A History of Knowledge

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

What the Jews knew
What the Christians knew
Tang & Sung China (618-1368)
What the Japanese knew
What the Muslims knew
The Middle Ages
Ming & Manchu China
The Renaissance
The Industrial Age
The Victorian Age
The Modern World
What the Muslims knew

Piero Scaruffi 2004

The basis of government is jugglery.
If it lasts and works, it becomes policy.
(Caliph Al Mansur of Baghdad)

The worst things are those that are novelties.
Every innovation is an error, and every error leads to hell.
(Mohammed, The Neglected Duty)
What Islam knew

• Bibliography
  – Majid Fakhry: A History of Islamic Philosophy (1970)
  – David Banks: Images of the Other - Europe and the Muslim World Before 1700 (1997)
  – Reza Aslan: No God but God (2005)
What Islam knew

• Bibliography
  – Bat Ye'or: Islam and Dhimmitude (2001)
  – Humphrey Fisher: Slaves and Slavery in Muslim Africa (1986)
  – Allan Fisher: Slavery and Muslim Society in Africa (1971)
The Roman and Persian empires in 600

http://www.ucalgary.ca/applied_history/tutor/islam/beginnings/
Islam

1500 BC: the Jewish patriarch Abraham (Ibrahim) founds the shrine of Mecca ("kaaba")

350: the Aramaic-speaking Nabataeans (Jordan) develop the Arabic script

460: Persian king Firuz persecutes Jews, who emigrate to Arabia

500: southern Arabia is ruled by a Jewish kingdom

525: the Jewish king Dhu Nuwas of Yemen dies and Yemen becomes an Ethiopian (Christian) colony

610: Muhammad (Mohammed) preaches in Mecca

622: Mohammed and his followers migrate ("heijra") to Yathrib, which is renamed Medina

632: Schisms between Shiites and Sunnites, who choose Abu Bakr as the first Muslim caliph ("prophet's successor")
Islam

632: Abu Bakr declares war on the Roman and Persian (Sassanid) empires
636-42: the Arabs capture Jerusalem, Persia, Syria, Egypt
661: Ali is murdered and is succeeded as caliph by Mu'awiyah ibn Abi Sufyan, first of the Umayyads
661: The capital moves to Damascus (in Syria rather than Arabia)
696: Arabic becomes the official language of the Islamic world
708: Arabs conquer Tangiers (Morocco)
709: Arabs invade Central Asia
711: The Arabs conquer southern Spain from the Visigoths
Islam

732: the Muslim invasion of Europe is stopped by the Franks
749: the Abbasid dynasty replaces the Umayyad dynasty
751: the Arabs defeat the Chinese at the battle of the Talas River, de facto closing the Silk Road
The Arab empire in 750
Islam

756: the last surviving member of the Umayyad dynasty flees to Spain, establishing a separate caliphate

762: the Abbasid caliph Al-Mansur moves the capital from Damascus to Baghdad (near the old Persian capital)

809: caliph Harun Rashid dies, after expanding the caliphate from Gibraltar to the Indu river and having started translations of Greek manuscripts

825: caliph Al-Mamun sponsors translations for his “house of wisdom”

825: Al Khwarizmi of Baghdad writes a book on "Hindu numerals"

867: the Saffarids (Shiite) in eastern Persia become independent

868: Egypt proclaims independence

945: the Buyids (Shiite) invade Persia from the Caspian Sea

962: the Ghaznavid kingdom is founded in Afghanistan
Eastern Islam in 1000
Islam

- 622-660: Early expansion
- 661-748: Umayyads
- 749-1258: Abbasids
- 868-962: Islamic kingdoms
- 992-1194: Seljuqs (Iran, Turkey)
- 1096-1291: Crusades (Palestine)
- 1212-1492: Christian reconquista (Spain)
- 1263-1335: Ilkhanate (Iran)
- 1301-1571: Ottoman expansion
- 1846-1956: European colonization
- 1952-: Islamic nationalism
What the Muslims knew

• The age of ignorance / Jabiliyyah
  – Desert
  – Ghazw/ Razzia (Bedouin raid)
  – North Arabian saddle (that turns camels into means of transport and combat animal)
    • Long-distance travel across deserts that had blocked the expansion of Mediterranean powers
    • Camel-breeding nomads control commercial networks
What the Muslims knew

• Poetry
  – Qasida (pre-Islamic desert encampment ode)
    • Exaltation of one's tribe
    • Longing for the loved one
  – Ghazal (love poem)
  – 10th c: Maqamat (epic rhymed prose mixed with religion, politics, geography, written in virtuoso forms)
What the Muslims knew

• Arabic
  – A semitic language
  – Oldest inscription in Arabic: 1st c BC (in Musnad script)
  – Arabic alphabet evolved (4th c) from the Nabataean/Syriac variation of the Aramaic alphabet
  – Oldest Arabic fragment in Nabataean alphabet: epitaph for the Arab poet and warlord Imru’ul-Qays (Syria, 329 AD)
  – Oldest Arabic fragment in the Arabic alphabet: Jabal Ramm, Jordan (4th century AD)
What the Muslims knew

- Arabic
  - Arabic inscription in Musnad script (Saudi Arabia, 1st c BC)
What the Muslims knew

- Arabic
  - The Nabataean alphabet could represent 22 phonemes, but Arabic has 28 phonemes: 6 Nabataean letters represented two Arabic phonemes each
  - Cursive Nabataean writing evolved into Arabic writing but with more ambiguities (only 17 letters were different in shape, one letter represented 5 phonemes, one represented 3 phonemes and 4 each represented 2 phonemes)
  - Disambiguation dots (Quranic era) to disambiguate phonemes
  - Disambiguation vowels (Al Farahidi, 786)
  - Kufic script (Arabia for Caliph Umar’s death, 646 AD)
What the Muslims knew

- Arabic
  - PERF 558: oldest surviving Arabic papyrus, found in Heracleopolis in Egypt
    - A bilingual Arabic-Greek tax receipt ("Document concerning the delivery of sheep to the Magarites and other people who arrived, as a down-payment of the taxes of the first indiction")
  - Disambiguating dots
  - Islamic formula "Bismillah ir-rahman ir-rahim" (In the Name of God, the Merciful, the Compassionate)
  - Dated both in the Islamic calendar (Jumada I, year 22) and in the Coptic calendar (30 Pharmouthi, 1st indiction or AD 642)
  - It calls the Arabs "Magaritae" (immigrants?) and "Saracens"
What the Muslims knew

• Arabic
  – Tombstone Of `Abd al-Rahma-n Ibn Khair al-Hajri (652 AD) in Kufic script

(Cairo Museum)
What the Muslims knew

• Pre-Islam Arabia
  – North Arab kingdoms under Hellenistic and Byzantine influence
    • Nabatean kingdom in Jordan (5th c BC - 105)
    • Palmyra kingdom in Syria (3rd c BC - 273)
  – Until the 1st c AD Arab seamen are the only one to know the effects of the monsoon on sea travel (the only one who can sail to the Far East)
What the Muslims knew

• Pre-Islam Arabia
  – Bedouin life organized around the tribe
  – Endless wars among Bedouin tribes
  – Complex network of alliances
  – Social egalitarianism
  – Shaykh elected as first among equals to keep peace within the tribe and demand respect from other tribes (not hereditary)
  – Hakam plays the role of the judge
  – Decisions made by hakams become the “sunna”, the ethical code of a tribe
  – Different tribes have different sunnas
What the Muslims knew

• Pre-Islamic Arabia
  – Communal life of the tribe
    • Women are property of men
    • The harem is the status symbol of a shaykh
    • Both men and women practice polygamy
    • No individual inheritance
    • Paternity is unimportant (matrilineal society)
    • Polyandrous marriages allowed
    • Bedouins are polytheists and animists
What the Muslims knew

- Jews
  - Jews expelled from Palestine by the Romans after the 70 and 132 insurrections
  - Yathrib (Medina) originally settled by Jews
  - Jewish merchants
  - Jewish Bedouins
  - Jewish farmers
  - Jewish poets
  - Jewish warriors
  - Symbiotic relationship between Jews and Arabs (Jews heavily Arabized, but Arabs heavily influenced by Jewish beliefs)
What the Muslims knew

• Pre-Islam Arabia
  – 525: The Himyarite kingdom converts to Judaism
  – 530: Christian Ethiopia invades south Arabia
  – 575: The Persian Sassanids invade south Arabia
  – 608: The Kaaba, a shrine to many Arabian tribal gods, is erected in Mecca
What the Muslims knew

• Pre-Islam Arabia
  – Eastern Roman Empire (Byzantium): Christian
  – Sassanid Empire (Persia): Zoroastrian
  – Yemen: Jewish
  – Ethiopia: Christian
  – Byzantines and Sassanids fight for control of the Middle East
  – Yemenis and Ethiopians fight for control of southern Arabia
What the Muslims knew

• Pre-Islam Arabia
  – Arabia is the only place where Zoroastrian, Christian and Jewish monotheistic religions coexist
  – In the 7th century Arabia surrounded by Christians (Syrians, Mesopotamians, Abyssinians)
  – Ghassanid tribe protects Roman borders of Arabia
  – Lakhmid tribe protects Persian borders of Arabia
What the Muslims knew

• Pre-Islam Arabia
  – Arab historians:
    • Ibn al-Kalbi (7th c AD)
    • Azraqi (8th c AD)
    • Tabari (9th c AD)
    • Ibn Ishaq (th c AD)
What the Muslims knew

• Mecca
  – Sanctuary for many gods
  – Mecca before Mohammed: a model of religious tolerance
  – Annual pilgrimage (haji) to Mt Arafat
  – Allah: lord of the Kaaba
  – Three daughters of Allah: Manat, Allat, AlUzza
  – Mecca before Mohammed: a model of gender equality Similar to the religion of Palestine in 6th c BC (Yahweh, Bethel, Arat, Harambethel)
  – Only monotheists: the hanif (poets and visionaries)
Ancient Arabia

