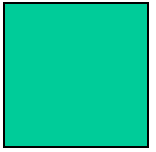


Logos 1: A Brief History of God

22 March 2006



Piero Scaruffi
www.scaruffi.com

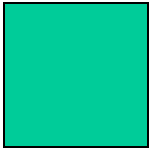
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A Brief History of God

- Prehistoric beliefs in the supernatural
- How the idea of the afterlife developed
- Evolution of God from Semitic to Indo-Aryan gods
- Monotheism
- Did "god" mean the same thing to different civilizations?
- Why do humans believe and what makes them believe?
- Neural correlate of the mystical experience



Bibliography



- **Alan Segal: Life After Death (2004)**
- **Alberto Siliotti: The Dwellings of Eternity (2000)**
- **Mircea Eliade: A History of Religious Ideas (1982)**
- **Joseph Campbell: The Masks of God (1959)**
- **Michael Persinger: Neuropsychological Bases of God Beliefs (Praeger, 1987)**
- **Paul Bloom: Descartes' Baby (2004)**
- **Jacques Cauvin: The Birth of the Gods and the Origins of Agriculture**
- **Marija Gimbutas: The Gods and Goddesses of Old Europe: 6500 to 3500 BC**

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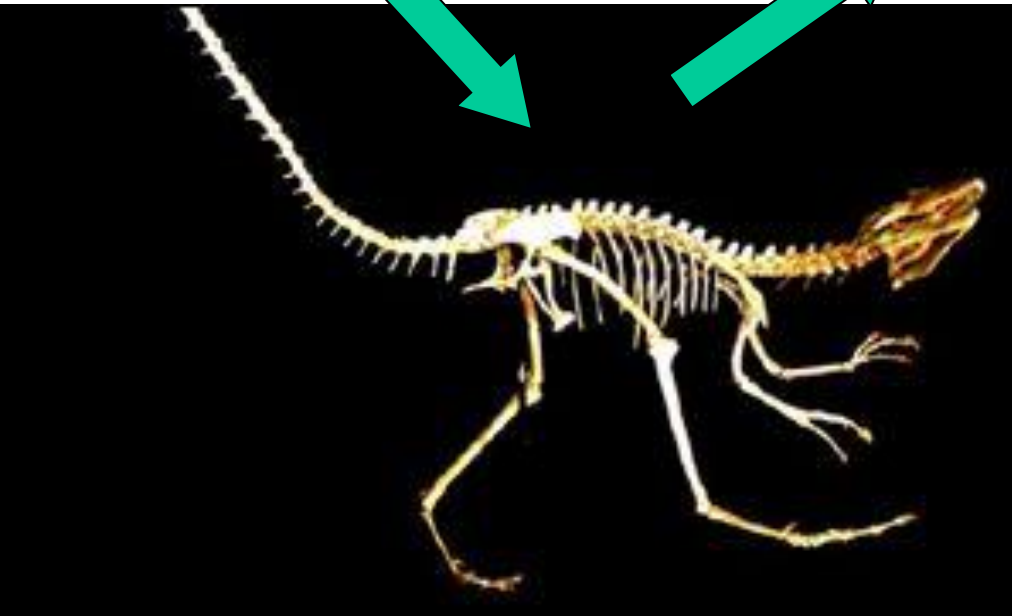
A brief History of Life



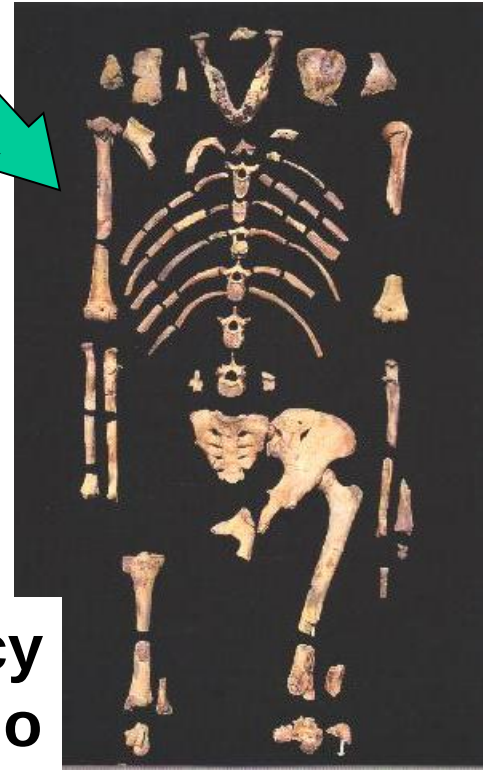
**First land creature
420 million years ago**



**First mammal
200 million years ago**

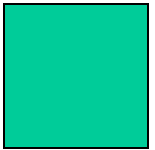


**First dinosaur
240 millions years ago**



**Lucy
3.5m years ago**

Earliest Art



Willendorf, Austria (30-20,000 BC)

What Early Humans Knew

- **Burial**

- **70,000 BC: burial of man in Shanidar Cave 4 in northern Iraq over a bed of flowers (Neanderthal)**
- **First elaborate tombs and cult of the dead when non-nomadic communities form**
- **3,500-3,000 BC: monumental tombs (Abydos-Egypt, Ur-Mesopotamia, Liangthi-China, New Grange-Ireland)**

**Gavrinis Island,
Brittany, France,
3,500BC**



What Early Humans Knew

- **Prehistoric beliefs (before 3,500 BC)**
 - **Natural world pervaded by supernatural forces**
 - **Humans can negotiate with the spirits that control the natural forces**
 - **There is a hidden world that shapes human destiny**
 - **Some people (shamans) can make contact with the spirits**
 - **The Earth and the Sky are deities**
 - **There is an afterlife for some people**
 - **Worship of ancestors**

What Early Humans Knew

- Prehistoric beliefs (before 3,500 BC)
 - The Mother Goddess
 - Figurines of Jericho, Palestine
 - Figurines of Catal Huyuk, Turkey
 - Figurines of Badari, Egypt (4,000 BC)
 - From the Syrian coast to the Zagros mountains from 3,600BC
 - Figurines of Niniveh, Iraq
 - Figurines of Indus Valley (2,300 BC)
 - Xiwangmu of China (at least 1,700 BC)
 - Amaterasu (sun goddess of Japan)
 - Only major exception: Persia!



Catal huyuk, 5000BC



Indus Valley, 2,500 BC



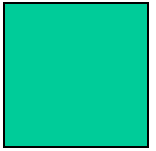
Badari, 4,000 BC

What Early Humans Knew

- Prehistoric beliefs
 - The Sky God
 - Horus (Egypt)
 - Anu (Mesopotamia)
 - Tien (China)
 - Dyaus (1,500-1,000 BC)
 - Varuna (India)
 - Zeus (Greece)
 - Ahura Mazda (Persia)



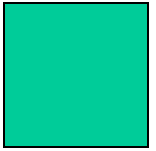
What Early Humans Knew



- Prehistoric beliefs
 - Varuna (India)
 - Zeus (Greece)
 - Ahura Mazda (Persia)



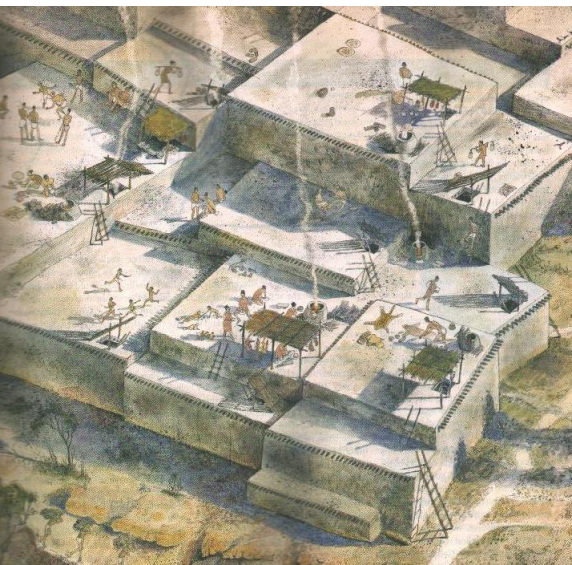
What Early Humans Knew



- **Prehistoric beliefs**
 - **Shamans**
 - **People whose odd behavior means that they can make contact with the world of spirits**
 - **Madness (they hear voices that others don't hear)**
 - **Drugs (they see and hear things that normally one cannot)**
 - **Dreams (ditto)**
 - **Hallucinations caused by deprivation**
 - **Wild imagination (they interpret events as omens)**

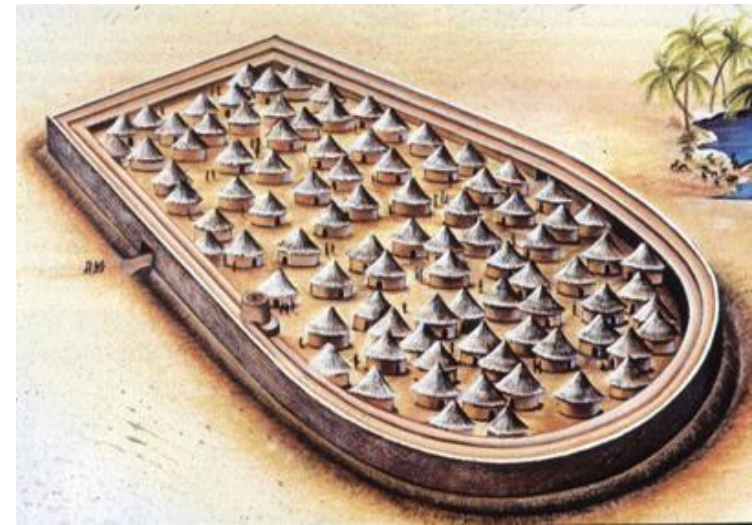
What Early Humans Knew

- The rise of religious institutions
 - Ultimate goal: control of nature
 - Humans can control nature through the spirits that control nature
 - First “gods”: sun, rain, fertility

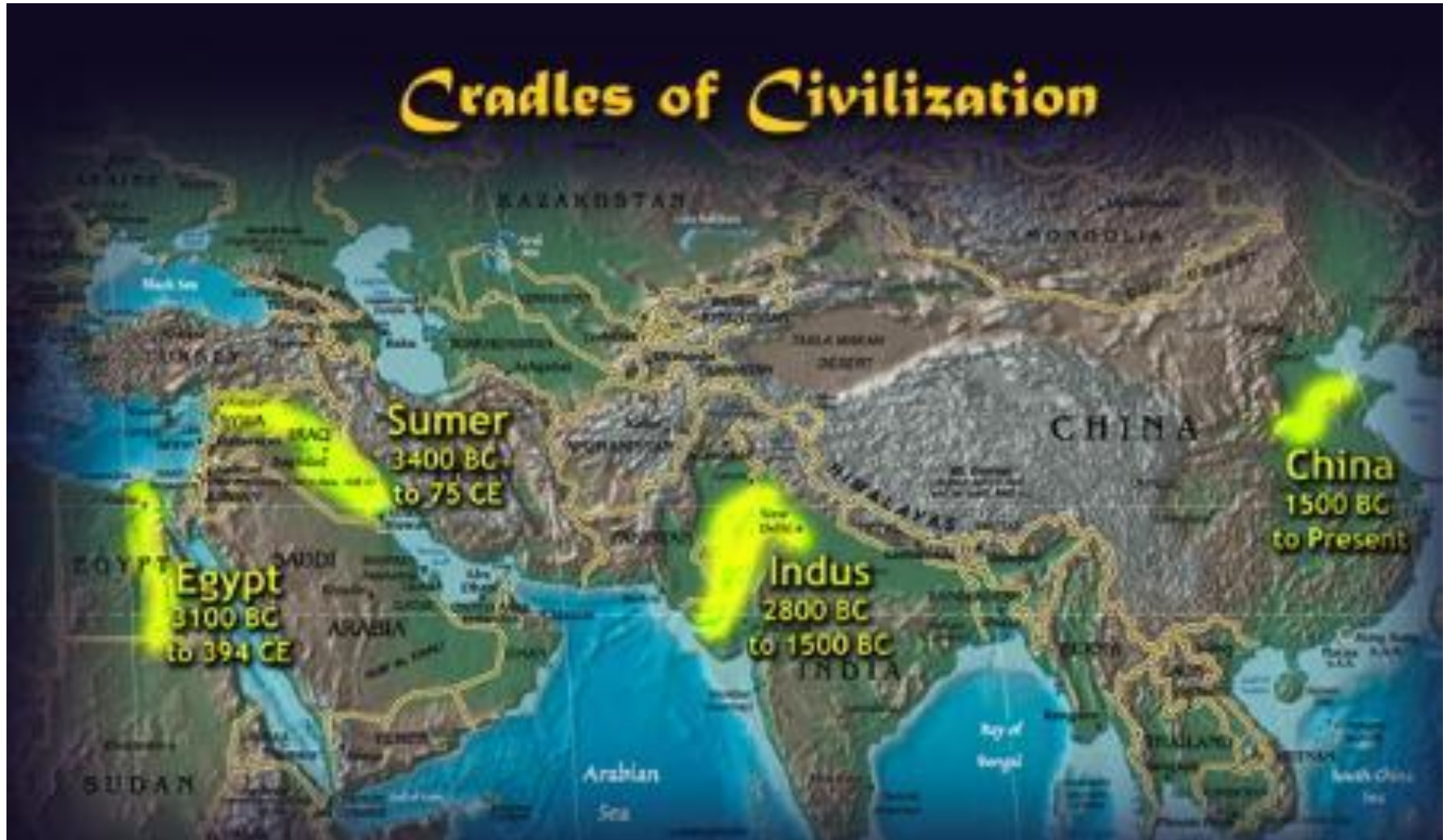


Catal Huyuk
(Turkey,
7,500 BC)

