</th>
<th>Regular Script (Traditional)</th>
<th>Regular Script (Simplified)</th>
<th>Pinyin</th>
<th>Meaning</th>
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<tbody>
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<td>Rice Plant</td>
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</tbody>
</table>
## What the Chinese Knew

- **Chinese language**

<table>
<thead>
<tr>
<th>Chinese Character</th>
<th>Pinyin</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>母</td>
<td>mǔ</td>
<td>Mother</td>
</tr>
<tr>
<td>目</td>
<td>mù</td>
<td>Eye</td>
</tr>
<tr>
<td>牛</td>
<td>niú</td>
<td>Cow</td>
</tr>
<tr>
<td>羊</td>
<td>yáng</td>
<td>Goat</td>
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<tr>
<td>马</td>
<td>mǎ</td>
<td>Horse</td>
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<tr>
<td>鸟</td>
<td>niǎo</td>
<td>Bird</td>
</tr>
<tr>
<td>龟</td>
<td>guī</td>
<td>Tortoise</td>
</tr>
</tbody>
</table>
What the Chinese Knew

• Chinese language
  – Many characters were originally pictographs (Note: the original symbol for “tree” represented BOTH branches and roots)
  – Many characters are ideograms (Note: the original symbol for “peace” is a woman under a roof)
  – Subtle meanings
What the Chinese Knew

• Chinese language
  – Written language prevails over spoken language (Chinese history is full of very important documents but very few important speeches)
  – High rate of literacy
  – Written language unifies China (that has thousands of dialects)
What the Chinese Knew

• Rice civilization (since at least 4,500 BC)
  – Rice requires the continual supply of water of a river (unlike wheat that relies on rainfall)
  – Irrigation of paddy fields requires large-scale cooperation (unlike wheat cultivation that can be more individualistic)
  – Rice/fish civilization needs to coexist with nature as opposed to control nature (wheat/livestock civilizations)
What the Chinese Knew

Batad, Philippines (2,000 BC)
What the Chinese Knew

• Xia/Hsia dynasty (2070-1600 BC or 2200-1750 BC)
  – Mythological first dynasty
  – Legendary founding father of the Yellow River civilization: Yu the Great, a water engineer
What the Chinese Knew

• Shang (1766 BC - 1122 BC)
  – From northern China
  – Chariot-riding warrior elite (military aristocracy)
  – Bronze

Chariot from royal tomb in An-yang (11th c BC)
What the Chinese Knew

• Shang (1766 BC - 1122 BC)
  – Oldest known form of Chinese writing (Anyang) for divination purposes, using more than 2,000 characters
What the Chinese Knew

• Shang (1766 BC - 1122 BC)
  – Supreme god Ti/Di or Shangdi
  – Royal ancestors subordinate to Ti
  – The king is the son of Heaven
  – Heaven is the ancestor of the emperor
    (and originally anthropomorphomic)
Shang bronze of 13th c BC
(Art Institute of Chicago)

Shang bronze of 12th c BC
(Miho Museum, Kyoto)

Shang bronze of 13th c BC
(San Francisco Asian Art Museum)

Shang bronze of 12th c BC
(Art Institute of Chicago)
What the Chinese Knew

- Shu (13th-11th BC)
What the Chinese Knew

• Zhou (1122 BC - 403 BC)
  – Mandate of Heaven (tien-ming): the cosmos is dominated by Heaven (tien) which bestows the emperor (the son of Heaven) with the power to rule over the empire (tien-hsia)
  – Supreme god (Tien or Ti) becomes more abstract and less “divine” (a cosmic principle, not an anthropomorphic deity)
What the Chinese Knew

- Zhou (1122 BC - 403 BC)
  - Polytheism: the world is inhabited by a multitude of spirits (one for each natural phenomenon) and ghosts
  - The supernatural is natural
  - Religion is natural philosophy: no holy wars, crusades, jihad, etc, no fear of damnation, no anxiety of salvation, no prophets, no dogmas
What the Chinese Knew

• Zhou (1122 BC - 403 BC)
  – Government's function is to provide peace, order and prosperity: Heaven wants humans to live harmoniously (both among themselves and with the rest of the universe)
  – Government should be humane and compassionate
What the Chinese Knew

• Eastern Zhou (771 BC - 403 BC)
  – A golden age of creativity
  – Iron replaces bronze for weapons and tools
  – Agricultural revolution
    • Ox-drawn plow
    • Large-scale irrigation
    • Transport canals
  – Economic growth
  – Rapid growth of trade
What the Chinese Knew

- Zhou (1122 BC - 403 BC)
  - Yang and ying
  - I Ching/Yi Jing
  - Three competing ideologies
    - Qiu Kong/ Confucius (native of the Zhou heartland)
    - Daoism
    - Legalism (7th c BC): totalitarian regimentation of society to serve the interest of the state
What the Chinese Knew

- I Ching/Yi Jing Book of Changes (900 BC)
  - 64 symbolic hexagrams, each hexagram consisting of a pair of trigrams chosen from a family of eight basic trigrams, each named for a natural phenomenon
  - The eight trigrams represent the possible combinations of Yang and Yin, or unbroken and broken lines
  - Divination and numerology
  - Commentaries on change
  - "Yin" (quiescence)
  - "Yang" (movement)
What the Chinese Knew

- Qiu Kong/ Confucius/ Kung Fu-tzu (500 BC)
  - Lun Yü (Analects)
  - Shih Shu (Four Books)
  - Philosophy of social organization
  - Literal objective: ethical basis for family
  - Abstract objective: social harmony through moral values
  - All humans are born alike
  - Human nature is not evil or good, humans become evil or good
  - The power of example
  - Ideal: the “chun tzu” (ideal person, humanity at its best)
What the Chinese Knew

- Confucius
  - Duty of obedience of the subordinate to the superior (ruler, father, husband) contingent upon benevolence and care of the superior for the subordinate (subject, child, wife)
  - Government by example of virtue (by moral education)
  - Benevolent ruler
  - Transformative power of education
  - Indifferent to gods
What the Chinese Knew