• Meccan shrine (Kaaba)
  – A model of religious tolerance
  – Nabataean gods (e.g., Kutba)
  – Goddess Uzza (Isis, Aphrodites)
  – Jesus and Mary
  – Three daughters of Allah: Allat/Astarte, al-Uzza, Manat
  – Hubal, the Syrian god of the moon, chief god of Mecca
  – Oracles (kahin) interpret the gods through ecstatic poetry (modeled after Delphi’s oracle)
Ancient Arabia

- Meccan shrine (Kaaba)
  - Ancient belief: the Kaaba was built by the first man, Adam, destroyed by the flood, rebuilt by Noah, rediscovered by Abraham/Ibrahim
  - Quran’s version: Allah commanded Abraham/Ibrahim and his son Ishmael/Ismail to build the Kaaba
  - Original Kaaba: a cube of unmortared stones
  - 360 idols
  - Pilgrims travel to Mecca (hajj) and rotate around the Kaaba seven times (tawaf)
  - Probably a cosmic metaphor (360 days of the year, seven astral bodies)
Ancient Arabia

- Meccan shrine (Kaaba)
  - Widespread cult of stones
  - Nomads carry stones in portable shrines
  - Nabateans and Syrians worshipped stones (Elagabalus, son of a Syrian woman, brought one to Rome when he became emperor in 216 AD)
  - Pilgrims took stones from Mecca with them
Ancient Arabia

- Meccan shrine (Kaaba)
  - Located near the “zamzam” well, that was probably a popular stop for caravans
  - But most trade routes do not cross Mecca
  - No evidence of commercial activity in Mecca other than selling goods to pilgrims and taxing pilgrims
  - No signs left of wealth (unlike Palmyra or Petra, where wealth translated into great buildings)
  - Not a city at all until the 5th c AD
  - There were monotheists before Mohammed: poet Zayd ibn Amr (opposed to Judaism, Christianity and later Islam)
Ancient Arabia

• Meccan shrine (Kaaba)
  – 5th century: Qusayy gains control of Mecca, collects nearby idols, creates a monopoly of pilgrimage and establishes the tribe of Quraysh (descendants of Ismail) as the wardians of the shrine (“the tribe of god”)
  – Qusayy creates an economic empire based on the lucrative captive market of pilgrims and on the advantages provided by the Kaaba
    • Mecca as a sanctuary is exempt from warfare
    • The great commercial fairs coincide with the pilgrimage cycle
  – But the wealth of the Meccan elite violates the egalitarian spirit of the tribe and creates social layers
Ancient Arabia

• Meccan shrine (Kaaba)
  – Usury
  – Accumulation of individual wealth
  – Individual inheritance
  – Patrilinear society
Ancient Arabia

• Mecca and Medina
  – Mecca: transition from bedouin pastoral society to center of trade (replacing Petra and Palmyra)
  – Medina: transition from bedouin pastoral society to agriculture
  – Mecca: polytheistic
  – Medina: mostly Jewish
What the Muslims knew

• Mecca
  – Legend
    • Sanctuary founded by Ibrahim (Abraham) around the Cube (Kaaba)
    • City settled by Ishmael
  – Archeological/historical record
    • No major trade route near Mecca in ancient times
    • Most ancient mosques in Egypt and Jordan originally oriented towards Jerusalem, not Mecca
    • Contemporary Roman and Persian documents refer to other Arab cities but not to Mecca
What the Muslims knew

• Arabian economy
  – Traders
    • Arabian trade routes to India become strategic to the Romans because of continuous warfare against the Sassanids.
    • Collapse of the western Roman empire causes chaos in the western Mediterranean
    • The camel overland (north Africa) and the dhow on the sea (Indian ocean)
  – Drought in Arabia
  – Decline of the Silk Road and rise of the Muslim trade with China and India
  – Islam first spreads in regions that have chronic scarcity of freshwater (north Africa, Middle East, southern Spain)
What the Muslims knew

- Arabian economy
  - Indigo
What the Muslims knew

- Eastern Roman Empire (Byzantium): Christian, intolerant to other religions
- Persian Empire (Sassanids): Zoroastrian, tolerant to other religions
- Jewish tribes in Arabia were generally pro-Persia
- Byzantium supported non-Jewish groups, including possibly Mohammed’s
- Ethiopia: Christian
- Yemen: Polytheistic (Allah one of the gods)
- What they did not know: previous civilizations of the Middle East (Sumers, Babylonia, Assyrian, Hittite)
What the Muslims knew

• The legacy of Judaism
  – Mohammed prayed towards Jerusalem (until 624)
  – Mohammed worshipped the temple built by a Jew, Abraham, in Mecca
  – Mohammed founded Islam on the Ancient Testament
  – Most ancient mosques oriented towards Jerusalem, not Mecca
What the Muslims knew

• The legacy of Judaism
  – St John Damascene (675-749) considered Islam a heterodox form of Christianity
  – The Islamic conquest caused a boom (not a decline) in Christian church building
What the Muslims knew

• The legacy of Judaism
  – Abraham (Ibrahim) led his tribe (Amorite invasion) from Ur to Haran to Canaan to (famine) Egypt to Canaan
  – Ibrahim and his son Ishmael built the Kaaba of Mecca as a shrine to his god
  – Ishmael (son of Ibrahim and the Egyptian slave Hagar) is the father of the Arab people
  – It was Ishmael, not Isaac, that God demanded from Ibrahim/Abraham as a token of his faith
  – All Jewish prophets are also Muslim prophets
  – Jesus was a prophet (messenger), but not divine (and was not crucified)
What the Muslims knew

• Mohammed
  – Early biographers
    • Ibn Ishaq
    • Ibn Hisham
    • al-Baladhuri
    • al-Tabari
What the Muslims knew

Portraits of Mohammed

Turkish Museum, Istanbul
What the Muslims knew

• Portraits of Mohammed

Rashid Al-Din’s Jami Al-Tawarikh
(University of Edinburgh)
What the Muslims knew

- Portraits of Mohammed

![Image of portraits of Mohammed](image1)

Bibliothèque Nationale, Paris (Iran, 1030)

![Image of Muhammad and followers](image2)

(Turkey, 16th c)

When Muhammad brought forth a spring in Mecca, however, the people declared he was an evil sorcerer, not a prophet; some in fact, led by the wicked Abu Jahl (blue turban), plotted his death.
What the Muslims knew

• Portraits of Mohammed

The ascent of Muhammad to heaven (1540, from the “Khamsa of Nizami”)

Detail: note the faces are all Chinese)
What the Muslims knew

- Mohammed’s formation (622AD)
  - 569: Born in Mecca
  - 575: Orphaned at six, raised by his uncle as a caravan trader
  - 595: marries Khadija, wealthy widow, much older than him
  - 610: divine revelation from angel Jibril (Gabriel)
  - Lots of wives, but only two sons (dead) and four daughters (all dead except Fatima)
  - Closest advisors: friend Abu Bakr, cousin Ali (Fatima’s husband)
  - Advocates better treatment for slaves and women
What the Muslims knew

• Mohammed’s formation (622AD)
  – 621: angel Jibril (Gabriel) transports him to Jerusalem to convene with past prophets
  – 622: expelled from Mecca and hired by Yathrib/Medfina (Medinat-un-Nabawi = city of the prophet) to provide arbitration
  – 627: wages campaign against caravans to Mecca
  – 629: takes Mecca and restores Kaaba to monotheism
  – 630: instructs general Osama to attack Syria
  – 631: last sermon (no Arab should claim superiority over a non-Arab), his quran (word) and his summah (the way)
  – 632: dies leaving Ali in charge
What the Muslims knew

• Mohammed’s formation (622AD)
  – Revelation
    • Social reform for restoring an egalitarian society and freeing slaves
    • Kahins are charlatans
What the Muslims knew

• Mohammed’s formation (622AD)
  – First believers in his revelation:
    • His wife Khadija
    • His younger cousin Ali, who was raised with Mohammed
    • Mohammed’s slave Zayd
    • His friend Abu Bakr, wealthy Qurayshi trader
What the Muslims knew

• Mohammed’s formation (622AD)
  – Haram (contract) with Jewish and oasis tribes to provide peace and justice for the community
  – A prophet in the Jewish/Christian tradition
  – Quarrel with the Jews
  – A mission to pacify pagan Arabia
  – A divine mission, as a descendant of Abraham
  – A new religion, that prays towards Mecca
What the Muslims knew

• Mohammed (622AD)
  – True monotheism (no Christian trinity)
  – Adopts the Roman and Sassanid experiments of a monotheistic state religion
  – Adds the concept of religious war
  – Human (not divine) prophet
  – Brotherhood
  – Austere living
  – System of reward based on faith and deeds (as opposed to Augustine's divine omnipotence)
  – Little or no reference to New Testament
  – Manicheist idea of a succession of revelations given to different peoples
What the Muslims knew

• Mohammed (622AD)
  – Threat to the power of the Quraysh tribe
    • Mohammed’s exclusive monotheism (all the other gods are false gods) disrupts the economics of Mecca
    • Mohammed’s egalitarian program disrupts the politics of Mecca
What the Muslims knew

• Mohammed (622AD)
  – The commune in Medina
    • Radical social, religious and economic reforms
    • Mohammed as the shaykh, hakam and kahin
    • The tribe is not defined by genetics but by the shahadah (accepting Allah as the only god and Mohammed as his prophet)
• Any member of any tribe can become a member of Medina’s new tribe (the “ummah”)
• A new political system on top of the Arabian tribal system
What the Muslims knew

• Mohammed (622AD)
  – The commune in Medina
  • Egalitarian society, redistribution of wealth
    – Usury banned
    – Mandatory charity (zakat)
What the Muslims knew

• Mohammed (622AD)
  – The commune in Medina

• Patrilinear society
  – Women cannot marry more than one man
  – Polygyny still required to save the ummah after the war with the Quraysh (hundreds of widows and orphans) but limited to four wives
  – Mohammed marries nine women in Medina, including 9 y.o. Aisha (the power of a shaykh is proportional to his harem)
What the Muslims knew

• Mohammed (622AD)
  – The only founder of a major religion who personally killed
  – Mohammed personally led the guerrilla war
  – Mohammed personally decapitated the male Jews of Medina and divided the women among his followers.
What the Muslims knew