Jericho
(Palestine,
8,500 BC)



The Origins of Civilization



(Courtesy Rafael Olivas)

Mesopotamia



Mesopotamia

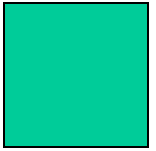
- **The Elohim**
 - **The world is surrounded, permeated and ruled by the Elohim, myriads of nameless supernatural beings (spirits) inseparable from one another**



Mesopotamia

- **Assembly of gods**
 - **A religion for this life, not for the afterlife**
 - **Anthropomorphic gods**
 - **Associated with the forces of nature**
 - **Each city is the property of a deity**
 - **Deification of kings**
 - **Unified pantheon**

Mesopotamia



- **Creation myth (“Eridu Genesis”, 17th century BC)**
 - **Nammu: the Mother who gave birth to Heaven (An) and Earth (Ki, later Ninhursag)**
 - **All the gods are sons of An and his wife Ki**
 - **Enki, son of An and Ki, created the world**
 - **The gods created humankind and the Sumer cities**
 - **Humanity was created to serve the gods**
 - **The gods lived in the Eden (Bahrein island?)**
 - **Enki ate a forbidden plant and was cursed by his mother who cursed his rib which was cured by the goddess of life Nin-ti**
 - **Enlil, the god of the storm, caused the Flood**

Mesopotamia

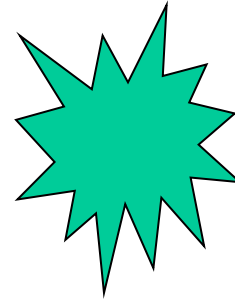
- **Evolution of theocracy: gods migrate from nature to politics (4000-3000 BC)**
 - The farming economy
 - The city state

Mesopotamia

- **Evolution of theocracy/ Economics**
 - Irrigation requires cooperation because river beds tend to change
 - Changing river beds cause expanded irrigation
 - Expanding irrigation causes expanding settlements
 - The whims of rivers are ascribed to gods
 - Thus priests are natural arbiters of the community
 - Priests are natural arbiters of the economic surplus
 - Temples become administration buildings
 - The irrigation society naturally creates city-states, and such city-states are naturally theocracies

Mesopotamia

- **Evolution of theocracy/ Politics**
 - Ancient times: a nature religion of spirits/forces (sky, wind, river, etc)
 - Non-human forms are then replaced by human forms (that can be represented visually)
 - Human-like deities begin to behave like human beings
 - The world of natural phenomena becomes a model of the human world

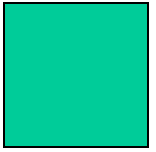


Ugarit, 1300 BC

Mesopotamia

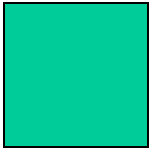
- **Evolution of theocracy/Politics II**
 - **Deities become an aristocracy, and humans their servants**
 - **Deities come to be worshipped like aristocracy, in palaces (temples) with servants (priests) and household chores (rituals)**

Mesopotamia



- **Evolution of theocracy/Politics III**
 - Deities come to be identified with the political leaders of the community/city/nation
 - Each city comes to be dominated by a deity, and cities often grow around the main temple
 - The main deity of a city becomes a virtual ruler of the city, defending it against enemies and enforcing justice within the city
 - Will of the deities communicated to the human rulers via dreams, omens, natural events

Mesopotamia



- **Evolution of theocracy/Politics IV**
 - The deity is no longer related to natural phenomena but to human phenomena, i.e. politics



Mesopotamia

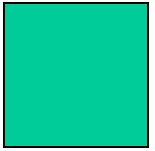
- Ziggurat
 - Royal palace subordinate to the ziggurat
 - The temple (not the palace) is the identity of the people of the city
 - The destruction of a temple is a catastrophe



Egypt



Egypt



- Maat: goddess that personifies cosmic harmony and a model for human behavior
- Tuat as the immortal omniscient creator and as the Underworld
- Ptah (and later Amon) as the creator, and the other gods as a manifestation of his creative powers
- Horus as the ancient sky-god
- Creation myths
 - Different creation myths from ancient times



Egypt

- **Obsession with the Afterlife**
 - **Everything in this life is functional to the Afterlife**
 - **The entire economy of the state revolves around the preparation for the king's afterlife**



Egypt

- **Obsession with the afterlife**
 - **Palaces (pharaohs) are comfortable but negligible (mud bricks and wood)**
 - **Tombs must be monumental and eternal (today we visit tombs, not palaces, Giza not Memphis)**
 - **The best furniture is for the tomb, not for the palace**

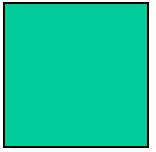


Egypt

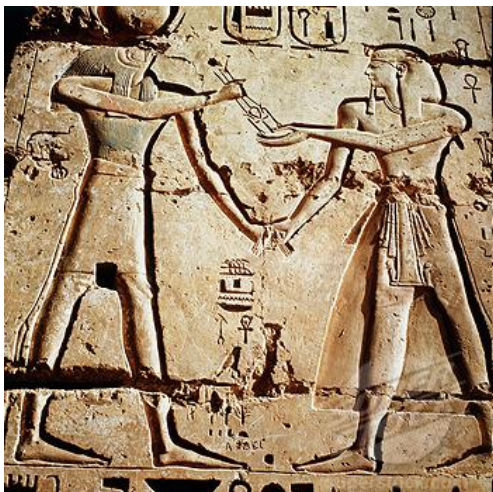
- Tomb not as the resting place of the dead, but as the instrument by which death can be overcome, a place of connection with the heavens and the afterlife
- Death as the gateway to eternal life
- Death = immortality



Egypt

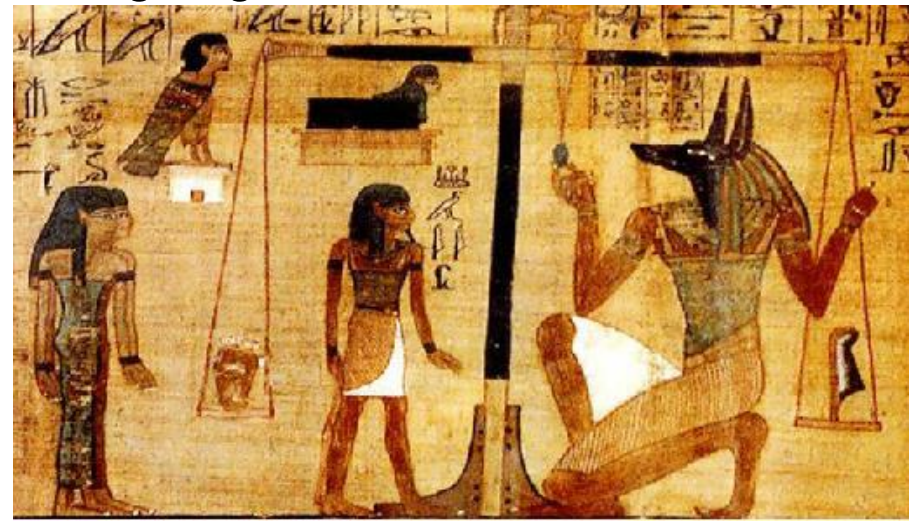


- **Gods behave like humans: mythology not theology**
- **Each city is dedicated to a god and has its own “religion”**
- **The pharaoh is the intermediary between gods and humans (son of the Sun god Re)**



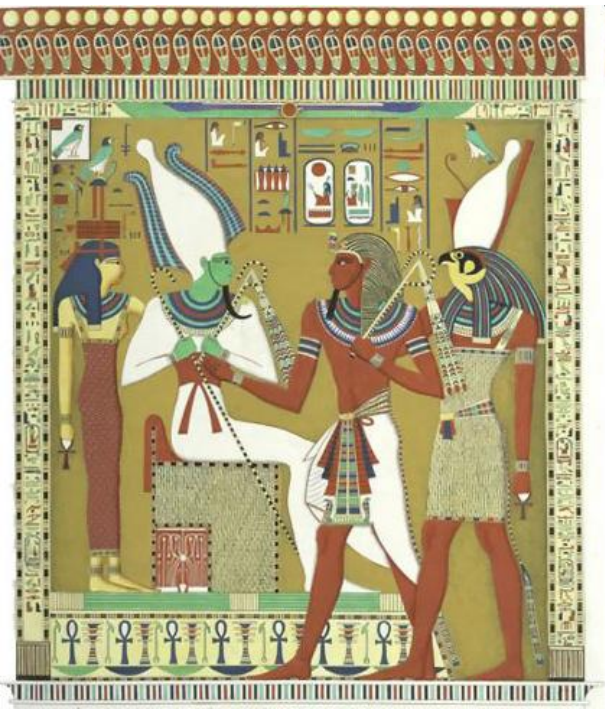
Pharaoh Speaks with the God Horus

Anubis weighing the heart of the deceased



Egypt

- Middle Kingdom (22nd c.BC-17th c.BC)
 - Osiris replaces Re, promising eternal life to everybody
 - "Osiris' mysteries" recount the death and resurrection of Osiris



Babylonia



Babylonia

- **Astral religion (1800 BC - 600 BC)**
 - **Gods identified with planets (Marduk=Jupiter, Ishtar=Venus)**
 - **Gods lose their “human” attributes**
 - **Gods are inscrutable**
 - **Humans can only have faith**
 - **Humans have sinned**
 - **Humans are depraved beings**



Babylonia/ Assyria

**Hammurabi judged
by a god (1750BC)**



**Altar of Assyrian king Tukulti-Ninurta I (reigned 1244-1207BC)
in Ashur : The king approaches
the throne of the god, who is
represented as a mere symbol**