- Lao-tzu/ Laozi (520 BC)
  - Daoism
  - “Dao-te Ching/ Dao De Djing ” (The Virtue of the Way)
  - The “Dao” (the “way”): ultimate unity that underlies the world’s multiplicity
  - The “Dao” underlies the continuous flow and change of the world
  - The way things do what they do
  - Understanding the “Dao” means identifying the patterns in the flow and change of the world (harmony with nature)
What the Chinese Knew

- Lao-tzu
  - Philosophy of nature
  - Change is inherent in nature (not caused by a god)
  - "Dao" (empty void of infinite potential) is the supreme being
  - "Qi" is vital energy in constant flux that arises from the “Dao”
  - "Yin" and "Yang" are opposites that harmonize to direct the movement of Qi
  - Everything is made of yin and yang
  - Matter = energy (matter “is” Qi)
What the Chinese Knew

• Lao-tzu
  – Wuwei: action through inaction (flow with the natural order)
  – Hostile to civilization/progress
  – Critique of Confucianism:
    • Spontaneous behavior vs calculated behavior (eg, rituals, education, learning)
    • Government is an obnoxious interference in nature
What the Chinese Knew

• Mozi (Mo Tzu or Mo Ti, b 470BC)
  – Proto-socialism
  – Mutual love (ai) produces mutual profit (li)
  – War is the worst ill (built anti-war militia specialized in defensive warfare)
  – Universal love and pacifism
  – Universal unbiased love (same love criteria for everybody) instead of Confucius’ “partial love” (more love for one’s own family than others)
  – Absolute obedience and rigid discipline are required
What the Chinese Knew

- Mohist canon
  - politics
  - military
  - philosophy
  - ethics
  - logic
  - science
- Had the Mohist school won over the Confucian school, China may have undergone a scientific revolution before the West
What the Chinese Knew

- Civil war/ Warring states (403 BC - 256 BC)
  - Anarchy: Chinese nadir to Zhou's golden age
  - Iron weapons replace expensive bronze weapons
  - Peasant foot soldiers replace the aristocratic charioteers
  - Much larger armies, much broader bloodshed and destruction
  - Cavalry armed with crossbows replaces the chariots
  - Chu is the most aggressive but Qin eventually conquers all
What the Chinese Knew

• Mencius/ Meng-zi (b 371BC)
  – Human nature (xing) was generated by Heaven
  – Heaven is good, therefore human nature is also good
  – All humans are equally good by nature
  – If people live a relaxed, orderly life, their good nature prevails
  – Humans should seek out their "lost child's mind" (good nature)
What the Chinese Knew

- “Zhuangzi/ Chuang Tzu” (330BC)
  - Second classic of Daoism
  - “If one asks about the Dao and another one answers it, neither of them knows it”
What the Chinese Knew

• Great Learning/ Da Xue (3rd c. BC)
  – Third book of Confucianism
  – Political program, from educating people to world peace
  – The order of the state is based on the order of the family which is based on the order of the individual
What the Chinese Knew

• Doctrine of the Mean/ Zhong Yong (3rd c BC)
  – Fourth book of Confucianism
  – Metaphysical foundation
  – Unity of Man and Heaven (Tian)
  – Zhong = equilibrium; Yong = harmony
  – Xing (human nature) is from Tian
  – To follow Xing is to follow the Dao
What the Chinese Knew

• The “Six Classics” (canonized by the Han dynasty)
  – Four books of Confucianism/ Shih Shu/ Ssu Shu
    • Lun Yü (Analects)
    • Daxue (Great Learning)
    • Zhongyong (Doctrine of the Mean)
    • Mengzi (Mencius)
  – Two books of Daoism
    • Dao-te Ching (The Virtue of the Way)
    • Zuangzi/ Chuang Tzu
What the Chinese Knew

- Xun-zi/ Hsun-tzu (b 300BC)
  - Human nature is evil
  - Human instinct leads to conflicts and therefore must be curbed
  - All humans are equally uncivilized by nature
  - Goodness must derive from society's action (wei)
  - Human nature (xing) is both innate (evil) and acquired (good) because of desires
  - Human selfishness requires draconian laws ("legalism")
What the Chinese knew

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

• Qin/Ch’in (256BC - 210 BC)
  – Based in the Wei Valley (Xian)
  – First unification of China (the Western word “Cina” derives from “Qin”)
  – Practical application of the Legalist political and military organization
What the Chinese Knew

• Qin (256BC - 210 BC)
  – Large-scale projects
    • Cheng-kuo Canal (246 BC) irrigates area north of Xian
    • Ling Chu/ Lingqu (219 BC), a canal through the mountains dividing north and south China, which connects the waterways of the Yangtze to the waterways of the Xi River and to the sea
• Great Wall
What the Chinese Knew

- Qin (256 BC - 210 BC)
- Terracotta soldiers of Xian
- Bronze chariots of Xian
What the Chinese Knew

- Qin tomb
- Terracotta Soldiers
- Great Wall
What the Chinese Knew

• Demise of legalism
  – Rule by impersonal law viewed less favorably by the Chinese than rule by a moral emperor
  – Opposite trend of the West (that trusts impersonal laws over the tyrant’s judgment)
What the Chinese knew

http://www.artsmia.org/arts-of-asia/china/maps/han-map.cfm
Chinese dynasties

- 0-300 AD four empires in Eurasia:
  - Han (Buddhist and Daoist)
  - Roman (Christian)
  - Parthian (Zoroastrian)
  - Kushan (Buddhist)

http://www.hyperhistory.com/online_n2/maptext_n2/barbarian.html
What the Chinese Knew

- Han Dynasty (206 BC - 220 AD)
  - Founded by a man of humble origins
  - Succeeded by one of his wives
  - Hereditary aristocracy is replaced by meritocracy
  - Emergence of the class of officials-scholars recruited nationwide on the basis of their knowledge of the classics
  - Education spreads and the dominant classes engage in literature (eg, poetry)
  - Relatively few slaves and few privileged families (the top and the bottom shrink, the middle swells)
  - Merchant class still despised (and excluded from bureaucracy)
What the Chinese Knew