• The succession
  – No succession rule for the leader of the ummah
  – The Quraysh still rule in Mecca
  – Abu Bakr is the compromise choice
  – Main goal of Abu Bakr’s caliphate: fighting the “false prophets” (i.e., anyone who tried to rebel) and declaring war on Byzantium and Persia
  – Umar conquers most of Byzantium and all of Sassanid empire
What the Muslims knew

• The succession
  – Uthman fully restores Quraysh power
  – Ali’s followers see it as a coup by Mohammed’s enemies
  – Uthman assembles the Quran
  – Uprisings against Uthman - Uthman murdered
  – Mu'awiya starts a dynasty (son succeeds father), the Umayyads, who are basically Mohammed’s old enemies, with capital in Damascus (not Arabia)
  – Demise of Mohammed’s egalitarian revolution
  – Mu'awiya models the new empire after the Byzantine and Sassanid empires, with members of his family as governors of the conquered provinces
What the Muslims knew

• The succession
  – Yazid, Mu'awiya’s son, murders Mohammed’s family, notably his grandson Husayn (son of Ali and Fatima), in Karbala (680 AD)
  – Yazid quells rebellions throughout the empire
  – People who mourn Husayn in Karbala: Shiites (first pilgrimage to Karbala: 684)
What the Muslims knew

• Reasons for the Arab success
  – Persia and Byzantium are weakened by both wars against each other and internal succession wars
  – North-African and Middle-Eastern populations alienated by Byzantine and Persian bureaucracies
  – No tolerance for “heresies” by Byzantium
  – Egyptian and Syrian opposition to orthodox Byzantine Church
  – North-African discontent with orthodox Catholic dogmas
  – 638: Jerusalem's Christian patriarch Sophronius welcomes the Muslims
What the Muslims knew

• Reasons for the Arab success
  – Arab tolerance for Christians and Jews (allowed to retain their religious and political institutions)
  – Muslims exempt from taxes
  – Islam’s brotherhood creates a higher level of asabiya and a larger tribe of all tribes, the umma
  – Religion had been a way to tell a tribe from another, but now becomes a unifying factor
  – Because Islam forbids the former caravan raiders to attack each other, they have to look for targets outside Islam
The Arab Empire

• Formation of the empire
  – 632: Abu Bakr declares war on the Eastern Roman and Persian (Sassanid) empires
  – 636–42: Jerusalem, Persia, Syria, Egypt conquered by Umar
  – Empire of faith: first religious empire
  – Umar’s policy: transforming the Arab warriors into an elite military class and tolerating the social and religious order of the conquered lands
The Arab Empire

• Reasons for the Arab success
  – Byzantine and Sassanid empires exhausted by centuries of warfare
The Arab Empire

• Reasons for the Arab success
  – Deadly combination of
    • tribally-based military units,
    • holy/charismatic leadership,
    • martyrdom-oriented religion
    • and horse-based desert raid
The Arab Empire

• Reasons for the Arab success
  – North-African and Middle-Eastern populations alienated by Byzantine and Persian bureaucracies
  – Egyptian and Syrian opposition to orthodox Byzantine Church
  – North-African discontent with orthodox Catholic dogmas
  – Large Arab minorities in Syria/Jordan
  – Arab tolerance for Christians and Jews (allowed them to retain their religious and political institutions)
  – Muslims exempt from taxes
The Arab Empire

• Reasons for the Arab success
  – Islam (substantive of aslama) = submission (to Allah) “aslem taslam” (Mohammed)
  – Muslim (active parciple of aslama) = subject
  – Prophet (nabi or rasul) = messenger (nabi has received a revelation from Allah, rasul is also entrusted with writing scriptures)
  – Moses, David, Jesus, Mohammed were rasuls
The Arab Empire

• Reason for the Arab success
  – Boom of Christian churches in Syria
  – Jews allowed to return to Palestine
  – Byzantine and Persian artists welcome at the caliph’s court
What the Muslims knew

• How Islam spread
  – Mediterranean and Middle East: war (7th c)
  – Central Asia and Africa: slavery
  – Far East: trade - brotherhood of traders
  – Europe and USA: immigration (20th c)
What the Muslims knew

- Rise of Islamic civilization
  - Economy: the Arab invasions created a huge integrated economy extending from Spain to India
  - Culture: the Arab invasions de facto united four of the great ancient civilizations (Greek, Jewish, Persian, Indian)
  - Muslims are a minority
What the Muslims knew

• Islam
  – Islam (aslama) = submission (to God)
  – Muslim = subject
  – Prophet (nabi or rasul) = messenger (nabi has received a revelation from Allah, rasul is also entrusted with writing scriptures)
  – Moses, David, Jesus, Mohammed were rasuls
  – Quran or “Recitation” (655): God’s revelation as received by Mohammed
  – Hadith: actions and utterances of Mohammed (different for Sunnis and Shiites)
  – Old Testament and New Testament
  – Moses, Jesus, etc were “Muslims”
What the Muslims knew

• Islam
  – Quran/ Koran

Oldest Quran fragments found in Birmingham University

Quran (8th c, Arabian peninsula, Kuwait Museum)
What the Muslims knew

• Islam
  – Quran
    • An “uncreated” book, revealed to Mohammed (recorded by Zayd bin Amr’s son Sa‘īd bin Zayd)
    • It exists regardless in the heavens
    • Arabic is the sacred vehicle for the Quran (no translation of the Quran “is” the Quran)
    • The Arabic language is defined by the Quran
    • The Quran is to Islam what Jesus is to Christianity: the embodiment of the divine
    • Mohammed is Islam’s St Paul
    • The protagonist is Abraham/Ibrahim: he is more than just a prophet
What the Muslims knew

• Islam
  – Quran
    • Humans are servants/slaves of Allah
    • The only duty of humans is to worship Allah ("I created… humankind only that they might worship me" – Quran 51:56)
What the Muslims knew

• Islam
  – The caliphs run the state
  – The ulama interpret the Quran and assemble the “hadith” (that represent the “sunna”)
  • Different hadiths in different regions (e.g., Syrian hadits claim that the Mahdi will be a member of the Quraysh tribe)
  – The ulama work out a set of rules to define what a good Muslim is
  – The ulama work out a set of rules for creating an Islamic society (“shariah”)
  – The ulama interpret the meaning of the Quran
  – No authorized translation of the Quran
What the Muslims knew

- Islam
  - It was the ulama, not the Quran, that created Islam
  - The Quran collects sentences by Mohammed that related to the historical context
  - Mohammed’s opinions changed over time (e.g., slavery, infidels, alcohol, for which different sutras prescribe different behaviors)
  - The Mecca and the Medina sutras differ greatly because they address two different audiences in two different situations
  - The Quran itself admits its inconsistency (2:106, 16:101)
What the Muslims knew

• Islam
  – Obligations
    • Shahada (testimony of faith)
    • Salah (ritual prayers five times a day)
    • Hajj (pilgrimage to Mecca)
    • Sawm fasting during Ramadan (ninth month of calendar)
    • Zakat tax (mandatory alm)
  – Jihad
Shahada

La ilaha il Allah, Muhammad-ur-Rasool-Allah
The Kaaba ("the cube" in Arabic) is a small stone building in the court of Mecca’s Great Mosque that contains the black stone (possibly of meteoric origin) first worshipped by the Jewish prophet Abraham. According to tradition, it was a white stone given to Adam on his fall from paradise and has turned black by absorbing the sins of the pilgrims who touch and kiss it.
What the Muslims knew

- **Islamic theology**
  - Sunnah (paradigm of behavior): Mohammed as role model (as per the Hadith, such as those compiled by Muslim ibn al-Hajjaj and Muhammad ibn Isma'il al-Bukhar)
  - Tafsir (commentaries on the Qur'an)
  - Commandments
    - Pork
    - Alcohol
    - Fornication
    - Usury
    - Idolatry
    - Jewish commandments
What the Muslims knew

• Islam
  – Free will does not exist
  – Problem of evil: Allah does what he wishes and it is not a business of any human being to argue or even try to understand it
  – Faith leads to Paradise
  – From “knowledge of certainty” (rational belief in Allah) to “eye of certainty” (instinctive belief in Allah) to “truth of certainty” (participating in Allah)
What the Muslims knew

• Islam
  – Eschatological (like Christianity): there is an end of the world
  – The apocalypse will be preceded by the coming of the anti-Christ, al-Dajjal, who will appear East of Arabia, will establish 40 years of terror and will be defeated by the Mahdi, also identified or joined with Jesus reborn (Mahdi first mentioned by al-Mukhtar, who led a rebellion against the Umayyids in 686)
  – Sunnis: Mahdi is a descendant of Mohammed
  – Shiites: Mahdi is the 12th imam
What the Muslims knew

• Islam
  – "Even if the entire duration of the world's existence has already been exhausted and only one day is left before the Day of Judgment, Allah will expand that day to such a length of time, as to accommodate the kingdom of a person out of my Ahl al-Bayt who will be called by my name. He will then fill the Earth with peace and justice as it will have been filled with injustice and tyranny before then.” (A later Hadith “Sahih Tirmidhi”)
What the Muslims knew

• Islam
  – Egalitarian religion: no superiority of one (free male) believer over another based on nobility, wealth, race, nationality
  – Appealed to the poor
  – No priestly mediation between believer and God
  – No equivalent of the Church
What the Muslims knew

- 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
What the Muslims knew

• Mecca
  – Mecca after Islam: a model of religious intolerance
  – Mecca after Islam: a model of gender inequality
What the Muslims knew

• Sunni and Shiite Islam
  – Sunni
  • “People of the Tradition of the Prophet”
  • The Hadith defines Sharia which is interpreted by the Ulema
  • The Caliphs (“successors”) are the legitimate successors to Mohammed
  • Most of the Arab world and the Indian subcontinent
What the Muslims knew

- Fiqh ("understanding the law")
  - Quran
  - Sunna
  - Analogy (qiyas)
  - Consensus (ijma): the consensus of the ummah (the community of Muslims) or of the ulema (the learned elite)
What the Muslims knew