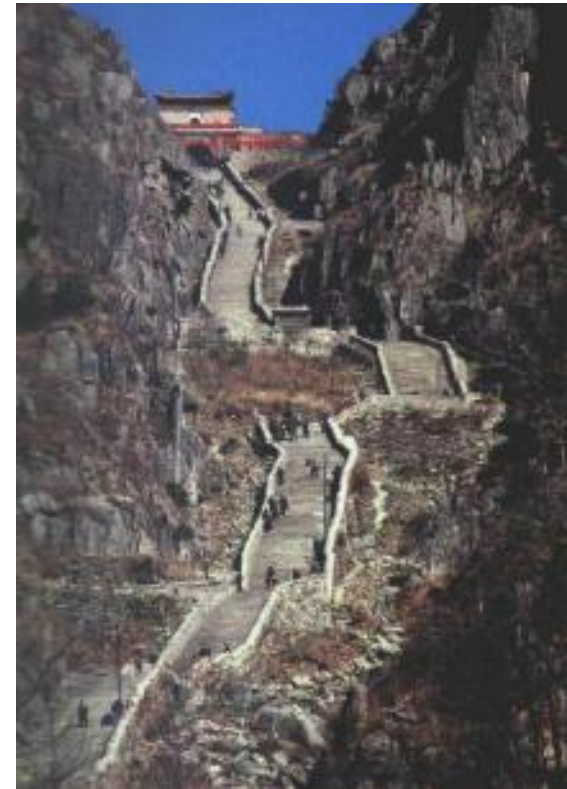


China



Shang and Zhou China

- **Pseudo-monotheism: Heaven/Tien**
 - The universe is a single whole/organism
 - But divided in three main realms:
 - Heaven (omnipotent)
 - Earth (Nature)
 - Human society
- **Polytheism: the world is inhabited by a multitude of spirits (one for each natural phenomenon) and ghosts**
 - The supernatural is natural

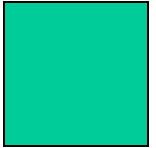


**Tai-shan
(China)**

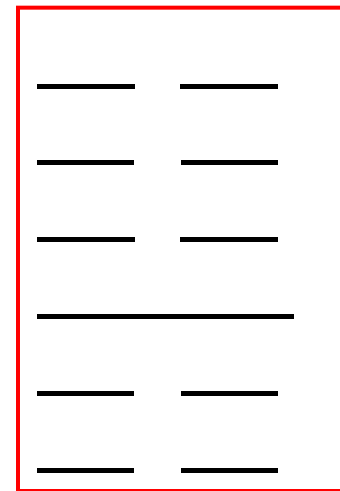
Shang and Zhou China

- **No creation myth: no need to explain the universe, no need to explain where the Chinese race came from**
- **Religion is natural philosophy: no holy wars, crusades, jihad, etc, no fear of damnation, no anxiety of salvation, no prophets, no dogmas**
- **Shamanic heaven is on Earth**
 - **There are wonders on Earth**
 - **There are dangers in the Otherworld**

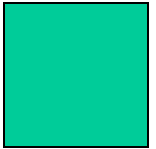
Shang and Zhou China



- Oracle bones for divination
- I Ching/Yi Jing Book of Changes (900 BC)
 - "Yin" (quiescence)
 - "Yang" (movement) Divination and numerology
 - Commentaries on change
 - "Yin" (quiescence)
 - "Yang" (movement)



Japan



Japan

- **Shinto as practical life**
 - **Pantheon of spirits (“*kami*”) personifying aspects of the natural world**
 - **Yorozu-yomi: there are gods for everything (food, mountains, rivers, rocks)**
 - **800,000 gods, mostly the deified heroes of the nation**
 - **A religion to deal with the everyday problems and issues of people**

Japan

- **Shinto as natural philosophy (1,000 BC?)**
 - **Humans depend upon the spirits (kami)**
 - **Humans can affect Nature by properly honoring the gods/spirits**
 - **Humans become impure through their participation in society and they purify themselves by worshipping the spirits**

Japan

- **Shinto as natural philosophy (1,000 BC?)**
 - **A set of rituals/legends explaining the relationship between the human world and the forces of nature**
 - **Emphasis on nature, cleanliness, purity, order, sincerity, tranquility**
 - **Nature is the manifestation of the divine**
 - **Most important festivals are celebrations of the beauty of nature**

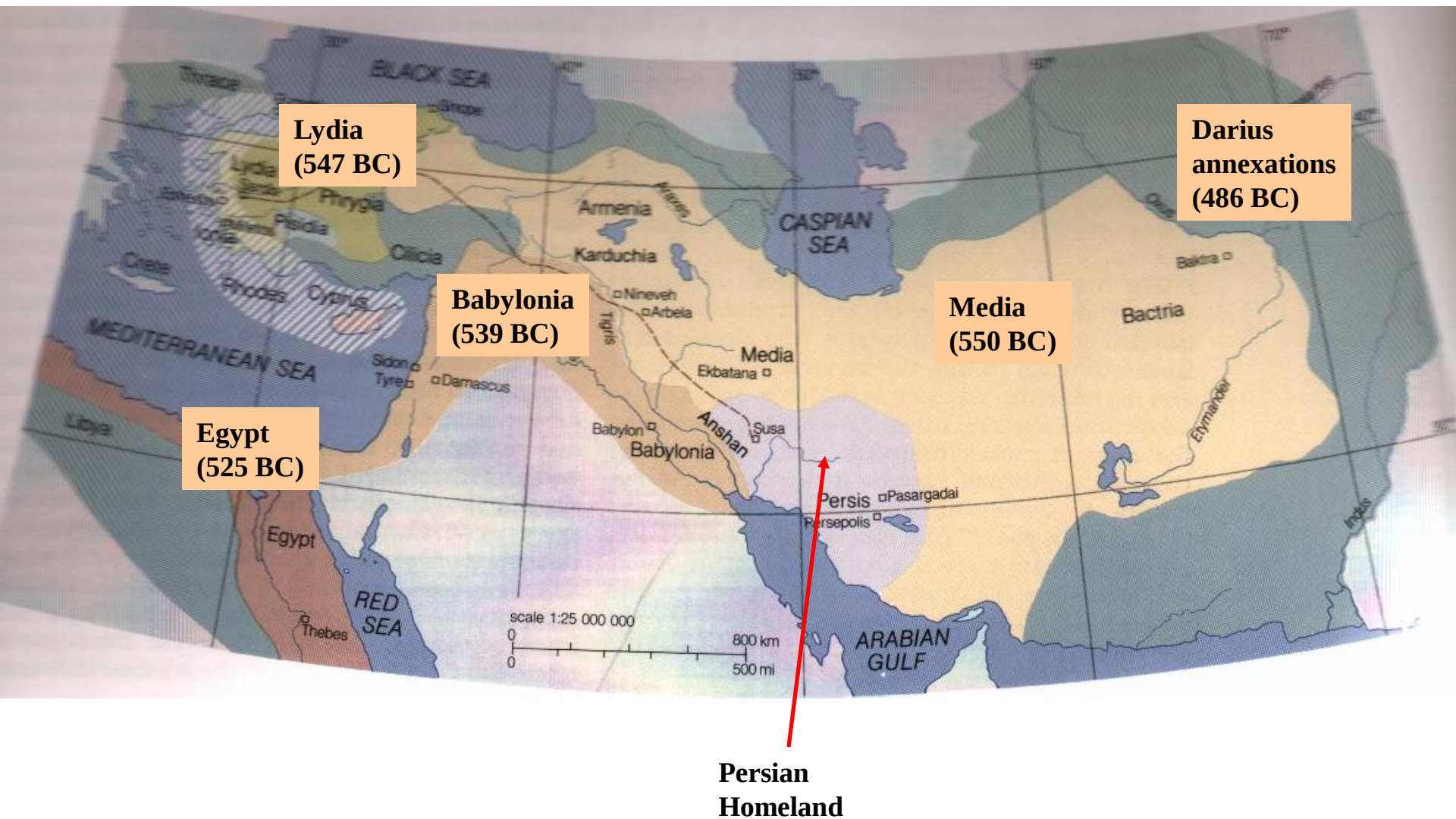
Japan

- **Shinto**
 - **Shinto deities do not dwell in heaven but in the surrounding nature**
 - **Shintoists do not worship the heavens but the surrounding nature**
 - **Reaching outward not upward**

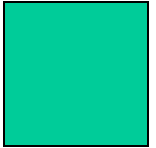
Japan

- **Shinto**
 - **Shinto buildings do not dominate the surrounding nature, they are part of it**
 - **Shinto monuments are non-monumental**
 - **The garden is a microcosm of nature**

Persia



Persia



- **Mazdaism**
 - **Originates among the peaceful, sedentary communities of northern Iran (Zoroaster's "Asha" or "people of righteousness"), constantly threatened by the raids of nomadic horsemen who practice animistic polytheism (Zoroaster's "Druj" or "people of the lie")**



Persia

- **Mazdaism**

- **Two contrary gods: Ahura Mazda (also Ormuzd), the creator god who is full of light and good, and Ahriman, the god of dark and evil**
- **Dualist: separates good and evil (Egyptian and Mesopotamian gods were capable of both good and evil)**
- **Ahura-Mazda is not responsible for evil**
- **Does not have a face (no painting, no statue)**
- **Does not live anywhere**



Persia

- **Mazdaism**
 - Heretic to build temples (all Achaemenian buildings were secular)



Persia

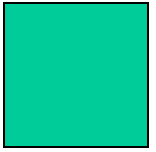
- **Zarathustra/ Zoroaster (b 628BC)**
 - Ahura originally referred to 33 ruling gods in ancient, pre-Zoroastrian religions in Persia and India
 - Zoroaster preached against all the other gods except Ahura Mazda
 - Spiritual, immaterial God
 - Monotheism



Persia

- **Zarathustra/ Zoroaster (b 628 BC)**
 - **A revealed religion (God revealed the truth to some people)**
 - **Eschatological (at the end of time, a messiah will come)**
 - **Frasho-Kereti (“Rehabilitation”): apocalyptic ending/judgement that takes place on Earth**
 - **Ristaxe: resurrection of the body**
 - **Hell (but only temporary: everybody eventually is “saved” by Ahura-Mazda)**

Persia



- **Zurvan (500 BC): Source of time, father of both Mazda and Ahriman**
- **Mithras (300 BC): Chief lieutenant of Mazda**

Judaism



Judaism

- **Stage 1: Stage of the elohim, and one "el" is the el of Abraham**
- **Stage 2: El the nomadic god of the Jews**
 - **God of the Jews**
 - **Nomadic God (not tied to a sanctuary but "god of the father")**
 - **God talks**
 - **God of punishment and wrath**
 - **Negative god ("thou shalt not")**
 - **Religion is obedience to God**
 - **Indifference towards unbelievers**



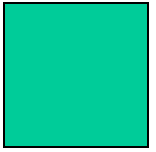
Judaism

- **Stage 3: Yahweh/YHWH the human-like god of the Jews - Moses (1,275 BC)**
 - **Not transcendent: a bodily god**
 - **Not infinitely good: capable of both good and evil**
 - **Not infallible: makes mistakes**
 - **Not omnipotent: his power is limited to the land occupied by the Jews**
 - **Not spiritual: the reward is material reward for this life, not for the afterlife**

Judaism

- **Stage 4: Yahweh/El the only god, a faceless god**
- **Elijah (875 BC): El**
 - **There are many gods, but El is the only god of Israel ("El Elohe Yisrael", Gen. 33:20)**
- **Amos, Hosea, Isaiah, Micah (8th/6th c BC)**
 - **El and Yahweh become synonymous**
 - **Monotheism: Yahweh is the ONLY god (the gods of the other nations do not exist)**
 - **Omnipotent god**
 - **Yahweh is an inscrutable god, no longer concerned with the problems of the Jews**

Judaism



- **Prophets**
 - **Ancient Mesopotamia: divination**
 - **Ecstatic visions**
 - **Foretelling the future**
 - **Interpreting natural events as divine messages**
 - **Interested only in events that affect the royalty**
 - **Totally indifferent to ordinary people**
 - **Biblical prophets**
 - **Advocate a higher form of morality and justice**
 - **Obsessed with rejecting idolatry**
 - **Progression towards ethical monotheism**
 - **Addressing the "people" of Israel**
 - **Addressing "all nations"**

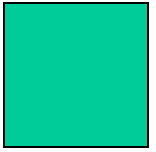
Judaism

- **Prophets**
 - **Zoroastrian influence**
 - **Revealed (God revealed the truth to prophets)**
 - **Apocalyptic (End of the world)**
 - **Eschatological (Resurrection of the Dead)**
 - **Messianic (the Messiah)**
 - **Dualistic (Satan)**