- Han (206 BC - 220 AD)
  - Emperor Wu Di (141-87 BC) dispatches explorer Zhang Qian / Chang-Ch'ien to Central Asia (139 BC and 115 BC)
  - Emperor Ming Di (57-75 AD) dispatches general Ban Chao to conquer Central Asia (73 AD)
  - Control of Central Asia increases volume of trade with the West (e.g., “Silk Road”)
  - The “Silk Road” is inaugurated by Parthian king Mithridates II and Chinese emperor Wu-Ti (106 BC)
What the Chinese Knew

Silk Road

http://www.travelchinaguide.com/silkroad/
What the Chinese Knew

• Han (206 BC - 220 AD)
  – Emperor Shun Ti (126-44) confines himself to the palace creating the imperial etiquette
  – Eunuchs gain power as the only men allowed near the emperor
  – Conflict between aristocrats and eunuchs
  – Conflict between generals and eunuchs
  – Empresses and their families gain power and appoint emperors
  – Conflicts between eunuchs and clans of the empresses
What the Chinese Knew

• Daoist religion (Dao Chiao)
  – Lao Tzu deified (142 AD)
  – Inclusive religion (local Gods, deified heroes)
  – Incorporating traditional spirits (polytheistic church preaching salvation through immortality)
  – Gods are divine emanation of the Dao
  – Very elaborate ritual to invoke/petition the gods
  – Pantheon organized as a celestial court
  – Goddesses represent the “yin” of the world
  – Ultimate goal is immortality (achieved via elixirs or discipline)
What the Chinese Knew

• Daoist religion
  – Daoism regresses to a system of magic (the Daoist priest being a sorcerer)
  – Escapism and hedonism (indulging in pleasure, avoiding social duties)
  – Government is only an expedient for the clever to dominate the masses
  – Alchemy
  – Kung-fu
What the Chinese Knew

• Daoist cults
  – Cult of the Immortals (e.g., the Xiwanmu/Queen Mother of the West, first mass religious movement in China)
  – Zhang Daoling's Tianshi Dao/ The Way of the Heavenly Teacher aka Wudoumi Dao/ Five Pecks of Rice Taoism (142 AD): polytheistic, magical, messianic
  – Zhang Jiao's Taiping Dao (2nd c AD)
  – Yang Xi's Shangqing/ Highest Clarity (370 AD)
  – Ge Chaofu's Lingbao/ Numinous Treasure: Highest Clarity plus Buddhist cosmology plus magic
What the Chinese Knew

- State religion
  - Worship of ancestors by commoners
  - Worship of Heaven by emperors (sons of Heaven)
  - Circular platform
- Han: 8 staircases - Tang: 12 staircases - Ming and Qing: 4 staircases (eg, Tiantan in Beijing)
- Oldest-known altar used in Chinese state religious practice: Xian, 7th c AD
What the Chinese Knew

- Han (206 BC - 220 AD)
  - Paper (105 AD)
  - Waterwheel (waterpower for grinding grain and casting iron)
  - Compass
  - Blast furnace to make steel (1st c BC)
  - Cast iron (119BC: the emperor nationalize all cast-iron factories; Tu Shih's water-powered bellows)
  - Agricultural tools made of cast iron
  - Water-powered industry
What the Chinese Knew

- Han (206 BC - 220 AD)

Miniature village (Beijing History Museum)

Miniature house, 25-220AD (Nelson Museum, Kansas City)
What the Chinese Knew

- Han (206 BC - 220 AD)

Miniature cart (Nelson Museum, Kansas City)

Miniature house of 2nd c AD (Art Institute of Chicago)
What the Chinese Knew

- Han (206 BC - 220 AD)

Three-storied pavilion, 2nd c AD
(Cantor Museum)
What the Chinese Knew

• Han vs Rome
  – Land-oriented vs sea-oriented
  – Irrigation vs import of grains
  – Self-sufficient vs dependent on colonies/provinces
  – Water-powered industrial revolution vs slave labor
  – Monocultural society vs multi-cultural/ethnic/religious/linguistic society
  – Han fell but China reunified many times (thanks to waterways the provide unity); Rome never reunified
What the Chinese Knew

• Six Dynasties (220 AD - 589 AD)
What the Chinese Knew

• Six Dynasties (220 AD - 589 AD)
  – Vogue of Daoism (that develops into an organized religion with a huge pantheon)
  – Arrival of Buddhism
What the Chinese Knew

- Six Dynasties (220 AD - 589 AD)
  - Poetry
    - The Yueh-fu (free-form shih)
    - The Lu-shih (shih with tonal rules besides formal rules)
    - Tao Chien/Qian (365): landscape poet
      - "T’ao-hua-yuan t’u/ Peach Blossom Spring"
  - Sculpture: mostly a Buddhist enterprise (cliff grottoes of Yun-kang and Longmen/Luoyang)
  - Painting: Ku Kai-chih/ Gu Kaizhi (344)
  - Calligraphy: Wang Hsi-chih (321)
Gu Kaizhi (345-406): "The Admonitions Scroll", 8th c copy
http://www.thebritishmuseum.ac.uk/compass/ixbin/goto?id=OBJ2100
What the Chinese Knew

- Chinese Buddhism
  - Introduced in 68 AD
  - India is the only part of the outside world to which Chinese scholars traveled for education and training
  - Not easy for missionaries to convert the Chinese: Buddhist values clash with traditional family values and work ethics of the Chinese people
  - Therefore emphasis on magic powers
  - Buddhism is the “religion of the images”
What the Chinese Knew

• Chinese Buddhism
  – Buddhist caves
    • Dunhuang/Mogao caves (366 AD)
    • Yungang/Datong caves (465 AD)
    • Luoyang/Longmen caves (494 AD)
Dunhuang/Mogao caves (366 AD)

- Cave 257 (North Wei)
- Cave 259 (North Wei, 450 AD)
Dunhuang Caves

- Cave 249 (545 AD)

Cave 254: Jataka stories (470 AD)
Dunhuang Caves

- Cave 285 (West Wei, 539)
Yungang/Datong caves (465 AD)

Indian influence (carving into the living rock)

Central-Asian influence (Gandhara-style iconography)
Luoyang/Longmen caves (494 AD)
Luoyang/Longmen caves (494 AD)
Dazu caves
What the Chinese Knew