• Sunni and Shiite Islam
  – Five Sunni (madhahib) schools:
    • Abu Hanifa (8th c): emphasis on analogical reasoning (predominant in Turkey, Central Asia, Pakistan, India)
    • Malik ibn Anas (8th c): emphasis on the established practice of Medina (Morocco, Algeria)
    • Muhammad al-Shafi (9th c): emphasis on consensus of the Islamic community (Egypt, Indonesia)
    • Ahmad ibn Hanbal (9th c): emphasis on the Hadith as interpreted by early Muslims (Iraq, Syria, Jordan, Palestine, Saudi Arabia)
    • Dawud az-Zahiri (9th c): literal interpretation
What the Muslims knew

- Sunni and Shiite Islam
  - Shia (“Shiate Ali”, follower of Ali)
    - Ali is the legitimate successor to Mohammed, and was succeeded by 11 more “imam” (of the Ali-Fatima lineage)
    - The Shia do not accept the verdicts of the three first Caliphs (Abu Bakr, Omar, Uthman)
    - The imam (appointed by Allah) is infallible
    - The twelfth imam disappeared and will return as the Mahdi
    - Ali’s hadiths: “Nahj al-Balagha/ Path of Eloquence”
    - Ayatollahs interpret the Sharia
    - Iran (majority), Iraq, Lebanon, Pakistan, India
What the Muslims knew

• Fiqh ("understanding the law")
  – Quran
  – Sunna
  – Reasoning (aql)
  – Consensus (ijma): the consensus of the ummah (the community of Muslims) or of the ulema (the learned elite)
What the Muslims knew

• Sunni and Shiite Islam
  – Shia schools:
    • Ithna 'Ashari (Jafari, Twelvers): accept Jafar as-Sadiq’s elder son Musa al-Kazim as the sixth imam, the imam is infallible, the 12th imam (Mahdi) is hiding and will return (Iran, Iraq)
    • Ismaili: accept Ja'far as-Sadiq’s elder son Ismail as the sixth imam (Pakistan, India, Syria, Saudi Arabia), Ismail’s successors are the leaders of the faith (currently Karim Aga Khan)
    • Zayd bin Ali (Fivers): anyone is eligible to become a imam, no return of the Mahdi, closest to the Sunni tradition (Yemen)
    • Many sub-schools
What the Muslims knew

• Sunni and Shiite Islam
  – Other schools:
    • Kharijites (7th c): fundamentalists and opposed to corruption, the community elects (and removes) the caliph (who can be any Muslim), takfir (expulsion or killing) for moderate Muslims
    • Abdullah ibn Ibad (“White Kharijites”, 7th c): evolution of Kharjites, emphasis on the views of Mohammed’s companions (Oman)
What the Muslims knew

• Holy cities of Islam
  – Mecca (Saudi Arabia)
  – Medina (Saudi Arabia): first capital
  – Jerusalem (Palestine)
  – Damascus (Syria): second capital (661)
  – Baghdad (Iraq): third capital (762)
  – Isfahan (Iran)
  – Istanbul (Turkey)
  – Cairo (Egypt)
  – Harar (Ethiopia)
What the Muslims knew

Prophets of major religions
What the Muslims knew

Diffusion of monotheism:
What the Muslims knew

- Islamic art
  - Christianity: religion inspires art and art has to work for religion
  - Islam: religion inhibits art
  - Hadith: images of people are evil
What the Muslims knew

- Islamic art

Gold dinar (Syria, 697 AD, Kuwait Museum)

Bronze pitcher (Iran, 8th c, Kuwait Museum)
What the Muslims knew

- Islamic art
  - Calligraphy

Quran (Iran, 11th c, Kuwait Museum)
What the Muslims knew

• Islamic architecture
  – Mosque (hypostyle mosque imitates Mohammed’s house and four-iwan mosque imitates fire temple)
  – Minaret (spiral minaret modeled after Babylonian ziggurat, circular, conical, star-shaped…)
  – Madrasa (similar to Buddhist monasteries)
  – Mausoleum (square domed chamber or round/square tower)
  – Incorporation of the Persian principles in Central Asia: apadana (archetype: throne hall of Darius in Susa), iwan (audience hall), arch, dome
What the Muslims knew

- Islamic architecture
  - Mosque
    - Courtyard
    - Hall for meeting and prayer
    - An unfurnished building
    - No altar, no paintings, no statues
    - Mihrab: arched niche marking the direction of Mecca
    - Abstract motifs for decoration
What the Muslims knew

• Islamic society
  – Top tier: Ruling Arabs
  – Non-Arab Muslims
  – Dhimmi: Christians, Jews, Zoroastrians, Hindus, African pagans
  – Slaves
What the Muslims knew

• Islamic society
  – Inequality between man and woman, believer and infidel, freeman and slave
  – A woman’s identity was determined by her function in the family (daughter, sister, wife, mother)
What the Muslims knew

- Islamic society
  - Slave trade
    - Enslavement forbidden within the Arab empire
    - Nubia provided most slaves
    - Slave women for harems
    - Slave men for domestic and military use
    - Slave condition considerably better than under Roman or Greek rule
What the Muslims knew

- Islamic society
  - Slaves
    - "A slave, the property of another, has no power over anything" (Sura 16.75)
    - "Your slaves are your brethren upon whom Allah has given you authority" (Hadith 3.721)
    - "Slavery is justified... it is not permissible to enslave a free Muslim, but it is lawful to enslave the infidel, and it also makes it lawful to take his offspring into captivity.” (Mufti Ibn Timiyya, Vol 31, p 380)
    - "Muhammad had many male and female slaves. He used to buy and sell them, but he purchased more slaves than he sold, especially after God empowered him by His message…” (Ibn Qayyim al-Jawziyya, "Zad al-Ma'ad", Part I, p. 160)
What the Muslims knew

• Islamic society
  – Slaves
    • Slaves originally used mainly in southern Iraq to clear the salt crust for agriculture and plantation labor.
    • Following a slave rebellion in Baghdad (IXth century), there developed a reluctance to allow large concentrations of slaves for plantation agriculture, and slavery became a domestic phenomenon
    • Riqab = someone who is owned/watched
    • Abad/ibadi = devout servant
    • Asra = prisoner of war
    • Ma Malakat Aimanukum = "your right hand's possession"
What the Muslims knew

• Islamic society
  – Slaves
  • "It needs no reiteration that every slave captured in war or purchased in the market or sent in lieu of revenue or tribute was invariably converted to Islam, so that slave-taking in medieval India was the most flourishing and successful missionary endeavour” (Kishori Saran Lal, “Muslim Slave System in Medieval India”)
What the Muslims knew

- Islamic society
  - Slaves
    - The Arabs are the first people to create continuing demand for large numbers of foreign slaves
What the Muslims knew

• Islamic society
  – “We Blacks have conquered the country of the Arabs as far as Mecca and governed them. The desert swarm with the number of our men who married your women and who became chiefs and defended you against your enemies... We defeated Dhu Nowas (Jewish ruler of Yemen) and killed all the Himyarite princes, but the Arabs and Whites (from Europe) have never conquered our country. ” (Al-Jahiz, 'Risalat mufakharat al-sudan 'ala al-bidan/ Treatise on the Superiority of Blacks over Whites”, 9th century).
What the Muslims knew

- Islamic society
  - Dhimmi (“protected one”)
    - Tolerated non-Muslim communities
    - Ahl al-Kitab (“people of the book”): Jews and Christians
    - Umayyads relied on Greek and Persian officers (who wrote government documents in Greek and Persian)
    - Judicial independence (Christian, Jewish and Zoroastrian laws)
  - Economic independence
  - Military and political dependence
  - Forbidden to marry Muslim women (death penalty)
  - Branding
What the Muslims knew

• Islamic society
  – Ghazis: frontier warriors (mainly, central Asian steppes)
  – Mamelukes (9th century)
    • children of non-Muslim slaves from the steppes (Turks), raised in isolation (Cairo monastic barracks), instructed about Islam and trained as soldiers (mounted warriors)
    • Sons of Mamelukes were forbidden to become a Mameluke (not hereditary)
    • Decline caused by gunpowder (16th century, by Ottoman Turks)
What the Muslims knew

• Islamic society
  – First time since Alexander that the Mediterranean, the Middle East and Central Asia are politically and economically united
  – Boom of commerce
    • “The honest Muslim merchant will rank with the martyrs of the faith” (Mohammed)
    • “Merchants are the trusted servants of Allah upon Earth” (Mohammed)
  – Art of castle building
  – New crops (rice, sugarcane, cotton, bananas, etc)
  – Cotton for ordinary clothing (Mohammed himself)
What the Muslims knew

- Islamic society
  - First universal civilization in history
    - Mediterranean Sea
    - Middle East
    - Central Asia
    - India
    - East Indies
    - Sub-Saharan Africa
What the Muslims knew

• Islamic society
  – Turks are the military elite
  – Arabs are the theological elite
  – Persians, Jews and Spaniards are the cultural elite
What the Muslims knew

• The Quran ("Recitation")
  – According to tradition:
    • Revealed by Mohammed in the dialect of the Quraish
    • Abu Bakr, the first caliph of Islam, had Zaid ibn Thabit compile the Quran in proper Arabic
    • Abu Bakr and Umar, the first two caliphs, did not publicize the Quran
    • Uthman, the third caliph, ordered the destruction of all other versions and made numerous copies of his version and sent one copy to each state capital (Uthman became the first Muslim leader murdered by fellow Muslims for his sins)
What the Muslims knew

• The Quran
  – According to tradition:
    • The copy of Ubayy Ibn Ka'b (a companion of Mohammed) was widespread in Syria in the first Islamic century and differs from the copy of Uthman
  • See http://www.derafsh-kaviyani.com/english/quran1.html
What the Muslims knew

• The Quran
  – Oldest known copy of the Quran in the British Museum: written in al-Ma’il script and composed at the end of the 8th century
  – The oldest quotes from the Quran (the Dome of the Rock mosque in Jerusalem) differ from the version of today's Quran
  – 1972 discovery in Sana (Yemen) of ancient pages of the Quran: several discrepancies with today’s Quran
What the Muslims knew