Judaism

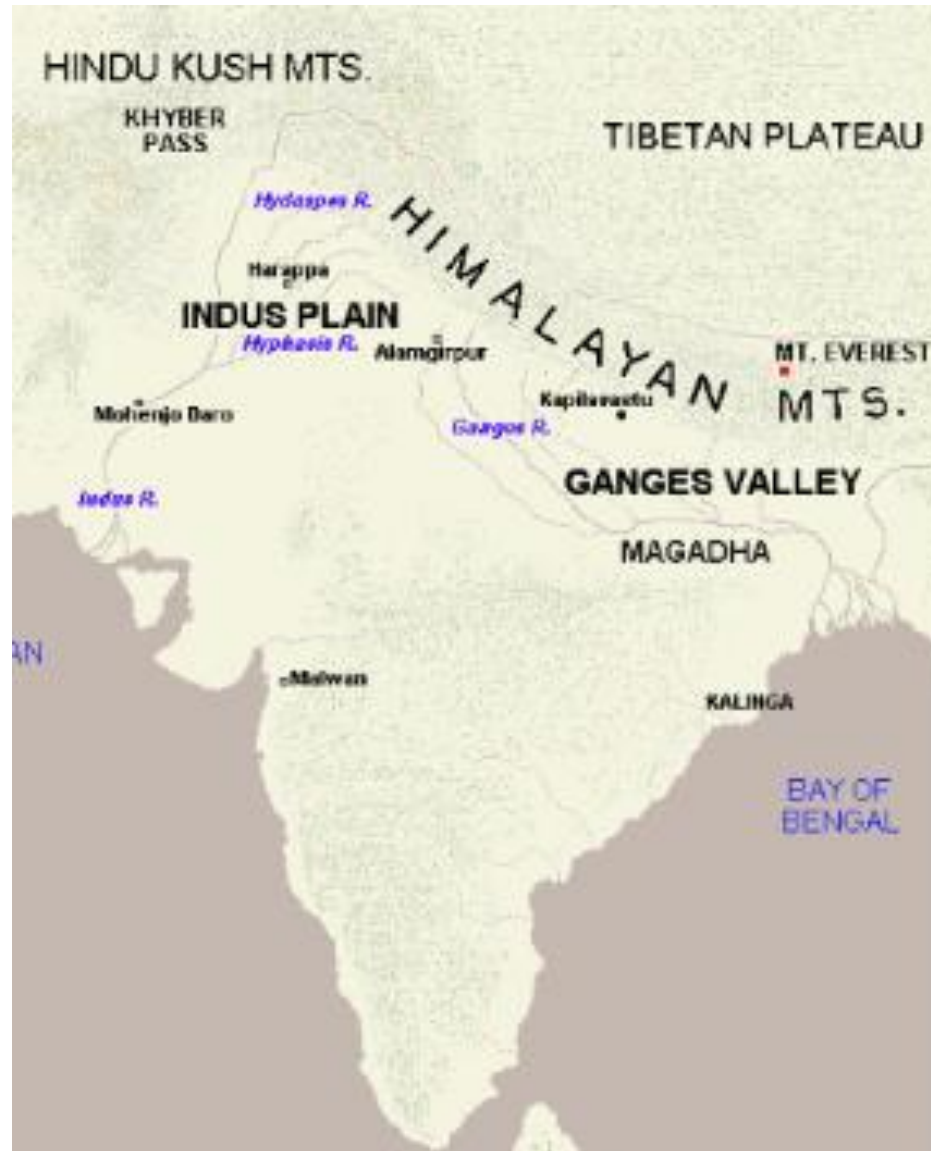
- **An immortal religion**
 - **Not a people that chose a god, but a God who chose a people**
 - **The only religion that survived the destruction of its kingdom**

Judaism



- **Creation myth**
 - **God created the world for humans**
 - **Humans disobeyed God and were expelled**
 - **God exterminated humans with a flood but told Noah to build an ark and restart the human race**
 - **God made a pact with Abraham to give the Jews a land**
 - **The Jews escaped to Egypt and became slaves**
 - **God sent Moses to lead them to the Promised Land and gave him the Ten Commandments**
 - **The Jews disobeyed the Ten Commandments**
 - **God sent them prophets to redeem them**
 - **God will eventually send a Messiah**

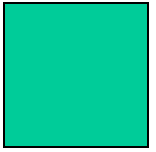
India/Vedism



Hinduism/ Vedas

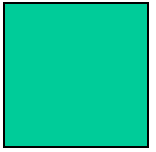
- **Rig-veda (1500 BC)**
 - **Beliefs of the Indo-Europeans**
 - **1028 hymns to a pantheon of gods**
 - **Hymn: exhortation + praise + request, the praise describing the mythology of the deity**
 - **Polytheism: gods are anthropomorphic, immortal and benign (except Rudra)**
 - **Sacrifice, prayer and ritual to please the deities**
 - **Aiming for a life of material pleasure (a utilitarian contract between the gods and the humans)**

Hinduism/ Vedas



- **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

Hinduism/ Vedas

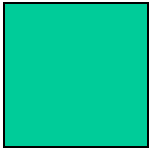


- **Rig-veda (1500 BC)**
 - **Remnants of Dyaus, the original sky-god of the Indo-Europeans (replaced by Varuna)**
 - **Dyausa Pita is the Sky Father, divine consort of the Prithvi and father of Agni, Indra and Ushas**
 - **Dyausa Pita and Pritvi Mata are one divine entity, the Dyavaprthivi**

Hinduism/ Vedas

- **Rig-veda (1500 BC)**
 - **Several contradictory creation myths**
 - **Creation by fecundation of primordial waters**
 - **Creation by dismembering of the giant Parusa**
 - **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**

**Creation Hymn from the Rig Veda (Translation by V.
V. Raman, University of Rochester)**

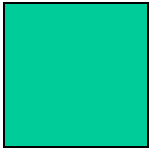


***Not even nothing existed then
No air yet, nor a heaven.
Who encased and kept it where?
Was water in the darkness there?
Neither deathlessness nor decay
No, nor the rhythm of night and day:
The self-existent, with breath sans air:
That, and that alone was there.***

...

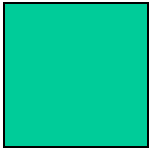
***When and how did creation start?
Did He do it? Or did He not?
Only He, up there, knows, maybe;
Or perhaps, not even He.***

Hinduism/ Vedas



- **The Vedas**
 - **Yajur-Veda (1000 BC): rites of sacrifice**
 - **The will of the gods is not as important as performing the correct ritual (i.e. the priest is more important than the gods...)**
 - **Sama-Veda: religious hymns**
 - **Atharva-Veda (900 BC): magic spells**
 - **Gods are less important than the appropriate spells**
 - **Prajapati supreme creator of the universe**

Hinduism/ Vedas



- **The Vedas**
 - **Brahmanas (900 BC): priestly rites in prose**
 - **Vedic gods downplayed**
 - **Prajapati: everything emanates from Prajapati, the primordial consciousness**
 - **Gods and humans are emanations of Prajapati**
 - **Concept of rebirth**
 - **Salvation as avoidance of rebirth**
 - **Salvation achieved through rituals**

Hinduism/ Vedas

- **Vedic vs Semitic gods**
 - **An anthropomorphic religion**
 - **Semitic gods had no names and were a crowd**
 - **Indo-Aryan gods had names and were individuals**
 - **A natural religion**
 - **Mesopotamian gods: protectors of the city-state**
 - **Indo-Aryan gods: forces of nature**

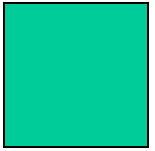
Greece



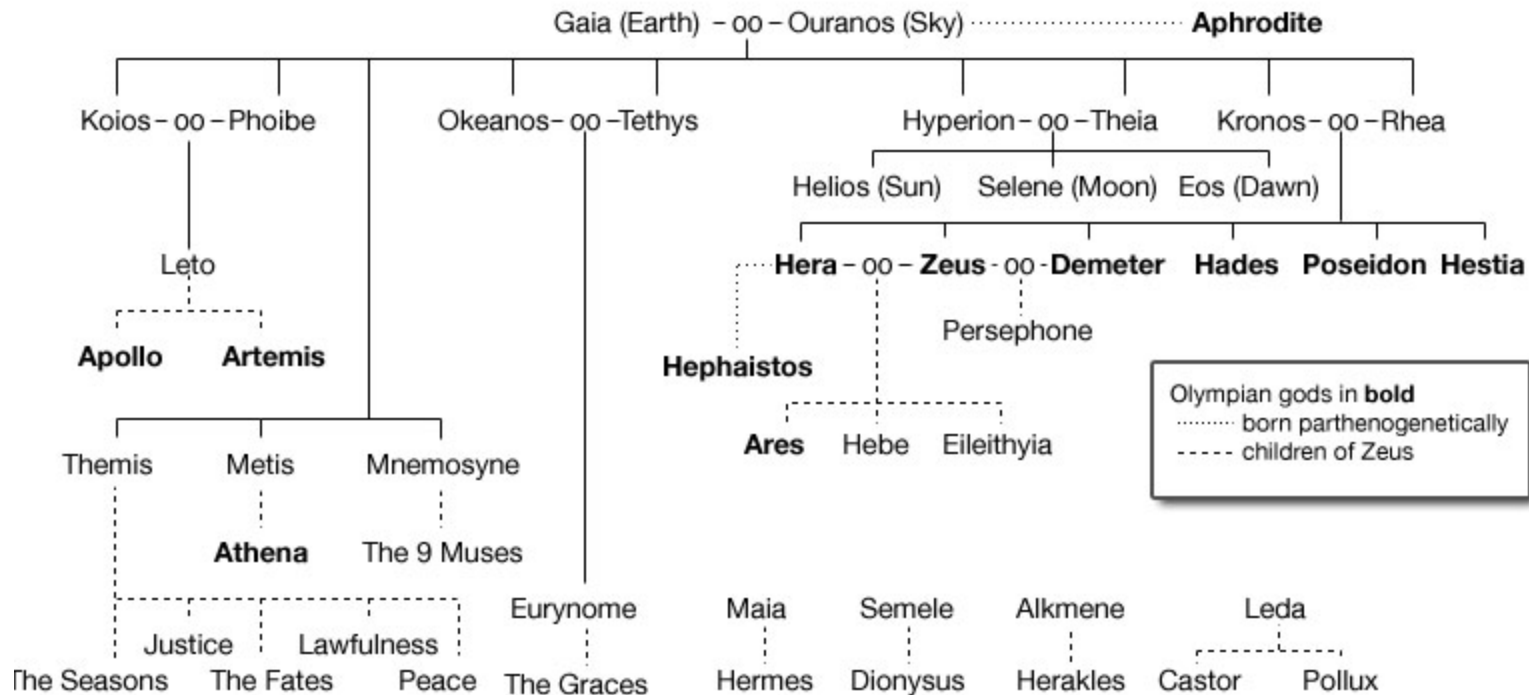
Greece

- **Afterlife**
 - **Indifferent to afterlife**
 - **Hades: not punishment or reward, simply a place (underworld) where the dead go**
 - **Immortality via**
 - **Heroism**
 - **Family**

Greece



- Creation myth
 - Earth/Gaia produced Sky/Uranus
 - Sky and Earth fathered children, who were the Titan parents of the Olympian deities



Greece

- **Greek religion**
 - **Gods did not create the world, they only conquered it thanks to their powers**
 - **Powerful but not omnipotent gods**
 - **Gods are capable of evil (Homeric poems, tragedies)**
 - **Oracles interpret gods**
 - **Sanctuaries: Delphi (Apollo), Olympia (Zeus)**



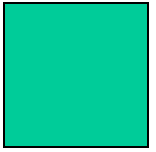
Greece

- **Religion as rational superstition**
 - **Gods have no effect on the working of the universe**
 - **Thus Science and Religion never contradict each other**
- **No organized church**
 - **Priests (oracles) are mere interpreters between gods and humans**
 - **No theocracy: powerless “priests”**
 - **Priestly duties were duties of every good citizen, just like many other duties**

Greece

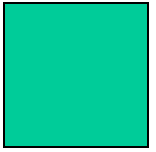
- **Heroism**
 - **Humans are halfway between beasts and gods**
 - **Heroism is a titanic struggle to become more divine than human**