• Chinese Buddhism
  – Jingtu (Pure Land) Buddhism
  – Chan/zen
  – Tendai
  – Hua-yen
  – Chen-yen
What the Chinese Knew

• Chan (zen) Buddhism
  – A fusion of Buddhism and Daoism
  – Focus on attainment of sudden enlightenment ("satori")
  – Main contribution of China to the development of Buddhism: the doctrine that sudden intuition can lead to salvation
  – Every individual possesses perfect wisdom but it requires meditation (oneness) for a mind to view its own potential of wisdom
What the Chinese Knew

• Chan (zen) buddhism
  – Spontaneous thinking as opposed to philosophical investigation (zen is the “everyday mind”, daily experience)
  – Spontaneous behavior as opposed to calculated behavior (“when hungry eat, when tired sleep”)
What the Chinese Knew

• Zhiyi (b 538AD)
  – Founder of Tiantai/Tendai Buddhism
  – Buddhahood is open to all people rather than to a few
What the Chinese Knew

- Chen-yen/Zhēnyán/Shingon Buddhism
  - Esoteric
  - The absolute cannot be express by words but only by magic symbols, formulas and rituals
  - Cosmological drawings (mandalas)

Womb World Mandala
What the Chinese Knew

• Effect of Buddhism on Daoism
  – Buddhism introduces incomprehensibly colossal dimensions of time and space in the traditionally simple dimensions of Chinese thought
  – Exuberant luxuriant Indian imagination collides with modest Chinese thought
  – Buddhist metaphysics does not help with ordinary life and therefore leaves room for traditional Chinese philosophy to still apply
  – Indian cosmic dimension vs Chinese practical dimension
What the Chinese Knew

• Paradise
  – Buddhism introduces the “Paradise of the West”
  – Buddhist paradise is discouraging: infinitely distant, infinitely large, infinitely empty
  – Buddhism considers animals as inferior beings, therefore there are no animals in Paradise
  – Buddhism considers sex as an inferior activity therefore there is no sex in Paradise
What the Chinese Knew

• Paradise
  – The Daoist paradise is full of animals and offers plenty of sex
What the Chinese Knew

• The Grand Canal (610) 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)
The Tang Empire

What the Chinese Knew

• Tang (618 - 907)
  – 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
    • 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)
  – 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)
  - 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

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

• Tang (618 - 907)
  – Printing
    • 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)
  – Buddhism ("Indianization of China"): state control of Buddhist monasteries (607)
  – Apex of Daoism influence (notably the Highest Clarity sect)
  – Confucianist revival
  – Deification of both Qiu Kong (Kung Fu-tzu) and Lao-tsu
What the Chinese Knew

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 (618 - 907)
  – Poetry
    • Golden age of poetry
    • 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)
What the Chinese Knew

• Tang (618 - 907)
  – Painting
    • 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)
What the Chinese Knew

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

Zhou Fang/ Chou Fang:

(Boston Museum of Fine Arts)

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

Dunhuang Cave 139A: Paradise of Amitabha (Tang, 9th c AD)
What the Chinese Knew

Li Chao-tao: “Emperor Ming Huang’s Journey to Shu” (8th c)
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”
• Only one doctrine can preserve (Chinese) civilization: Confucianism
Indus Valley civilization

[Map of the Indus Valley Civilization]

www.harappa.com
Indo-European Languages

• Climate and landscape
  – Himalayas in the north
  – Deserts and steppes in the west
  – Rain forest in the east
  – Indus, Ganges and Brahmaputra valleys and river deltas
  – Arab Sea and Gulf of Bengal
  – Main migration route: from the eastern steppes towards the southern seas
India

- 3000 BC: Harappa and Mohenjo-Daro in the Indus Valley of Punjab (600 kms apart)
- 1500 BC: Indo-Aryan tribes speaking Sanskrit invade India and settle in the Ganges valley
- 1000 BC: the Rig-Veda are composed in Vedic
- 900 BC: the Aryans are divided in four social classes
- 600 BC: the Upanishads are composed in Sanskrit
- 527 BC: Siddhartha Gautama is enlightened (the Buddha)
- 500 BC: the ascetic prince Mahavira founds Jainism
- 304 BC: Chandragupta Maurya
- 259 BC: Mauryan king Ashoka converts to Buddhism
- 220 BC: the Maurya dynasty under Ashoka's son Bindusara expands to almost all of India
Mohenjo-Daro

- Steatite Bust, Mohenjo-daro (2600-1900 BC)
- Copper Statuette of a Dancer, Mohenjo-daro (3000-1500 B.C.)

National Museum, New Delhi

Female figurines from Kulli, Baluchistan
Mohenjo-Daro

- Steatite seals
  - Dravidian language?
  - No Horses!

[Images of Mohenjo-Daro artifacts]
Indo-European Languages

• Indo-European warfare
  – Domestication of the horse
    • 2,500 BC: Horse first domesticated in the Eurasian Steppes
    • 2,000 BC: horses buried with chariots
    • 1,000 BC: domestication spread through Europe, Asia and North Africa
  – Horse-driven chariot
  – Leather armor
  – Bronze swords
  – Tripartite society: priests, warriors, farmers
Indo-European Languages

• The Indo-European migrations
  – 2200 BC: Mycenae (Greece)
  – 2100 BC: the Hurrians in northern Mesopotamia
  – 1720 BC: the Hittites in Turkey
  – 1700 BC: Indo-Iranians
  – 1600 BC: Indo-Europeans in the Indus valley
  – 1480 BC: the Mitannis in Mesopotamia
India

- 304 BC - 184 BC: Maurya
- 184 BC - 78 BC: Sunga (Bengal to Central India)
- 78 AD - 233: Kushan
- 318 - 528: Gupta
- 550 - 1190: Chalukya
- 1192-1526: Delhi sultanate
- 1526-1707: Moghul
- 1707-1802: Maratha
The Maurya Empire

304 BC - 184 BC

http://www.wsu.edu:8080/~dee/ANCINDIA/MAURYMAP.HTM
India

- 0-300 AD four empires in Eurasia:
  - Han (Buddhist and Taoist)
  - Roman (Christian)
  - Parthian (Zoroastrian)
  - Kushan (Buddhist)

http://www.hyperhistory.com/online_n2/maptext_n2/barbarian.html
What the Indians knew