• The Quran
  – Quran in Madani script (credited to 7th c by the museum for religious reasons but probably 8th c)

(Beit Al Quran, Manama, Bahrein)
What the Muslims knew

• The Quran - Patricia Crone's thesis (1977)
  – The Quran was written after (not before) the Arab conquests to bestow on them a messianic mission
  – Mecca was not the initial Islamic sanctuary
  – The hijra appears only from the eight century
  – "Muslim" was not commonly used in early Islam ("Magaritai" was the Greek name for Arab "immigrants")
What the Muslims knew

- The Quran - Christoph Luxenberg's thesis (2000)
  - At the time of Muhammad, Arabic was not a written language
  - Syro-Aramaic (Syriac) was the language of written communication in the Near East
  - Muhammad instructed his followers to know Syriac (as well as Hebrew)
  - Arabic script originally had only six letters to distinguish some twenty-six sounds
  - The letters were distinguished by points written above or below each letter
  - The Arabic alphabet began as a mnemonic device not intended as a full transcription of the sounds of the language
What the Muslims knew

- The Quran - Christoph Luxenberg's thesis (2000)
  - Quran = Syriac qeryana, the "lectionary" (sequence of biblical readings for the Christian liturgy)
  - Quran = a commentary in Arabic of the Old and New Testament in Syriac (the Peshitta)
  - Several passages of the modern Quran are due to misreading of the original Quran
  - Some sutras are merely transcriptions into Arabic writing of the Peshitta text
  - The Arabic of the Quran is in large measure not Arabic at all
  - The content of the Quran was substantially different at the time of Muhammad and Uthman (632-655 AD)
What the Muslims knew

• The Quran - The Evolution of God
  – The suras are not organized chronologically (they are organized from the longest to the shortest)
  – In the early Meccan suras Mohammed's god talks to him and calls himself "your lord“ not Allah
  – The second Meccan suras (56,68,78, 89 and 93) identify "the lord" with al-Rahman ("the mercyful one"), a god worshipped in Yemen.
  – Sura 17 sounds like someone who, after the fact, is trying to prove that Allah and al-Rahman are different names for the same god: "Pray to Allah or pray to al-Rahman, whichever you call upon, to him belong the most beautiful names".
  – But they were distinct gods in Mohammed's time, worshipped by different tribes
What the Muslims knew

- The Quran is meant to be recited, not read
- Art of recitation that evolved over the centuries
- Written in the ecstatic poetic style of the kahin
What the Muslims knew

- Quran
  - Moses does not understand Khidr's actions because he does not have his knowledge (Sura 18:60-82)
What the Muslims knew

- Mohammed represents the ideal and model for every Muslim.
- It is the imitation of Mohammed that has provided the heterogeneous Islamic world with uniformity of action, from how to eat to how to travel.
What the Muslims knew

- Baraka: divine presence (Mohammed has the most baraka of all, followed by the Islamic saints)
- Satan and jinn (spirits) have the opposite of baraka
What the Muslims knew

• The god of the Quran is a merciful ("rahman") and generous ("akram")
What the Muslims knew

• The Quran is a book about the structure of society
  – The duty of each Muslim is to struggle for the creation of a universal Islamic state (the “jihad”)
  – The Quran and the Hadith state which should be the laws of such a state (the "shariah")
  – Islam's goal was to reform society and to form a nation.
• Islam's mission is the reform of the whole world
• Islam's mission is inherently political
What the Muslims knew

• Islamic theocracy
  – The state is a divinely ordained institution
  – Theocratic monarchy
  – The caliph as the “policeman” of the empire, the Ulama (Islamic scholars) as the legislative branch of the empire (and moral authority)
  – Justice
What the Muslims knew

• Islamic theocracy
  – Sovereignty of Allah and viceregency of man (caliph)
  – Every Muslim who is knowledgeable about the Quran is entitled to interpret the law
  – Every Muslim is a caliph
  – The entire Muslim population (not just the priestly class) runs the Islamic state
  – Limited popular sovereignty under the suzerainty of God
  – Aim of Islamic state is to develop social justice
What the Muslims knew

• Umayyads (661-750)
  – Damascus
  – Arab purity
  – Byzantine culture
  – Removal of Mohammed’s family: son-in-law Ali (661) and grandson Husayn (680)
  – Continuing tribal wars among nomadic people of the Arabian peninsula
  – Intellectual awakening due to contact with other civilizations and urban lifestyle (Damascus, Alexandria)
  – Impiety of the Umayyad rulers
What the Muslims knew

- Abbasids (750-945)
What the Muslims knew

• Abbasids (750-945)
  – Baghdad
  – Islamic purity
  – Persian culture
  – Indifference towards Arabian tribal politics
  – Tolerance for non-Muslims (all Abbasid rulers were sons of non-Arab slaves)
  – Harun Rashid (786): Investment in architecture, translations (Baghdad as the new Alexandria), protection of scholars and poets
  – Arabian peninsula largely under control of tribal warlords and religious fanatics opposed to Umayyad/Abbasid worldliness
What the Muslims knew

- Abbasids (750-945)
  - Muhammad al-Bakr formalizes the Shiite ideology
  - Shiism appeals to the poor of Baghdad
  - Split when al-Baqr’s younger brother rebels
  - 740: the Shias of Yemen split from the main Shia tradition claiming that Zayd is the rightful fifth imam instead of Muhammad al Baqir
What the Muslims knew

• Disintegration of the Arab empire
  – Umayyads (Sunni) in Spain (756-1031)
  • Cordoba the cultural capital of the western Arab empire (912-976): palaces, libraries, universities
  – Fatimids (Shiite) in Egypt (969-1169)
    • Al-Hakim (996–1021): religious intolerance
    • 1009: Destruction of the basilica of the Sepulchre in Jerusalem
  – Buyids (Shiite) in Mesopotamia (945-1055)
  – Ghaznavids (Sunni) in Persia and Central Asia (962-1030)
  – Tribal warfare in Saudi Arabia (9th c-18th c)
What the Muslims knew

• Disintegration of the Arab empire
  – Iberia/ al-Andalus (756-1492)
    • Cordoba the cultural capital of the western Arab empire (912-976): palaces, libraries, universities
    • Syrian irrigation system (waterwheels, canals, etc)
    • Hindu numerals
    • Mapmaking and geography from Greece and Persia (Muslims pray towards Mecca, Jews towards Jerusalem)
• Paper from Damascus (950 and then mainly Xativa)
• Olive oil mills converted into paper mills
• Toledo a Jewish city
• One of the most advanced centers of culture in the world
What the Muslims knew

- Disintegration of the Arab empire
What the Muslims knew

• Reunification of the Middle East
  – Seljuqs (Sunni) in Mesopotamia, Persia and Anatolia (1055-1243)
    • Turks
    • Originally organized in ghazis (small groups of warriors) led by beys (chieftains) or babas (Sufi gurus)
    • Restored orthodox Islamic government and introduced religious intolerance
    • Large standing army of Turkish and Christian slaves and mercenaries to dominate nomads and Christians
    • Political stability
    • Urban and sedentary society by the 12th c
    • Persian culture
    • Invade Anatolia and destroy the balance of power between Islam and Byzantium
What the Muslims knew

• Reunification of the Middle East
  – Mongols destroy the Seljuqs (1243) and sack Baghdad (1258)
  – Ilkhans (Shiite) in Persia and Mesopotamia (1265-1335)
What the Muslims knew

• Arab kingdoms in North Africa
  – Muslim zealots create local kingdoms and military movements to unite the vastly fragmented Berber world
  – Tribal coalition regimes unified by Islam
  – Almoravids (Sunni Berbers) in Morocco (1062-1146) and Spain:
    • they link Spain and the Sahara in a trade zone and create a trading and urban society;
    • they promote Sunni Islam of the Maliki school;
    • prohibition of alcohol, destruction of musical instruments
What the Muslims knew

• Arab kingdoms in North Africa
  – Almohads (Sunni Berbers) in Algeria, Morocco, Tunisia, Andalucia (1130-1269):
    • Own radical version of Islam
    • Prohibition of alcohol and music
    • Persecution of dhimmi
  – Wealth due to trade with Europe (agriculture, textiles), Egypt (ditto) and black Africa (slaves, gold)
  – Tribal aristocracies backed by Christian and African slaves, Christian and Turkish mercenaries, and allied Berber tribes
  – Most Berbers continue to live in autonomous tribes
What the Muslims knew

• Arab kingdoms in North Africa
  – Ayubbids (Sunni) in Egypt, Syria and western Arabia (1169-1252)
  – Mamluks (Sunni) in Egypt and western Arabia (1252-1516)
What the Muslims knew

- Arab kingdoms in North Africa
  - Map of the Almoravid empire
What the Muslims knew

• Jihad
  – The world is divided into dar al-islam (peaceful territory of Islam) and dar al-Harb (warring territory of non-Muslims)
  – Permanent state of war between the two worlds
  – The jihad will only end when the whole world converts to Islam
What the Muslims knew

- Jihad is one of main duties of Muslims
  - with the heart (striving to be a better Muslim)
  - with the hand (using force to spread Islam)
  - with the word (converting infidels)
  - Muslims go to paradise if they carry out the jihad against the infidels
  - Superiority of the "mujaheddin" (Muslims who engages in jihad) over the "mumin" (Muslims who testify that there is no God but Allah and that Mohammed is his prophet)
What the Muslims knew

- Jihad is one of main duties of Muslims
  - First religion to be the raison d’être of an empire
  - No wars fought over religion before Islam
What the Muslims knew

• Jihad is one of main duties of Muslims
  – Christian martyrs: believers who let themselves be killed by unbelievers (as Jesus did)
  – Muslim martyrs: believers who were killed while fighting against unbelievers (as Mohammed did)
What the Muslims knew

• No conversions out of Islam
  – Death penalty for Muslims who convert to other religions
  – "The Prophet Muhammad has said several times that those who convert from Islam should be killed if they refuse to come back," says Ansarullah Mawlafizada, the trial judge [of the Afghani court trying a Muslim who converted to Christianity]. "Islam is a religion of peace, tolerance, kindness and integrity."
What the Muslims knew