Greece



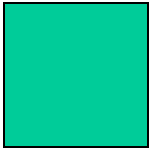
- **Cults of immortality outside mainstream religion**
 - **Eleusinian mysteries**
 - **Dionysian mysteries**
 - **Orphic mysteries**

Greece



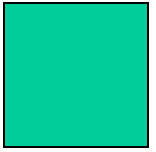
- **Eleusinian mysteries**
 - **Eleusis' sanctuary built in 15th c BC**
 - **Most important religious festivals**
 - **Lasted for 2,000 years**
 - **Four stages in the revelation of the mysteries**
 - **Demeter's search through the underworld for her daughter Persephone, abducted by Hades**
 - **Demeter as the bringer of immortality to humankind**

Greece



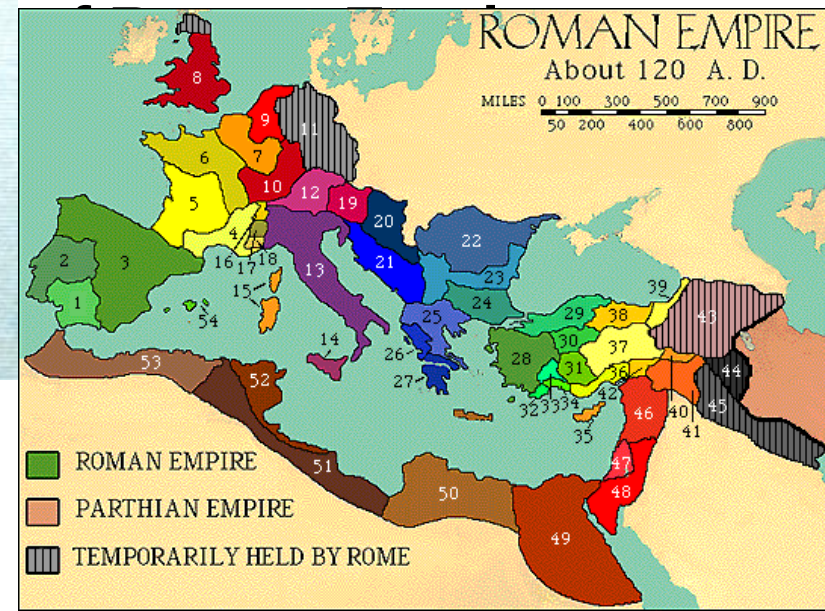
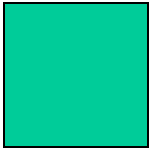
- **Cult of Dionysus/Bacchus**
 - **Legend: Zeus resurrected his (Zeus') son Dionysus (born of a god and a mortal) and created the human race from the ashes of his assassins, the Titans**
 - **Dionysus has both a divine and a human nature**
 - **His death and resurrection saves humans**
 - **Dionysus died each winter and was reborn in the spring**
 - **During the orgy the human soul becomes one with the god**

Greece

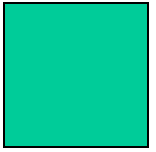


- **Orphic mysteries**
 - **Mystery: humans have a dual nature: the earthly body (which comes from the Titans and feels pain) and the divine soul (which comes from Dionysus and leads to ecstasy)**
 - **After death, people who lived in evil will be punished, while the souls of people who lived in holiness will be completely liberated from Titanic elements and reunited with Dionysus**
 - **Orphism vs Bacchism: purification instead of orgy, permanent instead of temporary union of soul and god, immortality instead of mortality**

Rome

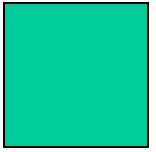


Rome



- **A synthesis of Greek and Italic religion**
 - **Greek pantheon (Zeus=Jupiter, Juno = Hera, Minerva = Athena, Mars= Ares, Mercury = Hermes, Hercules = Heracles, Venus = Aphrodite,...)**
 - **Quirinus, Janus, Vesta (no human-like personal histories and genealogies, and originally no faces)**
 - **Private cult to honor the ancestors**
 - **Rites of passage (birth, marriage, death)**
 - **Festivals of the dead**

Rome



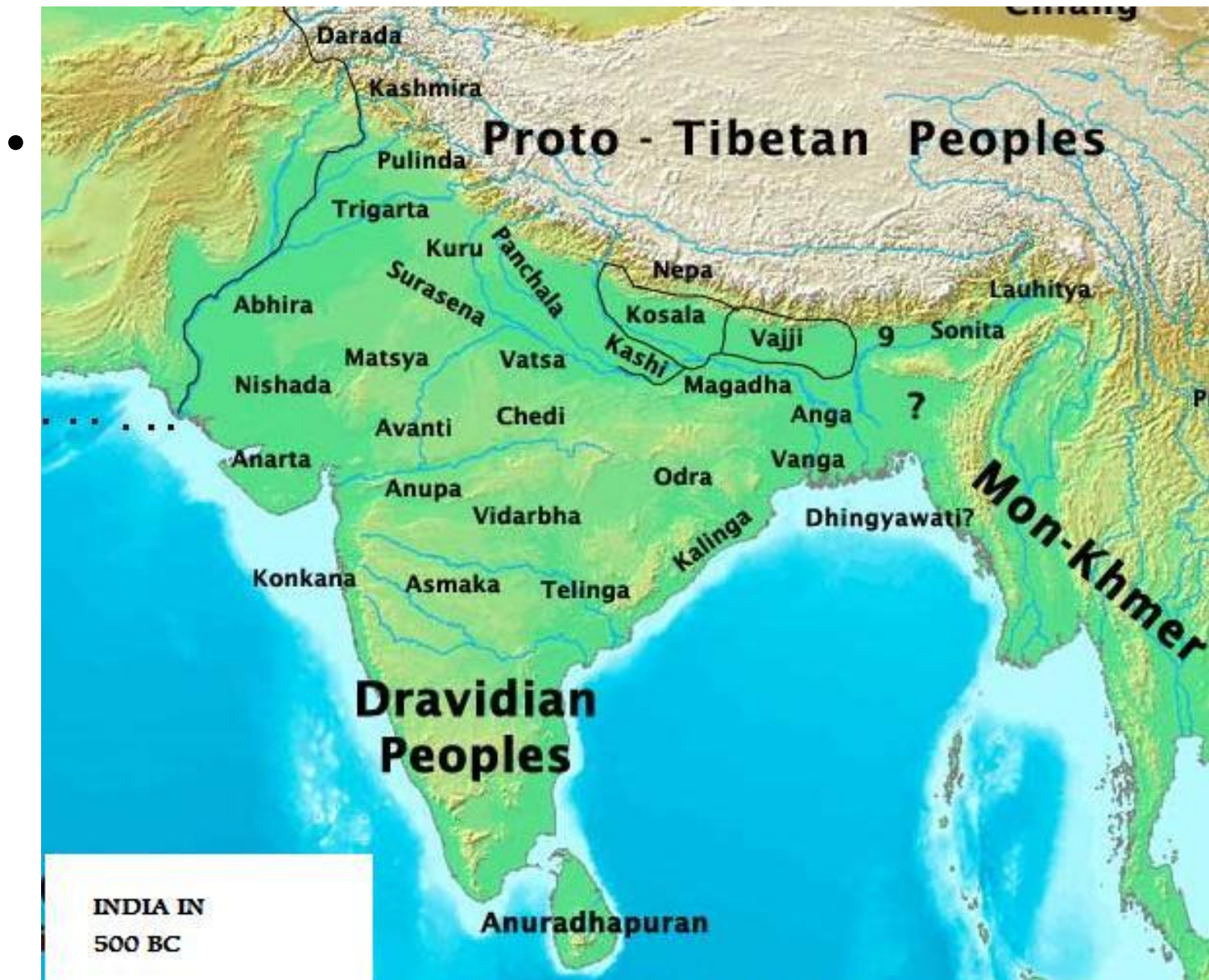
- **Roman vs Greek religion**
 - A religion for the protection of the state, not of the individual
 - Morality = patriotism
 - Roman gods did not quarrel
 - Roman gods did not mingle with humans
 - Priestly class reporting to the king/emperor
 - Romans not interested in individual immortality
 - **Immortality via the state**: the Roman Empire is eternal
 - Respect for all gods of all conquered nations

BREAK

- **Still to come**
 - Upanishad
 - Buddhism
 - Christianity
 - Islam
 - Did "god" mean the same thing to different civilizations
 - Biology of religion
 - Why do humans believe in God?



Hinduism/ Upanishad



Hinduism/ Upanishad

- **Problem of evil**
 - Karma of the person causes apurva that causes good/evil to the person
 - Misfortune is caused by prior wrongful deeds (is not only deserved but even required)
 - Causality is a loop from the individual back to the individual
 - **Cosmic justice is totally independent of gods**
 - Samsara: endless cycle of death and rebirth, transience of ordinary life

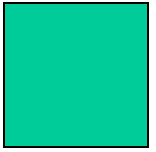
Hinduism/ Upanishad

- **Obsession with suffering**
 - **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**

Hinduism/ Upanishad

- **Salvation**
 - **Brahman:** the absolute, the soul of the world
 - **Atman:** the divine within the self, the soul of the individual
 - **Salvation:** union of the individual soul (“atman”) with the universal soul (“brahman”)
 - **Salvation is liberation (moksha) from the illusion of the multiplicity of the world (maya)**
 - **Moksha:** liberation from maya and experience of the brahman

Hinduism/ Upanishad

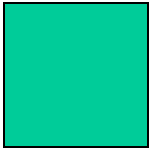


- **Brahman**
 - The ultimate cosmic principle
 - The first cause of the universe
 - The source of existence
 - Pure knowledge
 - Eternal, infinite, and conscious being
 - It is the subject, not the object, of thought
 - Brahman “is” the self (atman) of all beings

Hinduism/ Upanishad

- **Salvation**
 - **Salvation is achieved by transcending the human condition**
 - **Nothing has changed in the world: it is the individual's state of mind that has changed**

Hinduism/ Upanishad

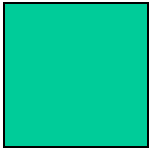


- **Salvation**
 - The order of the soul is a reflection of the order of the absolute
 - Thus understanding one's self is understanding the absolute
 - **Self-knowledge is knowledge of the absolute**

Hinduism/ Upanishad

- **Cycles**
 - The history of the universe is cyclic
 - Human life is cyclic (samsara)

India/ Shramanas



- **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**
- **The priest is replaced by the master**
- **The cycle of rebirth (saṃsāra) is the cause of sorrow**
- **Nirvana: the state of having escaped from the cycle of rebirth**

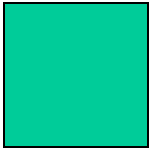
Buddhism



Buddhism

- **Nirvana**
 - **Suffering (existential suffering) is inherent in all living beings**
 - **Nirvana (state of complete liberation) via practice and enlightenment**
 - **Nirvana = no more rebirths**
 - **Salvation lies in eternal death, not eternal life**