• Today:
  – India has 112 mother tongues with at least 10,000 speakers
What the Indians knew

• The Vedas
  – Veda means “knowledge/wisdom” in ancient Vedic
  – Beliefs of the Indo-Europeans
  – All Vedas were reserved for male priests of the upper (Brahmin) caste
  – Not written down but handed down orally from father to son (jealously guarded secrets)
What the Indians knew

• Rig-veda (1500 BC)
  – Polytheism
    • Solar gods (Adityas): Varuna (god of the cosmic order) is the supreme god, his brother Mitra (son god), Surya (sun god) and his wife Ushas (the dawn), etc
    • Gods of the air: Indra (god of war, later becomes more popular than Varuna), Rudra, etc
    • Gods of earth: Agni (the fire god), Soma, etc
  – Asuras and Devas
    • Asuras deities of moral phenomena (e.g. Varuna)
    • Devas deities of natural phenomena (e.g. Indra)
    • Later: Devas" angelic and "Asuras" demonic
What the Indians knew

- Rig-veda (1500 BC)
  - Several contradictory creation myths (creation by fecundation of primordial waters, creation by dismembering of the giant Parusa/Purusha, creation by the One, creation by Visvakarman, creation by impregnating the mother Earth, I.e. goddess Prithivi, by the Dyausa Pita by way of rains, Tvastr, the "first fashioner", who created Earth and Sky)
What the Indians knew

• Caste System
  – Indo-Aryan tripartite society: priest, warriors, farmers (plus slaves)
  – Social classes (varnas) of the Indo-Europeans: Brahmins/Brahmans (priests), Ksatriyas (warriors and princes), Vaisyas (trader), Shudras (peasants and servants, probably descendants of the aboriginal inhabitants)
  – In practice a bewildering array of regional practices: Varna (the ideal caste system) plus Jati (the practical application, different in every region and probably fluctuating in time)
  – Thousands of jatis
  – A fifth caste: the untouchables or dalit
What the Indians knew

• Caste System
  – Caste promotes social order
  – The person who obeys the caste's code of behavior in this life will be reborn into a higher caste in the next life
  – India is a continent with no peasant rebellions
What the Indians knew

• Brahmanas
  – Commentaries on the four Vedas
  – Emphasis on sacrifice (activity of the priests)
  – Vedic gods downplayed
  – Prajapati: everything emanates from Prajapati, the primordial consciousness
  – Gods and humans are emanations of Prajapati
What the Indians knew

• Hinduism till 6th century BC
  – Monopoly of the Brahmins
  – Salvation can be attained only by secret rituals known only to the Brahmins
  – Basically, the Brahmins are the Hindu church
  – Indirectly, the Brahmins create a “rule of law” that prevails over the political rulers
  – (Hinduism = Sanatana Dharma)
What the Indians knew

• Upanishads (600 BC)
  – The metaphysical counterpart of the Veda (eg, the Brihadaranyaka is contained in the Yajurveda)
  – Philosophical meditation on the meaning of life and the nature of the universe, rather than mythology of gods
  – Pessimistic vision of the human condition: life is evil/sorrow
  – Union of the individual soul (“atman”) with the universal soul (“brahman”), rather than devotional acts
What the Indians knew

• Upanishads (600 BC)
  – Reaction of the Ksatriyas against the Brahmins: the Upanishads are not exclusive to the Brahmins
  – End of the monopoly of the Brahmins over religion
  – Rebellion of the new urban class
What the Indians knew

• Upanishads (500 BC)
  – Brahma: the absolute, the soul of the world
  – Atman: the divine within the self, the soul of the individual
  – Karma: moral determination of reincarnation
  – Samsara: endless cycle of death and rebirth, transience of ordinary life
  – Dharma: social and cosmic order
  – Dhyana: meditation
  – First formulation of the law of karma: 
    Brihadaranyaka Upanishad (4,4,5)
What the Indians knew

• Upanishads (500 BC)
  – Maya: the multiplicity of the world as an illusion of the senses
  – Moksha: liberation from maya and experience of the brahman
  – Yoga: a method for salvation, of union of brahman and atman, of experiencing the divine within the self
  – First formulation of yoga: Katha and Shvetasvatara Upanishad
What the Indians knew

- Brahman
  - The ultimate cosmic principle
  - The first cause of the universe
  - The source of existence
  - Pure knowledge
  - Eternal, infinite, and conscious being
What the Indians knew

- Upanishads (600 BC)
  - Salvation is liberation (moksha) from the illusory world (maya)
  - Moksha is achieved when the individual soul (“atman”) knows the universal soul (“brahman”)
  - The soul is divine
  - The order of the soul is a reflection of the order of the absolute
  - Thus understanding one’s self is understanding the absolute
  - Self-knowledge is knowledge of the absolute
What the Indians knew

- Problem of evil
  - Right and wrong actions ("karma") increase positive and negative potential energy ("apurva", later also called "karma")
  - Karma causes apurva
  - Apurva (positive or negative energy) eventually is released and causes good or evil to the person
  - Misfortune is caused by prior wrongful deeds (is not only deserved but even required)
What the Indians knew

- Problem of evil
  - Causality is a loop from the individual back to the individual
  - Nobody is an "innocent" victim (every victim is guilty of something done before or in a previous life)
  - Justification of the caste system (you are what you are because that is what you deserve)
  - Cosmic justice totally independent of gods
  - Pointless to try to improve one's lot
What the Indians knew

• Suffering and Salvation
  – Wisdom is the realization that everything is suffering
  – But the realization of suffering does not lead to pessimism
  – It leads to salvation
  – The realization of suffering is the first step towards salvation
  – Salvation is liberation from suffering
  – Salvation is achieved by transcending the human condition
What the Indians knew

• Suffering and Salvation
  – Salvation is an “awakening” in which one finally sees the truth
  – Nothing has changed in the world: it is the individual’s state of mind that has changed
What the Indians knew