• From the Quran (jihad):
  – Slay them wherever you find them. Drive them out of the places from which they drove you. Idolatry is worse than carnage (Q 2:190-3)
  – When the sacred months are over slay the idolaters wherever you find them. Arrest them, besiege them, and lie in ambush everywhere for them (Q 9:5)
  – Prophet, make war on the unbelievers and the hypocrites and deal rigorously with them (Q 9:73)
What the Muslims knew

• From the Quran (jihad):
  • "Those who believe fight in the cause of God." (Sura iv, 76)
  • "Fight those who have not faith in Allah nor in the hereafter and who forbid not what God and his Prophet have forbidden, and who are not committed to the religion of truth" (9:29);
  • "Strike terror into the hearts of the enemies of Allah" (8:60)
  • "I will instill terror into the hearts of the unbelievers, smite them above their necks and smite all their finger-tips off them. It is not you who slew them; it was Allah" (8:12,17).
  • "The unbelievers follow falsehood while the believers follow the Truth. When you meet the unbeliever strike off his head, and when you have laid him low, bind him firmly" (sura 23).
  • "When you meet the unbelievers, strike off their heads; then when you have made wide slaughter among them, carefully tie up the remaining captives." (Sura xlvi.4)
What the Muslims knew

- From the Quran (jihad):
  - "Fight then against them till strife be at an end, and the religion be all of Allah" (Sura viii, 39-42)
  - "Kill those who join other gods with Allah wherever you may find them." (Sura ix, 5-6)
  - Kill the disbelievers wherever we find them" (2:191)
  - "Murder them and treat them harshly" (9:123)
  - "Fight and slay the Pagans, seize them, attack them" (9:5)
  - "Slay or crucify or cut the hands and feet of the unbelievers" (5:34)
  - "Seize them, and bind them, and burn them in the blazing fire" (69:30-37).
  - "If there are 20 amongst you, you will crush two hundred; if a hundred, you will crush a thousand of them" (8:65)
What the Muslims knew

• Peace
  – “Peace” in Islam means something different from “peace” in every other country
  – “We are men of peace” (Osama bin Laden)
  – The peace in Islam is conditional on the surrender of all people to Islam, i.e. on the submission to Allah's will as explained in the Quran
What the Muslims knew

• Peace
  – Al-islam in Arabic means both submission and peace
  – Islam is derived from the root SLM, like Salam that means “peace/ serenity” (NOT “peace/ no war” that would be sulh/salaha)
  – Peace is only available to one who has first surrendered to Allah and it is denied to those who refuse to surrender
  – Mohammed signed his treaty offers with the words, “aslem taslam”, 'surrender and you will be safe'.
What the Muslims knew

• Peace
  – The Quran is divided into two periods, the revelations in Mecca and the revelations in exile, in Medina
  – The Meccan revelations are peaceful.
  – The Medina revelations are not.
What the Muslims knew

• From the Quran (women):
  • Men are allowed to marry up to four wives and to sleep with their slave maids and keep as many captive women as they like (4:3)
  • Women cannot enter a tribunal (2:282)
What the Muslims knew

• Women:
  – Mohammed married at least 9 women and up to 25
  – After a “revelation” from Allah, Mohammed forced Zeinab, his cousin, to divorce her husband Zeid, his adopted son, and then married her
  – In 624 Mohammed (then 54) was engaged to the six-year old daughter of Abu Bakr and married her when she was nine.
What the Muslims knew

• From the Quran (slaves):
  – Equivalence is the law decreed for you when dealing with murder - the free for the free, the slave for the slave, the female for the female (2:178)
  – No believer shall kill another believer, unless it is an accident. If you cannot find a slave to free, you shall atone by fasting two consecutive months (4:92)
What the Muslims knew

• Mohammed vs Jesus
  – Mohammed yielded to the three temptations of Satan that Jesus rejected (used his power for personal ends such as his various murders and marriages, used his power to make his religious teaching into an earthly empire).
What the Muslims knew

• Islam vs Christianity
  – Christianity was born out of persecutions (Christians were persecuted for three centuries)
  – Islam was born out of military conquest and expansion
What the Muslims knew

• Jews
  – Mohammed’s troops behead 700 Jews in 627 (the survivors were killed in 629)
What the Muslims knew

- Muhammad's Last Sermon:
  - An Arab has no superiority over a non-Arab nor a non-Arab has any superiority over an Arab; also a white has no superiority over black nor a black has any superiority over white except by piety and good action.
  - Learn that every Muslim is a brother to every Muslim and that the Muslims constitute one brotherhood
  - No Prophet or Apostle will come after me and no new faith will be born.
  - I leave behind me two things, the Qur’an and my Sunnah
What the Muslims knew

• The Afterlife
  – Divine Judgement
  – The faithful proceed to paradise
  – Paradise is a place of physical pleasure
  – The unfaithful and the bad Muslims shall go to hell
What the Muslims knew

- Islamic eschatology
  - Jesus will herald the end of time
  - Mahdi will come after Jesus to establish peace and justice
  - The Day of Judgement
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<td>Sinners</td>
<td>Hell</td>
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<tr>
<td>Born out of</td>
<td>Exile</td>
<td>Persecution</td>
<td>Military conquest</td>
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What the Muslims knew

• The Afterlife
  – Egyptians: obsessed with the afterlife, but no clear definition of the soul (the thing that becomes immortal in the afterlife)
  – Mesopotamia: not interested in the afterlife or in the soul, immortality is impossible (even gods die)
  – Greece: clear definition of the soul, but indifference towards the afterlife (even gods die, while immortality is granted by heroism)
  – Persia: bodily resurrection of everybody
  – Rome: the state is immortal, not the individual
What the Muslims knew

• The Afterlife
  – Judaism: not interested in the afterlife or in the soul
  – Christianity: resurrection of the soul, and the soul is the self
  – Islam: bodily resurrection of the faithful
What the Muslims knew

• No continuity with previous civilizations
  – A new religion (Islam)
  – A new language (Arabic)
  – A new state (Quran/Hadith)
What the Muslims knew

• Reason of success
  – The new Arab order (stretching from Persia to Spain (i.e. the strategic routes to India) restores economic order in the western Mediterranean and spawns an economic boom at a time when Europe's economy is collapsing
  – Vast commercial empire
  – Pure capitalism instead of state-controlled economy of the Roman empire
    • Checks, letters of credit, trade associations, joint-stock companies
    • Small farmers (who cultivate the land themselves) greatly improve agriculture
What the Muslims knew

• Reason of success
  – Inherit the intellectual heritage of Persia, Syria, Rome and Hellenized Egypt
  – Import intellectual achievements of India (“Arabic” numerals) and China (paper)
  – Cavalry, lances and swords
What the Muslims knew

- Early Arab state (630-700)
  - Only Arabs are Muslims
  - Nude female bodies of early murals
  - Medina: erotic poetry and libertine society
- Umayyad dogma (700-850)
  - Subjects encouraged to convert
  - Calligraphy replaces murals
  - Mystical society
• Damascus, Syria (705)
Jerusalem: Dome of the Rock (691)

Raffaello: Lo Sposalizio della Vergine/
Marriage of the Virgin (1504)
• Aanjar (Lebanon), a Umayyad (8th c) city

• Qasr al Heir Al-Gharsi (8th c castle, Syria)
What the Muslims knew

• Hasan Al Basri (700 AD, pre-Sufist)
  – Virtue, mortification, prayer, purity of heart to attain knowledge of Allah
  – Patient acceptance of life’s trials and submission to Allah’s will
  – Fear of Hell and hope of Paradise
  – Non-violent jihad (teaching, preaching)
  – Allegorical interpretation of the Quran
What the Muslims knew

- Muqatil ibn Sulayman (8th c, pre-Sufist)
  - The Quran has three levels of meanings: literal, historical, allegorical
- Jafar al-Sadiq (8th c, pre-Sufist)
  - The Quran has four levels of meanings
- Shaqiq al-Balkhi (9th c)
  - Four stages of the ascent to Allah
- Abu Said Kharraz (9th c)
  - Seven stages to Allah
- Abu Yazid al-Bistami (9th c)
  - Annihilation of the self and union with the divine attributes
What the Muslims knew

• Rabia Al Dawiyya (717 AD, pre-Sufist)
  – Slave-girl
  – Extinction of the ego in mystical unity with God
  – Trust in God, and acceptance of his will ("rida"), is the only attitude that makes sense
  – Fear of punishment or hope of reward are meaningless
  – "Sidq": sincerity of love (love God not because of Paradise/Hell but only because of sincere love)
  – "I am too busy loving God to find any time to hate Satan"
What the Muslims knew

- Abbasids (749-1258)
  - Persians, not Semitic
  - Revolution of the provinces
  - Capital moved from Damascus to Baghdad
  - End of Arab monopoly on power: Tribal aristocracy of Arabia replaced by cosmopolitan elite
  - Persian influence: Sasanid court traditions replace Arab tribal traditions
  - Civilian bureaucracy (diwan, vizir)
  - Madrasa (religious seminary)
  - Army reformed along Persian model
  - Contempt for Arab customs
  - Empire fragments into independent caliphate
What the Muslims knew

• Abbasids
  – Paper (know-how acquired from Chinese prisoners in 751; first paper factory in Baghdad in 793)
  – Lateen sail (already used in the Mediterranean) that enables sailors to sail in any direction regardless of the way the wind blows
  – Agricultural revolution (crops from the Far East, irrigation)
  – Algebra & Trigonometry
What the Muslims knew

• Abbasids
  – Epics (Ferdowsi's "Shah-nameh", 1010)
  – Love poetry
  – Sense of humour
  – No theater, no novel
  – Panegyric (exaltation of the ruler)
  – Greek philosophy
  – Age of Translations: 786-825, in Baghdad
What the Muslims knew

• Influence of Neo-Platonism
  – Everything emanates from the One (Allah)
  – Man stands at the juncture of the spiritual and material world
  – Through inner knowledge man can rise to the top of the hierarchy of beings from the material state to knowledge of Allah
What the Muslims knew

