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)
• Joseph Campbell: The Masks of God (1959)
• Michael Persinger: Neuropsychological Bases of God Beliefs (Praeger, 1987)
• 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
Method

- 140 slides
- The blanks are optional
- Please hold your questions till the end
- Recommend a book only if you have read dozens of them
- Please no Hollywood movies…
A brief History of Life

First land creature 420 million years ago

First dinosaur 240 millions years ago

First mammal 200 million 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, Liangthu-China, New Grange-Ireland)
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 3,600 BC
    • 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!
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 (the 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)

Jericcho
(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)

Anubis weighing the heart of the deceased

Pharaoh Speaks with the God Horus
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
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

Lydia (547 BC)

Babylonia (539 BC)

Media (550 BC)

Darius annexations (486 BC)

Egypt (525 BC)

Persian Homeland
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
  – Ristaxez: 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

• 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 anthropomorphomic, 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
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 anthropomorphemic 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

![Family tree of Greek gods](image)
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
• 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

- Proto-Tibetan Peoples
- Dravidian Peoples

India in 500 BC
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 vs Mahayana
(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

• Mahabarata
  – 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)
• 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
• **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

- 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

- Byzantine Empire
- Sasanian Empire

- Constantinople
- Mediterranean Sea
- Syria
- Iraq
- Iran
- Egypt
- Mecca
- Red Sea
- Arabian Peninsula
- Persian Gulf
- Indian Ocean
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’etre 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

Reptilian brain (includes the thalamus)

Limbic system (not 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.
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?