• Shramana
  – Wandering ascetic individual who renounced the world to find salvation in spiritual meditation
    • Siddhārtha Gautama/ Buddha (Buddhism)
    • Vardhamana/ Mahavira (Jainism)
  – Liberation can be achieved by anybody irrespective of caste
  – Liberation is to be achieved by each individual, either by introspection or by following other individuals
What the Indians knew

• Shramana
  – The priest is replaced by the master
  – The cycle of rebirth (Ṛṣaṅga) is the cause of sorrow
  – Nirvana: the state of having escaped from the cycle of rebirth
What the Indians knew

• Siddhartha Gautama (527BC)
  – Sakyamuni: "sage of the Shakya clan"
  – Budh: to be aware
  – Buddha: “the enlightened one”
What the Indians knew

• Siddhartha Gautama (527BC)
  – Member of the warrior caste
  – Rebellion against the dogma (salvation through rituals) of the Brahmins
  – Preached in Prakrit (language of the commoners) not Sanskrit (language of the Brahmins)
  – Monastic (“underground”) movement
  – No divine birth, supernatural powers or miracles
  – Discontinuity with Vedas (rejection of rituals, gods and priests)
  – Continuity with Upanishad (same pessimistic view of the human condition)
What the Indians knew

• Siddhartha Gautama (527BC)
  – Life is suffering (“dukkha”)
  – All suffering is caused by ignorance (“avidja”) of the nature of reality and by attachment to Earthly belongings (“tanha”) that results from ignorance.
What the Indians knew

- Siddhartha Gautama (527BC)
  - Karma is not action but only causation
  - Karma is what persists after death
  - Life is damnation (sorrow replicated via karma)
  - Salvation does not lie in eternal existence but in escape from the illusion of the self
  - Nirvana (state of complete liberation) via practice and enlightenment
  - Nirvana = no more rebirths
  - Salvation lies in eternal death, not eternal life
What the Indians knew

- Siddharta “Buddha” Gautama (527BC)
  - No atman: no enduring consciousness, consciousness is a substance not a being
  - Personal identity through time does not consist of a self that is continuously reborn but of a continuity of karma
  - Dharmas (elements of existence): the components of a cart exist, but the cart itself is only a concept and does not truly exist
  - Each dharma is relative to every other dharma, each dharma is caused by another dharma (conditioned existence)
  - Nothing exists for any period of time (no duration to dharmas, dharmas are momentary)
  - Each moment is an entirely new existence
What the Indians knew

• Buddha (527BC)
  – Decay is inherent in all complex things
  – Suffering (existential suffering) is inherent in all living beings
  – “Only suffering exists, but no sufferer is to be found. Acts are but there is no actor” (from the Visuddhimagga)
What the Indians knew

• Buddha (527BC)
  – No god: no Brahman
  – Brahman replaced by "righteousness" (dharma), living a life of moral and ethical standard (the Four Noble Truths and the Eightfold Path)
  – Gods are not creators of the universe, and cannot influence human life. They are subject to the same cycle of rebirth. Enlightenment is actually possible only for humans.
  – No transmigration: souls do not migrate from this life to the next one (there is no self)
Buddhism

• Difference with Hinduism:
  – No atman: no enduring consciousness, consciousness is a substance not a being
  – Salvation lies in escape from the illusion of the self: nirvana
  – "Only suffering exists, but no sufferer is to be found" (from the Visuddhimagga)
  – No brahman
  – Very difficult to do the right thing (requires meditation and practice)
  – Monasteries and universities
  – Ability to create wealthy corporate institutions
What the Indians knew

• Jainism (570BC)

Map of the world of mortals (Sam Frogg)
What the Indians knew

• Jainism
  – Buddha: the soul of the individual does not exist
  – Mahavira:
    • Panpsychism: everything has a soul (humans, animals, plants, objects)
      – Death by starvation is the most sublime death
      – The universe is the set of all souls
    • The soul of the individual ("jiva") is the only thing that is eternal
  – Both are anti-Brahminical (remove the need for the Brahmin to perform secret rituals)
What the Indians knew

• Six darshana (schools) of philosophy
  – Samkhya
  – Nyaya
  – Vaisesika
  – Purva-mimamsa
  – Royal Yoga
  – Vedanta
What the Indians knew

• Six darshana (schools) of philosophy
  – 1. Samkhya
    • Oldest school (400 BC)
    • Atheism (no creator god)
    • Interplay of Purusha and Prakriti
What the Indians knew

• Six darshana (schools) of philosophy
  – 1. Samkhya
  • Purusha: the self, the mind (infinite number of purushas)
  • Prakriti (Pra=first, Kri=to do) is the first cause (Matter, Nature, natural order of the universe)
  • Prakriti is the active (female) material principle and it is the actor of samsara (cycle of rebirth)
  • Purusha is the inert (male) spiritual principle and it is a mere spectator of samsara (it is conscious of samsara)
What the Indians knew

• Six darshana (schools) of philosophy
  – 1. Samkhya
    • Prakriti generates both the world of objective phenomena (tamas prevails) and the world of subjective phenomena (sattva prevails): a twofold development process generates a twofold world
    • The (external) world and the mind (internal world) are made of the same substance, the difference between them is one of degrees not of substance
What the Indians knew

– Samkhya

- The evolution of the world is due to the interaction between purusha and prakriti
- A self/purusha neither affects nor is affected by nature: it is a mere spectator, it creates consciousness of the samsara which is occurring
- Prakriti is both matter and mind. Purusha is the awareness of them. Both an object and its mental representation belong to the realm of prakriti: only the awareness of the mental representation belongs to the realm of purusha.
- Each purusha is isolated from the other purushas. Each purusha is an eternal and static monad.
What the Indians knew

– Samkhya

• There is no original creator, but there is a universal destiny/goal: prakriti will eventually dissolve and only purusha will be left

• Prakriti naturally evolves towards a state of self-knowledge that liberates the purusha
What the Indians knew

- Six darshana (schools) of philosophy
  - 2. Nyaya
    - Logic
    - Four kinds of means of knowledge (pramanas): perception, inference, analogy and testimony
    - Knowledge is a relationship between self and non-self
    - Atomism (the world is composed of an infinite number of elementary units)
    - A system of behavior (like Yoga to Samkhya)
What the Indians knew