• Kalam (theology)
  – Qadarism: al-Hasan al-Basri (d. 728), Mabad al-Juhani (d. 699) and Ghaylan ibn Muslim al-Dimashqi (d. 723)
    • Humans have free will
    • (Political implication: the caliph is responsible for the evil he commits)
What the Muslims knew

- Kalam (theology)
  - Traditionalists/Hadith scholars
    - Jahm bin Safwan (d. 746): absolute determinism (a man’s life is predestined by Allah)
    - Malik Anas (d. 795): rationalizing Allah is heresy
    - The Quran is uncreated: Allah reveals himself through the Quran
What the Muslims knew

• Kalam (theology)
  – Mutazilism: Wasil ibn Ata (d. 748), Muammar Abbad, Thumama ibn Ashras (d. 828)
    • Rational theology
    • One is the creator of her/his own deeds (and therefore Allah is not responsible for evil)
    • The essence of Allah is reason
    • Allah creates the world with some rational laws and then the world is independent of Allah
    • Revelation is secondary to reason
    • The Quran is “created”
    • Atomism: Everything in the world consists of atoms and events
What the Muslims knew

• Kalam (theology)
  – Abu al-Hasan al-Ashari (b. 873)
    • Mutazilah’s method (applying logic to scriptures) but the result is the opposite (traditionalism)
    • Free will entails that humans are creators (of their own fate). Heresy: there is only one creator, Allah

• All good and evil is created by Allah
• Good and evil are acquired by humankind
• The essence of Allah is unknowable
What the Muslims knew

• Kalam (theology)
  – Fundamentalist theologians vs hellenizing philosophers
    • God as prime mover or God as the One vs miracle-making God
    • God as a rational being vs God who issues moral law by diktat
  – Fundamentalist theologians vs mystics (Sufis)
What the Muslims knew

- Ahmad ibn Hanbal (830): strict obedience to the Koran and the Hadith
What the Muslims knew

- Sufism
  - Possibly predating Islam
  - Love is a projection of the divine essence
  - Dancing, drumming, chanting and other physical rituals to transcend worldly existence and perceive the divine
  - Lataif-e-sitta (the six subtleties) located in different parts of the body
  - Several orders: Mevlevi (whirling dervishes, originated with Mevlâna Jalâluddîn Rumi), Azeemia, Badawiyyah, Bektashi, Chishti, Halveti, Jerrahi, Kibruyeh, Murabitun, Naqshbandi, Noori, Qadiri, Rifa’î, Safaviyeh, Sanusiyya, Sarwari Qadiri, Shadhil, Suhrawardiyyy, Tijani, Yesev, Zahediyeh
What the Muslims knew

- Sufism
  - Union of the nafs (the self) with the ruh (equivalent to the brahman of the Hindus or the qi of the Taoists)
  - Love is the foundation of Sufism
  - Sexual imagery to display love for Allah
  - Pir (equivalent of the Buddhist/Taoist master)
  - The Quran is not essential
    - Allah is everywhere all the time, no need to read a “love letter to your beloved one when she is in front of you”
- No monasticism
  - Islam is a communal religion
  - Islam abhors celibacy
What the Muslims knew

• Sufism
  – More Greek philosophy than Quran
  – More Vedanta than Quran
  – Pantheism: God is the universe (God’s reality is not external to the world’s reality), everything is God (e.g., a mouse is God)
  – All religions are shadows of the true religion
What the Muslims knew

• Sufism
  – Ascetism inspired by Christian hermits of Syria
  – Philosophy inspired by Buddhism
  – Music and dance ("whirling dervishes") to accompany the rituals of "remembrance of Allah" (dhikr)
  – 840: the Sufist Muhasibi (d. 857) preaches the path to truth
  – 840: Islamic philosophy is founded by Kindi
  – 890: the Sufist Junayd (d. 894) preaches the ecstasy of enlightenment
  – 922: the Sufist Husayn Hallaj is executed in Baghdad for heresy ("I am the truth", "I am He whom I love and He whom I love is me")
What the Muslims knew

- Sufism
  - Ibrahim Adham (d. 776)
  - Dhil Ak-Nun al-Misri (Egypt, 9th c)
  - Abu Yazid al-Bastami (Persia, d. 875)
  - Sahl al-Tustari (9th c): Allah’s essence is light and human beings preexist their worldly birth as particles of his light
  - Husayn Tirmidhi (9th c)
  - al-Husain Mansur Al-Hallaj (Persia, 9th c)
  - Abu Al Qasim (Baghdad, 10th c)
  - Fusion of Islam with Gnostic, Neoplatonic and Buddhist elements
What the Muslims knew

• Sufism
  – Reaction of the ulama:
    • Husayn Hallaj is tortured, mutilated, crucified, decapitated, dismembered and burned.
What the Muslims knew

• Chief centers of learning: Baghdad, Damascus, Cordova, Toledo

• Abbasid emperors (Al-Mansur, Harun al-Rasid and Al-Mamun) encourage translation of the Greek and Indian classics into Arabic
What the Muslims knew

• Yacub al-Qindi/Kindi (b 803): Aristotelian philosophy
  – Neo-Platonic interpretation of Aristotle
  – Religious truths can be demonstrated philosophically
  – Prophets and philosophers achieve the same truth (it is bestowed on prophets by Allah, it is reached through arduous reasoning by philosophers)
  – Allah is a creator (not just a substance that passively generates the world)
  – Time is finite (there was a beginning)
What the Muslims knew

- Ibn al-Rawandi (d. 910): anti-Islamic
  - Religious is superfluous: the truth can be assessed by Reason alone
  - Dualism (Manicheism) is superior to monotheism
What the Muslims knew

• Abu Bakr al-Razi (Persia, b 865): Plato & Pythagoras
  – Truth must be found in Philosophy, not in Religion
  – Prophets are not intermediaries with Allah
  – Religion is superfluous because Reason alone can find out the truth
What the Muslims knew

• Abu Bakr al-Razi (Persia, b 865): Plato & Pythagoras
  – Anti-Aristotelian metaphysics
  – From Democrites: atomism (and existence of the void)
  – From Pythagoras: metempsychosis (transmigration of the soul)
  – The goal is to free the soul from the body
What the Muslims knew

- Abu Bakr al-Razi (Persia, b 865): Plato & Pythagoras
  - Five co-eternal principles
    - Space: infinite and eternal (Aristotel: finite, as big as the universe)
    - Time: infinite and independent of motion (Aristotel: a kind of motion)
    - Matter
    - Soul
    - Allah
What the Muslims knew

- Abu Bakr al-Razi (Persia, b 865): Plato & Pythagoras
  - Five co-eternal principles
    - The Soul got infatuated with Matter
    - Allah married the Soul to Matter, thus creating the world
    - Reason (impacted by Allah himself) will eventually lead the Soul to free itself from the infatuation with Matter (e.g. material pleasure) and return to its pure state
    - Then the world will cease to exist
  - The world was created and will eventually end (Aristoteles: the world has always existed and always will)
What the Muslims knew

- Abu Nasr Muhammad Al Farabi (Persian Turkestan, b 878): Platonism
  - Reconciled Islam and neo-Platonism
  - Religion as a symbolic system to express truth to non-philosophers
  - Metaphysics and politics are dual aspects
What the Muslims knew

• Abu Nasr Muhammad Al Farabi (Persia, b 878): Platonism
  – Allah (the One) is the ultimate reality: he is thought thinking itself
  – He generates the world not because of choice but inevitably because of his nature
  – The world emanates from the One through a series of ten “intellects”, each corresponding to a cosmic sphere (infinite, the outer universe, fixed stars, Saturn, Jupiter, Mars, Sun, Venus, Mercury, Moon)
  – The tenth intelligence is the one that generates the human world (universe and souls)
  – The universe is God thinking itself
What the Muslims knew

- Abu Nasr Muhammad Al Farabi (Persia, b 878): Platonism
  - Happiness is detachment from the body to unite with the One
  - Reason is the path to happiness
  - The destiny of humanity is to improve intelligence until a full understanding of divinity is achieved
  - Religion is an inferior way to think about the divinity
  - Vision of the “virtuous city” whose inhabitants are pursuing “happiness” (unity with the One)
What the Muslims knew

• Abu Nasr Muhammad Al Farabi (Persia, b 878): Platonism
  – Classification of the sciences
    • Linguistic
    • Logical
    • Mathematical (arithmetic, geometry, astronomy, music, mechanics, dynamics)
    • Physical (chemistry, mineralogy, zoology)
    • Metaphysical
    • Political
    • Juridical
    • Theological
What the Muslims knew

• Yahya ibn 'Adi (Christian of Iraq, b 893)
  – Ethics
    • Three parts or souls
    • The appetitive (shared with other animals)
    • The courageous
    • The rational (the noblest and unique to humans)
    • To follow the first is to fall into ignorance and evil; to follow the last is to adhere to goodness and happiness.
    • Humans are endowed with the natural capacity for reasoning
    • However, some never develop the skill to reason and understand the sciences
What the Muslims knew

• Abu 'Ali Ibn Miskawayh (Persia, 932)
  – Ethics
    • Humans differ from animals because they have free will
    • Teleological account of good and evil
    • Good actions are those that humans undertake in accordance with Allah’s original intentions for humans
    • Evil actions are those that lead in the opposite direction
    • Virtue is the mean between two extremes (like in Aristoteles)
What the Muslims knew

- Abu 'Ali Ibn Miskawayh (Persia, (932)
  - Ethics
    - Earthly happiness consists in conquering and controlling nature
    - Celestial happiness consists in sharing the divine with Allah
    - Fear and sorrow are moral ills
What the Muslims knew

• Ikwan al-Safa/ Brethren of Purity (Basra, 10th c.)
  – The foremost form of knowledge is knowledge of the self
  – Self-knowledge is prior to any other kind of knowledge
  – Psychology is propaedeutic to metaphysics, cosmology, etc
  – Cognitive closure: there are concepts that human reason cannot possibly comprehend (Allah’s essence, the origin of the universe,…) in which cases humans have to trust the divine instructions given to prophets
  – Mutazilite view of free will
What the Muslims knew