Buddhism

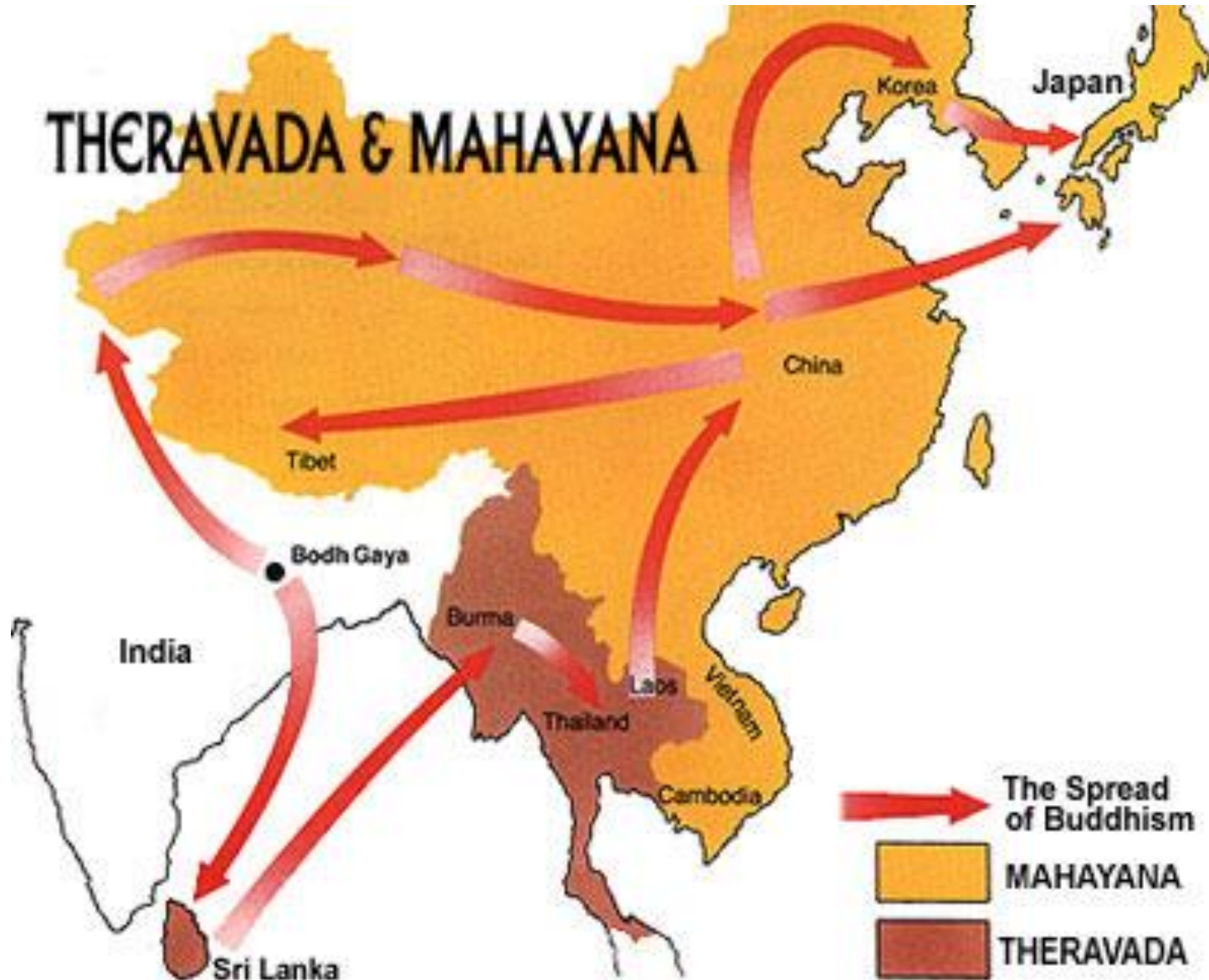


- **Nirvana**
 - **Four-fold negation of nirvana:**
 - **it is not true that we exist or do not exist,**
 - **and it is not true that we both exist and not exist,**
 - **and it is not true that we neither exist nor do not exist**
 - **i.e. nothing can be said about nirvana**

Buddhism

- **Dharma**
 - No atman: no enduring consciousness, consciousness is a substance not a being
 - Dharmas (elements of existence) do exist
 - Nothing exists for any period of time (no duration to dharmas, dharmas are momentary)
 - Each moment is an entirely new existence
 - Personal identity through time consists of continuity of karma

Buddhism



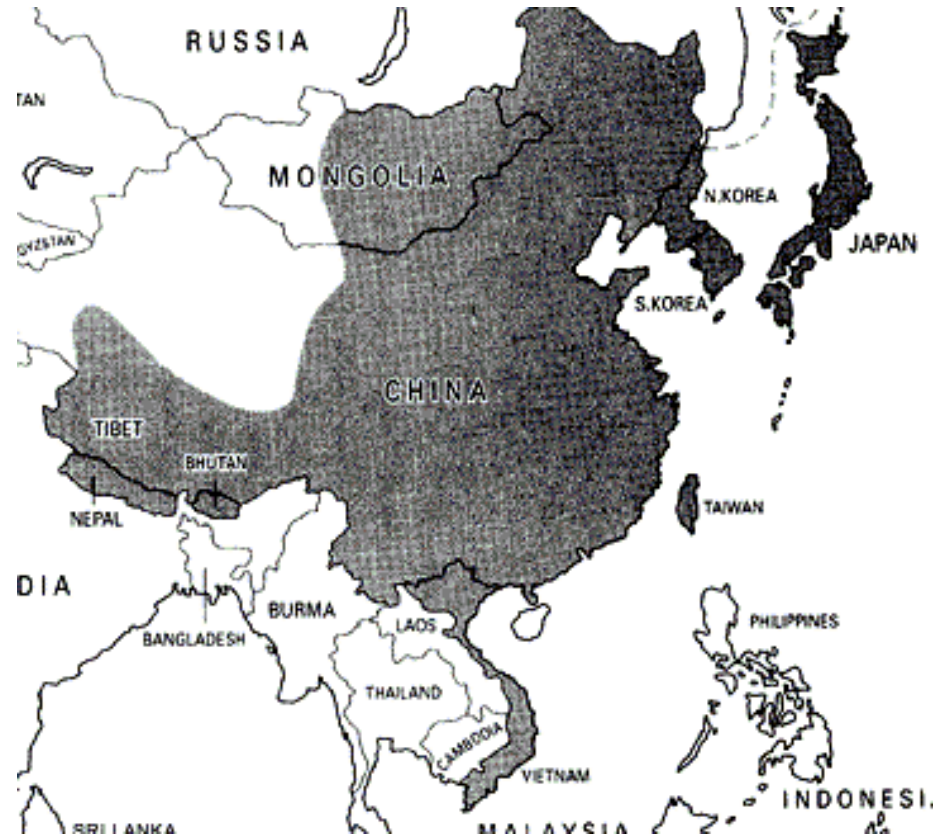
(Theravada) Buddhism

- **Atheism**

- No god: no Brahman
- No soul to start with
- 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

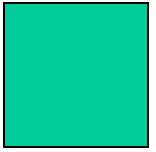


Mahayana Buddhism



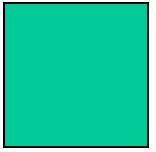
- **Polytheism**
 - Lots of Buddhas
 - Bodhisattvas
 - Nirvana is a place, paradise, contrasted with hell

Hinduism/ Darshana



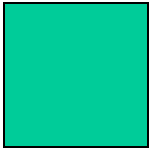
- **Darshana (schools) of philosophy (450 BC)**
 - **Samkhya: Atheism, World is real (due to two substances, prakriti and purusha)**
 - **Yoga: Theism (Isvara), World is real (prakriti/purusha)**
 - **Vedanta: Theism (Brahman), World is not real (only one substance, spirit)**

Hinduism/ Smriti



- **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
 - Notably the sanskrit epics (Mahabharata, Ramayana)
 - Vehicle: human incarnations of the gods (e.g., Krishna and Rama)

Hinduism/ Smriti



- **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**
 - **Three paths to religious realization**
 - **path of deeds (karma yoga)**
 - **path of knowledge (jnana yoga)**
 - **path of devotion (bhakti yoga)**

China

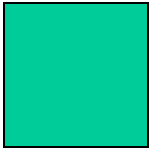
- **China in 500 BC**



China

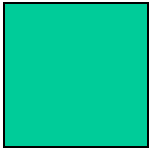
- **Kung Fu-tzu/ Confucius: Philosophy of social organization**
 - Social harmony
 - Calculated behavior
- **Laozi/ Lao-tzu (Daoism): Philosophy of Nature**
 - Harmony with nature
 - Spontaneous behavior

China



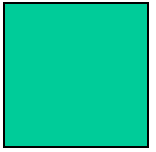
- **Daoism**
 - The fundamental pattern is the cycle
 - The cycle is due to the interplay of yin and yang
 - Contraries are aspects of the same thing
 - "Dao" (empty void of infinite potential) is the supreme being
 - "Qi" is vital energy in constant flux that arises from the "Dao"
 - Matter = energy (matter "is" Qi)

China



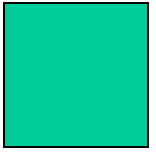
- **Daoist creation myth of 5th c AD**
 - **There was a cosmic egg for 18,000 years**
 - **Heaven and Earth were in a state of chaos or cosmic egg for 18,000 years.**
 - **When the cosmic egg broke apart, Heaven, Earth and P'an-ku were born**
 - **P'an-ku originated humans**

Greece/ Philosophia



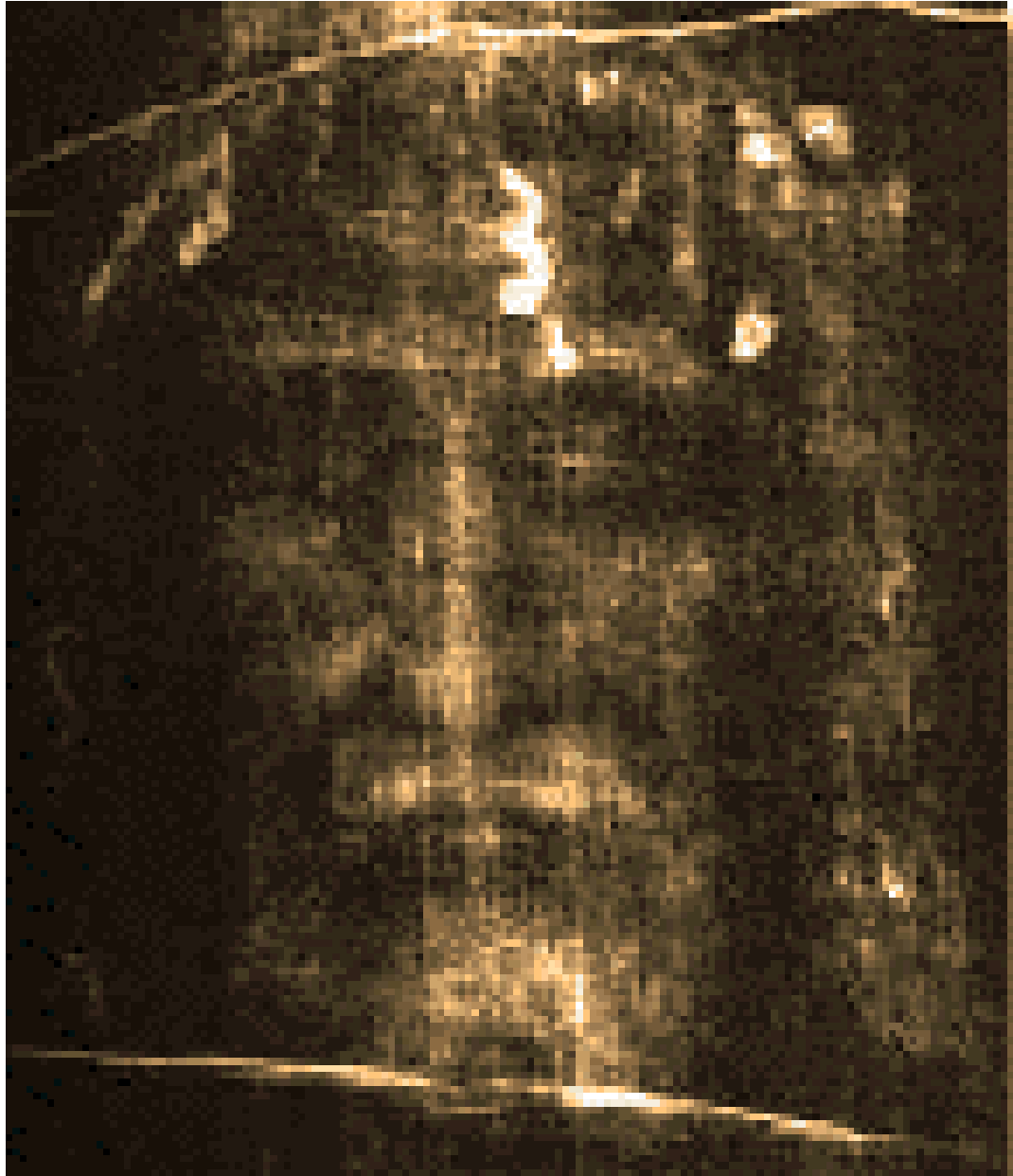
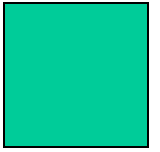
- **Herakleites**
 - Knowledge of the absolute can only come from reasoning (logos) not from perception
 - The fundamental unity and order of the universe “is” the logos (proto-pantheism)
 - **Logos permeates everything**
 - Logos as the personification of cosmic justice and distinct from the gods
- **Parmenides**
 - 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**