• Six darshana (schools) of philosophy
  – 3. Vaisesika
    • Atomism (the world is composed of an infinite number of elementary units)
What the Indians knew

- Six darshana (schools) of philosophy
  - 4. Purva-mimamsa
    - Literal interpretation of the first half of the Vedas
    - Emphasis on ritual like in ancestral times
What the Indians knew

• Six darshana (schools) of philosophy
  – 5. Royal Yoga
    • Patanjali’s “Yoga Sutra” (150 BC)
    • Samkhya’s prakriti/purusha dynamics
    • Samkhya’s metaphysical knowledge is not enough for liberation
    • Liberation also requires devotion and meditation
    • Raya Yoga = Bhakti (devotion) + Karma (deeds) + Jnana (knowledge) Yogas
    • Theism: God Isvara (not the creator but an examplar of liberated being, a reference point for meditation, one of the many purushas)
What the Indians knew

• Six darshana (schools) of philosophy
  – 6. Vedanta
    • Badarayana (450BC)
    • Gaudapada: “Mandukyopanisad-karika” (750 AD)
    • Interpretation of the second half of the vedas
    • Systematic analysis of the nature of body, mind, and the ultimate
    • Inert matter originates from pure consciousness
    • All souls share in the absolute consciousness (Brahman = Atman) and are enveloped in karma
    • Phenomenal reality emanates from the absolute (Brahman)
What the Indians knew

• Six darshana (schools) of philosophy
  – 6. Vedanta
    • Nothing is real but pure consciousness
    • Mind-body dualism is an illusion
    • The world is an illusion
What the Indians knew

- Six darshana (schools) of philosophy
  - Vedanta
    - Monism (only one substance, Brahman=Atman)
    - Monotheism (only one God, as opposed to Vedic polytheism)
    - Theoretical counterpart to yoga
  - Subschools
    - Shankara - Non-dualism (advaita)
    - Ramanuja - Qualified monism (visistadvaita)
    - Dualism (dvaita)
What the Indians knew

• Six darshana (schools) of philosophy
  – Samkhya: Atheism, World is real (due to two substances, prakriti and purusha)
  – Yoga: Theism (Isvara), World is real (prakriti/purusha)
  – Vedanta: Theism (Brahman), World is not real (only one substance, spirit)
  – Nyala: logic, atomism
What the Indians knew

• Smriti (200 BC)
  – The Vedas are “shruti” (“what has been heard from the gods”). “Smriti” (“what is remembered”) is a compendium of the Vedas/Upanishad for ordinary people
  – Sanskrit epics (Mahabharata, Ramayana)
  – Sanskrit Puranas (Vedic textbooks for women and lower-caste men)
    • Bhagavata-Purana (18,000 verses dedicated to the Hindu god Vishnu and his human incarnations Krishna and Rama)
What the Indians knew

• Vyasa: Mahabarata (6th c BC - 4th c AD)
  – 90,000 verses (longest poem in world literature)
  – Tale of the rivalry between the Kauravas and the Pandavas, which eventually destroy each other
  – Hundreds of side stories and meditations
  – Another way to achieve liberation/salvation which does not entail negation of life
What the Indians knew

• Mahabharata
  – Spiritual synthesis of the main Indian philosophical schools
  – The world and human life are full of ambiguities
  – No precise definition of good and evil
  – An ethical life is important, but there is no definition of what is “ethical”
  – Humans must look into themselves to find that definition
What the Indians knew

• Bhagavad-Gita
  – 700 verse
  – The god incarnate Krisna/Vishnu reveals himself so that humans can know the divine
  – Humans must act in order to save themselves
  – “Action is superior to inaction”
  – Social life, caring for the family, working, etc are not impediments to salvation - they are as good as ascetism and mysticism
  – The world was created by a caring god (Vishnu), who helps its creation achieve salvation
What the Indians knew

- Ramayana (by Valmiki)
  - King Rama’s wife is kidnapped by the demon Ravana
  - Rama recovers his wife with the help of the monkey Hanuman
  - In books one and seven Rama is an incarnation of Vishnu
What the Indians knew

- Hindu cosmogony
  - Shiva
    - Terrible god
    - Dravidian origin (Rudra?)
    - God of ascetics and god of the phallus
    - Shiva beheaded his father, the incestuous Brahma, and was condemned to carry the skull until he found release in Varanasi
    - Shiva appeared on Earth in various human, animal, and vegetable forms
    - He performs a cosmic dance while the world is being destroyed
What the Indians knew

- Hindu cosmogony
  - Vishnu
    - Benevolent god
    - Vishnu gave birth to the creator (Brahma)
    - Vishnu separated heaven and earth
    - Vishnu intervenes in human affairs
    - Many incarnations (Avatar): Rama, Krishna,…
    - Dravidian origin (Krishna is dark skinned)
    - Vishnu the Sustainer and Shiva the Destroyer
    - Vishnu identified with north and south
What the Indians knew

• Hindu cosmogony
  – Devi
    • The “Goddess”
    • Uma, the mother
    • Lakshmi, the wife of Vishnu,
    • Parvati, the wife of Shiva (daughter of the Himalayas),
    • Durga, slayer of demons,
    • Kali, goddess of death,
    • Shakti, the female power (Lakshmi is Vishnu's shakti and Parvati is Shiva’s shakti, and she is also Kali and Durga),
What the Indians knew

- Hindu texts (written in Sanskrit)
  - Shruti (includes some poetry)
    - Vedas
    - Brahmana
    - Upanishad
  - Smriti (all poetry)
    - Ramayana
    - Mahbharata (incl. Bhagavad Gita)
    - Purana
    - Dharmaśāstra (incl. Manusmriti)
What the Indians knew

- Hinduism and Buddhism
  - A completely new way of looking at the human condition compared with the West and China
  - The world that we perceive is illusory
  - Suffering
    - Hinduism: caused by samsara (cycle of rebirths) and maya (illusory world)
    - Buddhism: caused by ignorance ("avidja") of the nature of reality and by attachment to Earthly belongings ("tanha")
What the Indians knew

• Hinduism and Buddhism
  – Salvation is achieved by transcending the human condition (enlightenment)
    • Hinduism: moksha (via yoga) leading to unity of atman (individual soul) with brahman (universal soul)
    • Buddhism: escape from samsara (nirvana)
What the Indians knew

- **Hinduism**: Upanishads (100+ of them, 8th c BC till 5th c BC)
  - Written and understood by the higher castes only
  - Emphasis on the self (atman)
  - Fails outside India

- **Buddhism**: Pali canon (5,000 sutras, 6th c BC till 1st c BC)
  - Missionaries and monks instead of priests
  - The self is an illusion too (anatta)
  - Fails in India
What the Indians knew

- Hinduism and Buddhism
  - Too theoretical
  - India: ordinary people prefer the stories of the Mahabharata and Ramayana
  - China: ordinary people prefer the Buddhist schools that preach a paradise, sound like Daoism, make enlightenment easier, allow magic, etc
What the Indians knew

• Greece
  – Fragmented in city states
  – State religion: a chaotic pantheon of deities
  – Populist religion: the mysteries
  – Legendary heroes
  – A bewildering array of philosophers

• India
  – Fragmented in many states
  – Priestly religion: a chaotic pantheon of deities
  – Populist religion: Shiva and Vishnu
  – Upanishads and Buddhist canon
  – Six philosophical schools
What the Indians knew

• India and Greece
  – Puranas = Homeric poems and other Greek legends
  – Seven sacred cities = Oracle cities (e.g. Delphi)
  – Mt Meru = Mt Olympus (and they both lie to the north)
  – Thirtas = Mystery cults
What the Indians knew

- India and China
  - Very little in common
  - India’s mindset is exuberant and theoretical
  - China’s mindset is somber and practical
  - Confucianism is about building a just society
  - Buddhism disappears from India and morphs in China
  - Daoism has more in common with Hellenistic and Roman religions than with Hinduism
  - “Eastern philosophy” is a Western invention
What the Indians knew

• Greece and India: geography matters
What the Indians knew

- Egypt and China: geography matters
  - Protected from almost all sides
  - Undisturbed for centuries
  - Mostly indifferent to the rest of the world
  - River-centric
  - More cohesive societies
What the Indians knew

Founders of major religions
Buddhist Art

• Sunga period (2nd-1st c BC)
  – The stupa: funereal tumulus that developed into a cosmic building, both a memorial to a saint and a diagram of the spiritual universe
  • When the Buddha died his ashes were divided into eight portions and buried under mounds
  • First stupas: 5th c BC
  • Balance of round and square shapes
  • Gateways at the four points of the compass
Buddhist Art

Stupa 1, Sanchi (2nd c BC, oldest stone structure in India)

Stupa 2, Sanchi

Stupa 3, Sanchi (2nd c BC)
Buddhist Art

Ajanta Cave 10 (1st c BC)
Buddhist

- Bhaja caves (1st c BC)
Buddhist Art

- Anuradhapura, Sri Lanka: Jetawanarama (3rd century AD)
Buddhist Art

• Theravada and Mahayana

http://www.buddhanet.net/
Buddhism

• Theravada/Hinayana
  – The Buddha as a supremely enlightened human
  – Only one Buddha
  – Very difficult to achieve salvation
  – Arhat only saves himself
  – Atheistic
  – Nirvana: end of cycles

• Mahayana
  – The Buddha as a manifestation of a divine being
  – Many Buddhas
  – Easier to achieve salvation
  – Charity helps
  – Bodhisattva can save others
  – Polytheistic (multiple Buddhas plus Bodhisattvas)
  – Nirvana: paradise is a place (contrasted with hell)
What the Indians knew

• Nagarjuna (150 AD, Buddhist)
  – Reality cannot be grasped (logical agnosticism)
    • All theories, including Buddhism, lead to inconsistencies
    • Dharmas neither exist nor don't exist ("four-fold negation")
  • The phenomenal world is a fiction of our mind, that creates categories/forms to understand reality
What the Indians knew

- Vasubandhu (350AD, Buddhist)
  - The way we see things is shaped by previous experience, therefore things do not exist, or, better, are inside our consciousness
  - Only consciousness exists
  - Consciousness is inter-subjective because each “mind” (vehicle of consciousness) influences the others
What the Indians knew

- Gupta India (4th-6th c AD)
  - Decline of Buddhism, rise of Hinduism
  - Reduced contacts with the West, following Persian-Roman wars
  - Resurgence of the Brahmin priests
  - Old gods (e.g., Indra) abandoned in favor of Brahma, Vishnu, Shiva (creation, preservation, destruction)
  - Emphasis on priestly rites, not on metaphysics
What the Indians knew

- Gupta architecture
  - First international style in Asia, spreading to China, Japan, Central Asia, Southeast Asia
What the Indians knew

Aihole, "cradle of Indian architecture"

Durga temple, 7th c

Ladh Khan, 6th c

Huccimallli temple, 5th c
What the Indians knew

Badami
What the Indians knew

- Gupta India (4th-6th c AD)
  - Buddhist stupa vs Hindu temple
What the Indians knew

• Gupta India (318-550)
  – India’s classical age
  – First books (earliest extant: 350 AD)
  – Revival of Sanskrit (prakrit was the administrative language under the Maurya)
  – University of Nalanda (students from China, Japan, Korea, Mongolia, Tibet, Nepal, Sri Lanka)
  – First treatise on algebra (Aryabhata, 499, also heliocentric theory)
  – “Siddhantas” (5th c): trigonometry
  – Aryabhata (499): The Earth revolves around the Sun
  – Chess (6th c AD)
What the Indians knew

• Gupta India (318-550)
  – Poetry and theater
    • Kalidasa (Sanskrit, 353)
  – Six darshana (schools) of philosophy
  – Mathematics
    • “Arabic” numerals (300 BC)
    • Decimal system
What the Indians knew

• Gupta India (318-550)
  – Spreading of Indian culture
    • Burma: kingdom of Pegu (1080): Hinayana Buddhism, Bagan
    • Java: colonized by Indian tribes expelled from India, Sailendra dynasty (732): Borobudur
    • Cambodia: colonized after Indian traders via the Melong, Khmer empire: new capital of Angkor (910) and Angkor Wat (1130)
• Thailand
Angkor
Bagan