Greece/ Philosophia

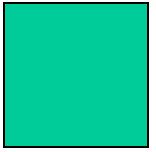


- **Anaxagoras**
 - **Nous (mind) created the world as we know it**
- **Democritus**
 - **The soul is made of atoms like the body**
 - **Humans do not have a special status in the world**
- **Platon**
 - **The Demiourgos/Theos created the world**
 - **The universe is a rational being with a soul**
 - **Theos is the supreme good**
- **Aristoteles**
 - **Theos is the first motor**
 - **Theos is the first substance**
 - **Theos is form without matter**

Christianity



Christianity



- **A religion of slaves**
 - **When Jesus was born, half of the population of the western world were slaves**
 - **Early Christians were mostly slaves**

Christianity

- **God**
 - **Only one God for everybody**
 - **Nameless**
 - **God dwells in Heaven (Paradise)**
 - **God is omnipotent, omniscient, infinitely good**

Christianity

- **Salvation**
 - God created humans to live in a new paradise
 - Humans used free will to disobey God (Adam's original sin) and are now condemned to Hell
 - The original sin is inherited by all humans
 - Humans cannot change their destiny
 - Humans can be saved only by divine grace
 - Salvation has been secured for humans by Jesus
 - Salvation is obtained by faith in Jesus alone
 - Jesus will return at the end of time
 - God will hold a universal judgment

Christianity

- **Christianity vs Judaism**
 - **Universality**
 - **Positive god (“thou shall”) instead of the negative god of Judaism (“thou shall not”)**
 - **God of love (New Testament) vs God of wrath (Old Testament)**
 - **Eternal damnation for unbelievers**
 - **Acceptance, not rebellion**
 - **Hermits (ascetism) and monks (piety)**

Christianity

- **Christianity vs Roman religion**
 - **The individual, not the state**
 - **Charity instead of gifts to the gods**
 - **Equality of all humans**

Christianity

- **Christianity vs Hinduism/Buddhism**
 - **Linear progression of time instead of cycles**
 - **Jesus' bodily miracles vs Buddha's mental miracles (a more materialistic view of life)**
 - **The individual is responsible for her damnation but not for her salvation**

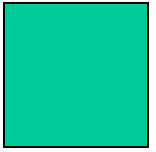
Christianity

- **Christianity vs older religions**
 - **A religion of the You not just the I**
 - **Self-sacrifice vs sacrifice/offering**

Christianity

- **Christianity vs Greek religion**
 - **Rationality replaced by superstition**
 - **Virtue replaced by faith (the only virtue)**
 - **Justice in this world replaced with justice in the next world**
 - **Free exercise of reason replaced with obedience to Christian dogma**
 - **Greek tolerance for foreign faiths replaced by Christian intolerance**

Christianity



- **An imperial religion/ The era of monotheism**
 - **St Paul**
 - **Constantine**



St Paul by El Greco

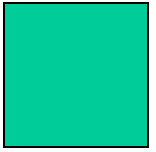


Colossal head
of Constantine



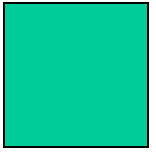
Theodosius I

Christianity



- **Impure monotheism**
 - **Trinity: one God in three persons (Father, Son, Holy Spirit)**
 - **Virgin Mary**
 - **Saints**

Persia/ Manicheism



- All prophets of all religions revealed only part of the truth
- Zoroaster, Buddha, and Jesus were all prophets sent by the same god
- Mani is the last prophet
- Dualism: there is no omnipotent good deity, but two competing (and equally powerful) deities



Islam

The Pre-Islamic World



Islam

- **Islam = submission (to God)**
- **Muslim = subject**
- **Prophet = messenger**
- **Manicheist idea of a succession of revelations given to different peoples**
- **Moses, Jesus, etc were “Muslims”**
- **Old Testament and New Testament (with variants) are also God’s revelation**
- **Quran: God’s revelation as received by Mohammed**



Islam

- **Pure monotheism**
- **No “idol” worship**
- **No priestly mediation between believer and God**

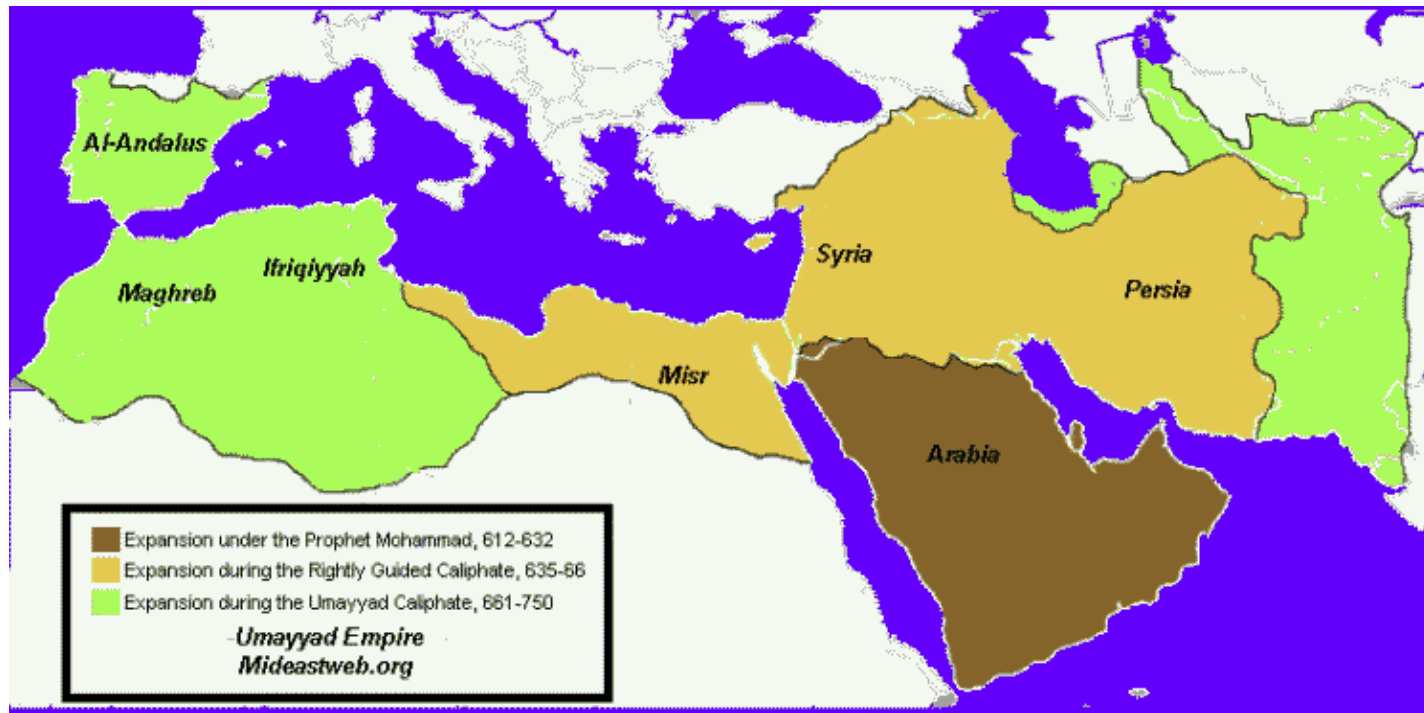


Islam

- **A realistic religion**
 - **No holy spirit**
 - **No miracles**
 - **No saints**
 - **No implausible events (such as resurrection of Jesus, immaculate conception)**
 - **Not a kingdom in heaven but on Earth**
 - **The future history of the human race on Earth**

Islam

- Islamic theocracy
 - Political nature of the Quran
- Jihad
 - First religion to be the raison d'être of an empire
 - No major wars fought over religion before Islam



Summarizing...



Summarizing...

- **Did "god" mean the same thing to different civilizations?**
 - **Ancient Semitic: protector of the city state**
 - **Ancient Egyptian: eternity for the king**
 - **Modern Egyptian: eternity for everybody**
 - **Indo-European: forces of nature**
 - **GraecoRoman: powerful human-like creature**
 - **Vedas: powerful human-like creature**
 - **Upanishad: brahman**
 - **Modern Semitic: perfect, eternal, infinite, omnipotent, good being**
 - **Judaism: God of the Jews**
 - **Christianity/ Islam: God of all humans**

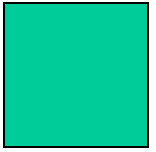
Summarizing...

- **Did "god" mean the same thing to different civilizations?**
 - **Chinese: God is Heaven**
 - **Hinduism: God cannot be comprehended**
 - **Buddhism and Confucianism: God is irrelevant**
 - **Daoism: “God” is Nature**

Summarizing...

- **Did "god" mean the same thing to different civilizations?**
 - **Rome: God justifies the empire that humans created**
 - **Islam: God is the very reason to create an empire**

Summarizing...



- **Where did god live?**
 - **Mesopotamia: Assembly of the gods in Nippur**
 - **Egypt: Sun, Underworld**
 - **China: Heaven**
 - **India: Mt Meru**
 - **Judaism: follows the Jews**
 - **Greece: Mt Olympus**
 - **Rome: Woods**
 - **Christianity/Islam: Paradise**

Summarizing...

- What religions have in common
 - Theology: **why** are we here
 - Cosmology: **what** is out there
 - Ethics: **how** we give meaning to our life
 - Immortality for the race (society)
 - Immortality for some individuals
 - » Immortality for all individuals
 - Liturgy: memorizing knowledge and passing it on to future generations about why, what and how

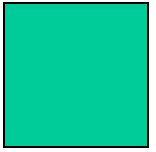
Inferring...

- **Biology of religion**
 - All religions ultimately provide a who, a what and a why
 - Religion is in our brain (in our genes):
 - We believe what we believe because our brains are wired to believe it
 - Religion happens to us the same way language happens to us
 - Then why fewer and fewer people believe in gods?

Inferring...

- **Sociology of religion**
 - **Religions are metaphors**
 - **They were written as metaphors and they were understood as metaphors**
 - **Today we live in the age of the literal (science)**
 - **Religions are understood as literal**
 - **Therefore rational westerners repudiate the Bible, which is difficult to believe literally**
 - **Ancestral thought was metaphorical**
 - **Literal thinking is a modern invention**

God as a cognitive faculty



- **Why do humans believe in God?**
- **Where is God in your brain?**
- **Where is the neural correlate of the mystical experience?**

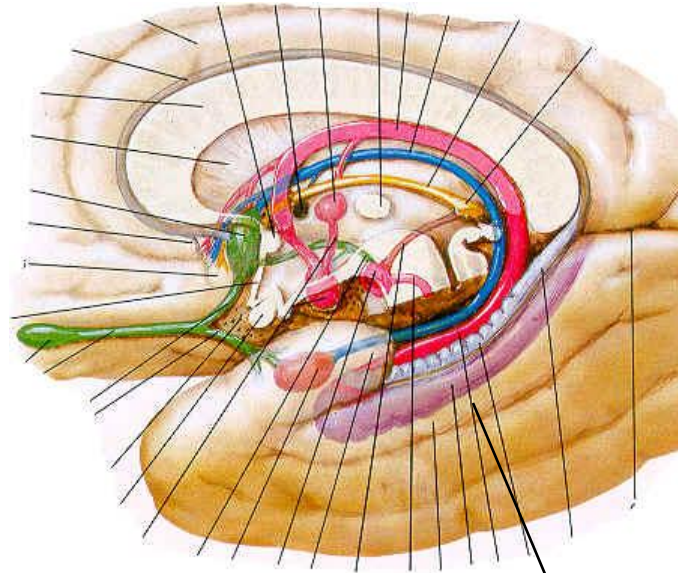
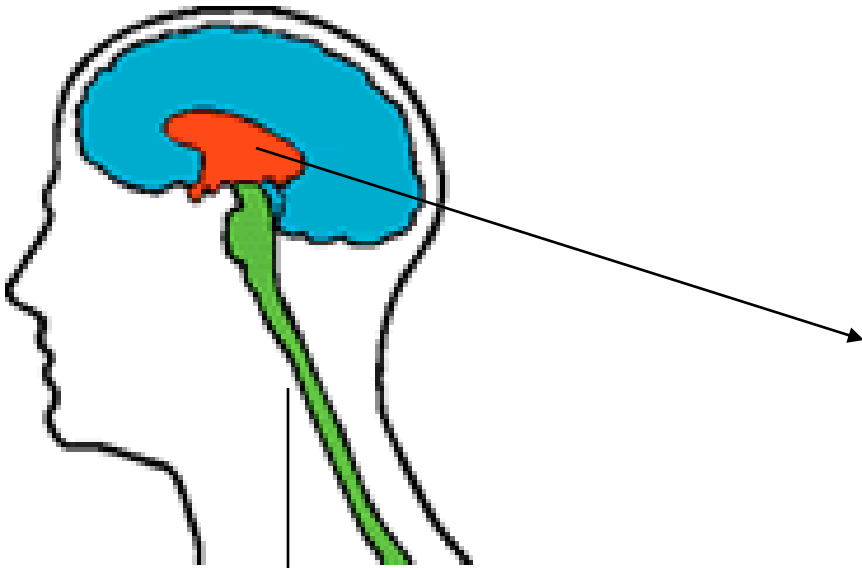
God as a cognitive faculty

- **It is easier for humans to believe in miracles than in Einstein's Relativity or in Quantum Mechanics**
- **Proof of the existence of God: one can "feel" it (whereas one cannot "feel" Einstein's spacetime or Heisenberg's uncertainty principle)**
- **Paul Bloom: we have an innate predisposition to divide the world into mind and matter, and to perceive a non-material essence**
- **Hallucinogenic drugs help achieve the mystical experience**
- **Collective hysteria helps achieve the mystical experience**

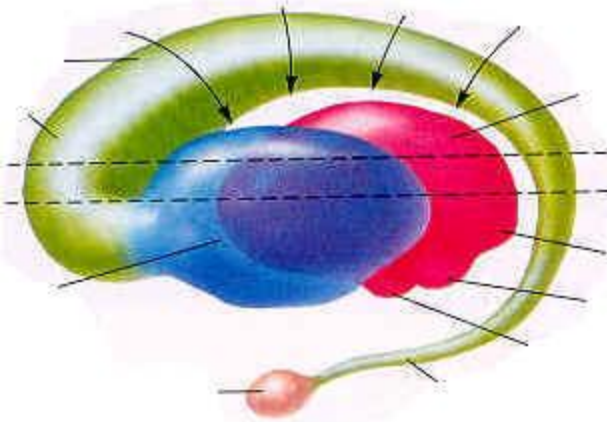
God as a cognitive faculty

- **What do collective hysteria and hallucinogenic drugs have in common?**
- **They paralyze parts of the brain, so that perception is reduced and the ability to perform reasoning is even further reduced.**
- **They close, not open, the “doors of perception”**
- **That “is” the mystical state**

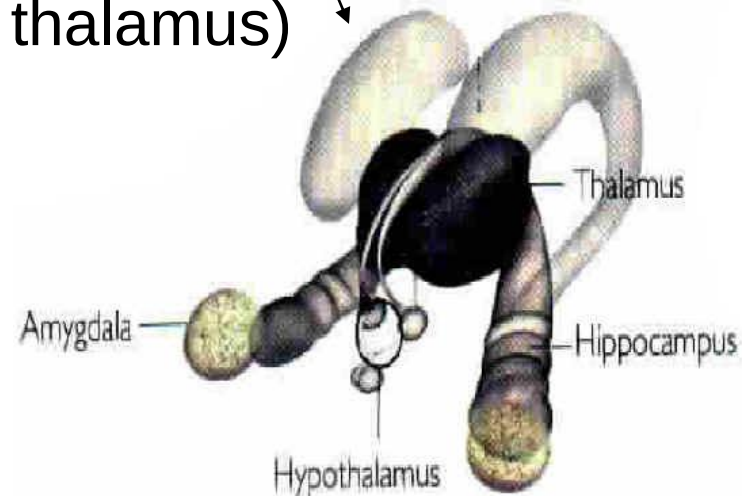
God as a cognitive faculty



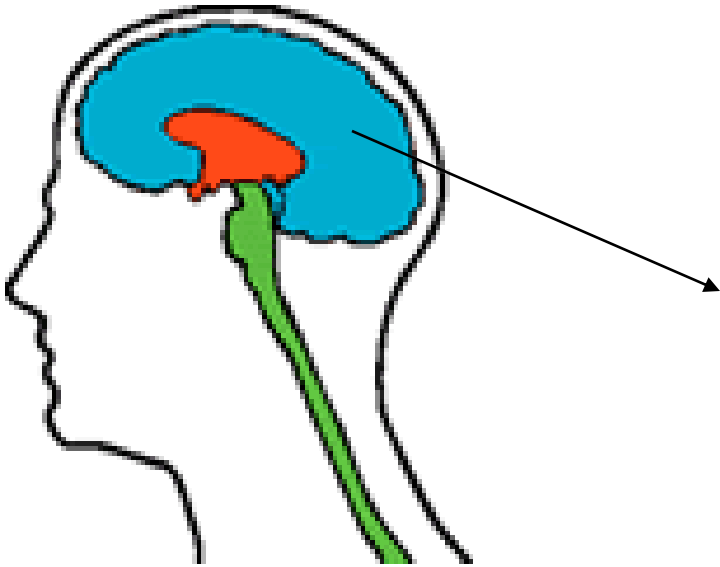
Limbic system
(not the thalamus)



Reptilian brain
(includes the thalamus)



God as a cognitive faculty



Neocortex

God as a cognitive faculty

- **Speculation**
 - **God is a remnant of a pre-human state of existence, one in which humans were not “sapiens”**
 - **One can grasp the sense of God by returning to the mental state of primitive hominids**
 - **All apes believe in “God”, because their brain is permanently in the state in the “mystical state”**
 - **All lower mammals, that do not have the neo-cortex and our cognitive faculties, may feel “God”**

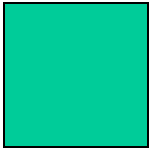
God as a cognitive faculty

- **Speculation**
 - The mystical experience is achieved by (generally speaking) switching off the neocortex
 - The mystical experience is achieved by behaving like a mammal or a reptilian

God as a cognitive faculty

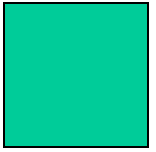
- **Speculation**
 - Religion may simply be an evolutionary leftover, governed by the older (irrational) parts of the brain and superseded by reason whenever we let the newer (rational) part of the brain take over
 - Humans believe in miracles because the older brain is genetically programmed to believe in miracles
 - Humans do not believe in Relativity or Quantum Mechanics because the human brain is not genetically programmed to believe (instinctively) in it

God as a cognitive faculty



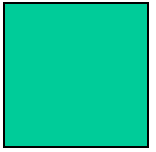
- **Three fundamental “religious” beliefs:**
 - **1. That gods created the universe;**
 - **2. That humans are entitled to an afterlife;**
 - **3. That pleasing the gods will make the afterlife more pleasant and even eternal**
- **Is this due to the interaction of the new rational brain with the older irrational brain?**

God as a cognitive faculty



- **Is there a gene of religion?**
 - **Paul Bloom's "Is God an Accident"**
 - **Scott Atran's "In God's We Trust"**
 - **Dopamine is a neurotransmitter that plays a powerful role in mystical experiences**
 - **A gene that enables dopamine action is the dopamine D4 receptor gene (DRD4)**
 - **Laura Koenig in *Journal of Personality*" (vol 73, p 471, 2006)**

God as a cognitive faculty



- Chimpanzees throw leaves and branches over the dead.



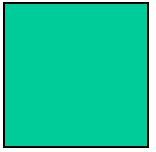
Photograph by Monica Szczupider

November 2009

National Geographic

Cameroon—At the Sanaga-Yong Chimpanzee Rescue Center, more than a dozen residents form a gallery of grief, looking on as Dorothy—a beloved female felled in her late 40s by heart failure—is borne to her burial.

God as a cognitive faculty



- **What is unique about humans is the elaborate rituals (involving dancing, chanting, drumming, funeral processions, masses for the dead, decorated tombs, etc)**

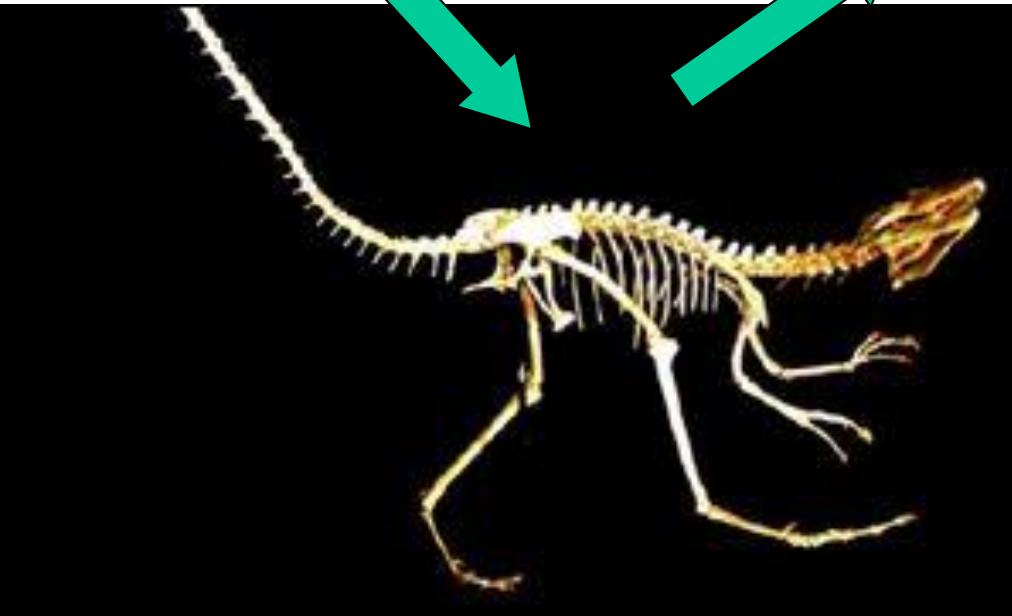
When was God born?



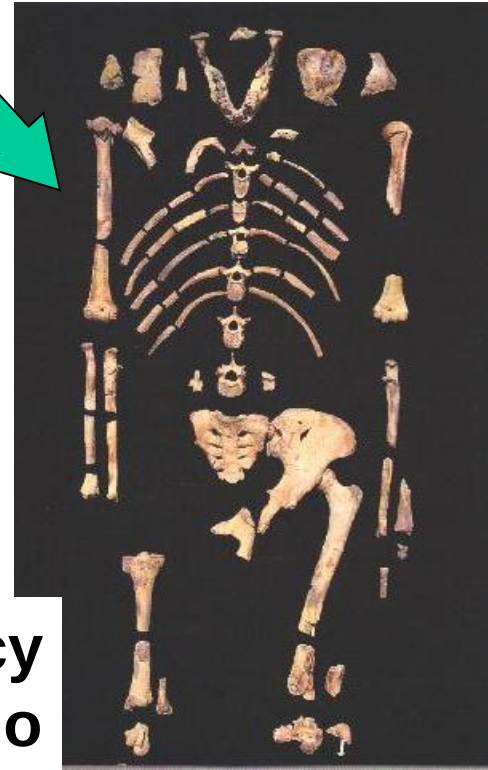
**First land creature
420 million years ago**



**First mammal
200 million years ago**



**First dinosaur
240 millions years ago**



**Lucy
3.5m years ago**

A brief History of God?