• Ikwan al-Safa/ Brethren of Purity (Basra, 10th c.)
  – Pythagoras’ metaphysics of numbers
  – Allah created the active intellect, whose reason created the universal soul, whose movement created matter
  – Evolution: plants came before lower animals that came before higher animals
What the Muslims knew

• Ikwan al-Safa/ Brethren of Purity (Basra, 10th c.)
  – The human body is a representation of the cosmos
  • 9 substances (bone, flesh, blood, …) that correspond to the 9 celestial spheres, 12 orifices of the body (eyes, ears, nostrils, nipples, mouth, navel…) that correspond to the 12 signs of the Zodiac, 4 main organs (head, breast, stomach, belly) that correspond to the 4 elements, etc
What the Muslims knew

- Asharism: Abu Bakr Al-Baqillani (d. 1013)
  - Knowledge
    - Eternal knowledge of Allah
    - Temporal knowledge of humans
      - Necessary knowledge
      - Empirical knowledge
    - The world is composed of atoms and events, which are both continually created by Allah
    - Both atoms and events are perishable, transient
What the Muslims knew

• Jews
  – About one million Jews in the Arab empire
  – Yehudai (760) establishes the preeminence of the Babylonian Talmud
  – Anti-Jewish literature widespread since the early stages of Islam
  – Jewish unity maintained between the Christian and Arab world despite the severed ties between Christians and Arabs
  – Massacres in Egypt (1009), Almohad North Africa (1147) and Yemen (1165)
  – Tolerated in Iraq (Babylonia), Istanbul, Spain, Egypt
  – Adoption of the Arabic language in both Iraq and Spain
What the Muslims knew

• Saadia ben Joseph (933)
  – Jewish philosopher
  – Born in Egypt, active (from 922) in Babylonia
  – Arabic translation of the Pentateuch
  – Rational defense of Jewish theology
  – Four sources of knowledge: the senses, intuition, reasoning, tradition
  – Creation ex nihilo (against Plato and Aristotle): God did not need matter or ideas to create the world
  – Free-will is compatible with God’s omnipotence and omniscience
What the Muslims knew

• Scientific method
  – Ibn al-Haytham (born 965 in Iraq) uses mathematics to prove his theories (the scientific method seven centuries before Francis Bacon and Rene Descartes)
What the Muslims knew

- Astronomy
  - Baghdad observatory (833)
  - Tabit ben Qurra (9th c, Baghdad): trepidation theory of the motion of the stars
  - Abu Al-Fargani (9th c, Baghdad): astronomy
  - Abu Al-Battani (10th c, Syria): astronomy, determination of the solar year of 365 days
  - Abd al-Rahman al-Sufi: first recorded observation of galaxies other than the Milky Way in “Book of Fixed Stars” (964)
  - Abu al-Hasan Ali ibn Yunus (950)
  - al-Biruni (973)
  - Nasiraddin Tusi (1201)
What the Muslims knew

• Astronomy
  – Nur ad-Din Al-Bitruji/ Alpetragius (Spain, 12th c)
    • "Kitab al-Hay'ah/ The Book of Theoretical Astronomy"
    • Non-Ptolemaic astronomical system to avoid both epicycles and eccentrics
    • Nine concentric spheres (a` la Aristotle but fewer spheres)
    • Inspired by Ibn Bajjah/ Avempace's and Ibn Tufail/ Abubacer's models of planetary motion
What the Muslims knew

• Mathematics
  – Al-Khwarizmi (780): algebra
  – Habash al-Hasib (825): sine, cosine, tangent
  – Abu'l-Hasan Al-Uqlidisi (952): invention of the decimal fractions
  – Umar al-Khayyam (1048): algebraic equations
  – Sharaf al-Din al-Tusi (1135): algebraic geometry
What the Muslims knew

• The numerals
  – Al-Khwarizmi: “On the Calculation with Hindu Numerals“ (825) in Arabic
  – Al-Kindi: “Ketab fi Isti'mal al-'Adad al-Hindi/ On the Use of the Indian Numerals" (830) in Arabic
  – Ordinary people still use the Babylonian system (sexagesimal)
What the Muslims knew

• Optics
  – Ibn al-Haytam (11th c, Cairo): mathematics, medicine, astronomy and especially optics
  – Alhazen: seven-volume treatise on optics (1021)
What the Muslims knew

- **Medicine**
  - Ali ibn Sahl Rabban al-Tabari (783)
  - Abu Bakr al-Razi (Persia, 850)
  - Ali ibn Abbas al-Majusi (925)
  - Ibn Sina (Persia, 981)

- **Alchemy/chemistry**
  - Jabir ibn Hayyan (8th c)

- **Astrology**
  - Astrology persecuted by the Church but popular in the Arab world
What the Muslims knew

• Ahmad Ibn Muhammad Miskawayh (932): theory of evolution ("Tahdhib al-Akhlag")
• Alhazen al-Haytham (b.965): the unconscious, visual perception
What the Muslims knew

- Technology
  - Banu Musa brothers: “Kitab al-Hiyal/ The Book of Tricks” (Baghdad, 9th c.)
    automata and many inventions
  - The windmill introduced in Iran 6th-9th c AD
What the Muslims knew

• University
  – University of al-Qarawiyyin or al-Karaouine in Fes, Morocco (founded by a woman, Fatima al-Fihri, 859 AD)
What the Muslims knew

• Art
  – Anti-realist (unlike western art)
  – Dogma of not representing living beings (e.g., no sculpture)
  – Music, poetry, calligraphy, tiles...
  – Mosque: a building to pray (for a religion without a ritual), modeled after the courtyard of Muhammad's house in Madina
  – Minaret: to call the faithful to prayer and be heard as far as possible
  – The influence of weaving (a very polychromatic and mostly geometric art)
What the Muslims knew

- Mosque
  - Medina, Saudi Arabia (622)
  - Al Haram, Saudi Arabia (644)
  - Amr Ebn El Aas Mosque, Egypt (642)
  - Kairouan/Qayrawan, Tunisia (670) with first minaret (703)
  - Al Aqsa, Jerusalem (709)
  - Damascus, Syria (710)
  - Bukhara (712)
  - Aleppo, Syria (715)
  - Xian, China (742)
  - Cordoba, Spain (785)
  - Samara, Iraq (852)
  - Ibn Tulun, Egypt (876)
What the Muslims knew

Medina
What the Muslims knew

• Poetry
  – Traditional form of art of the pre-Islamic Bedouins of Arabia
  – Muwassaha (southern Spain)
  – Ibn Hazm (Cordoba, b. 994): "The Dove's Neck-ring"
  – Ibn Tofayl (Cordoba, 12th c): "Hayy Ibn Yaqzan"
What the Muslims knew

- Qushayri (986, Sufist)
  - Higher and higher stages of knowledge/consciousness on the way to union with God
What the Muslims knew

- Abu Ali al-Husain ibn Abdallah ibn Sina/ Avicenna (Persian Turkestan, b1023)
  - Less original than Farabi but more famous (probably because a better writer)
  - Reconciling Islam, Aristotle and Plato
  - Medicine
What the Muslims knew

- Abu Ali al-Husain ibn Abdallah ibn Sina/ Avicenna (Persia, b1023)
  - The universe is a series of ten emanations from Allah, from the first intelligence to the “active” intelligence of the human body
  - The process of emanations is also a process of self-knowledge by Allah
  - The “active intellect” is universal (a sort of universal mind or consciousness), the “passive intellect” is individual (soul, reasoning)
  - Neo-Platonic trialism (intellect, soul, body)
  - Anti-atomistic
  - Refutes Plato’s doctrine of ideas
What the Muslims knew

• Abdallah Ibn Sina/ Avicenna (Persia, b1023)
  – Essence is not existence: something can be, without existing (we can imagine an elephant with wings, but this does not imply that elephants with wings exist)
  – Essences are like Platonic ideas, but need a mind in order to be
  – Existence (wujud) and essence (mahiyyah) are unified only in God: God is the uncaused first cause, the necessary existent, whose property “is” existence (essence = existence)
What the Muslims knew

- Abdallah Ibn Sina/ Avicenna (Persia, b1023)
  - Creation is a necessary consequence of God’s existence/essence
    - God is an eternal act of self-knowledge
    - This requires an intellect (in order to know)
    - The intellect contemplates God, itself as a necessary being, and itself as a merely possible being
    - This trinity of functions yields the trinity of intellect, soul/body and the starless cosmos
    - That intellect, in turn, also contemplates God and itself, thus yielding a new triad of intellect, soul/body and the starry sky
What the Muslims knew

• Abdallah Ibn Sina/ Avicenna (Persia, b1023)
  – Creation is a necessary consequence of God’s existence/essence
    • And so forth until the last intellect becomes the active intellect that yields the Earth and our souls/bodies
    • The soul is created attached to a body but it is immortal
What the Muslims knew

• Abdallah Ibn Sina/ Avicenna (Persia, b1023)
  – Plato’s Republic recast as the Ideal Islamic state based on shari’a
  – Astronomy, Mechanics and Music as branches of Mathematics
What the Muslims knew

- Solomon ibn Gabirol/ Avicebron (105x, Spain)
  - Jewish philosopher
  - Forty-stanza didactic poem “Keter Malkhut/ The Kingly Crown” (many layers of meaning)
  - Knowledge of the microcosm (the self) is knowledge of the macrocosm (the universe)
  - Everything is made of two fundamental substances: matter and form
  - Matter was originally one of the first emanations from God and it was a spiritual substance with an attribute of corporeality
What the Muslims knew

- Abu-Hamid Al-Ghazali (Persia, 1095)
  - Reaction to Platonism
  - The god of Aristoteles and the god of Abraham are incompatible
  - Repudiation of the philosophical method of discourse
What the Muslims knew

• Abu-Hamid Al-Ghazali (Persia, 1095)
  – Heresies
    • The world is eternal (vs it was created by God)
    • God is pure intellect (vs God is well acquainted with our material world)
    • Bodies will never resurrect
    • Only the scriptures provide truth
What the Muslims knew

• Ghazali (Persia, 1095)
  – Three degrees of knowledge:
    • Certainty reached by demonstration is knowledge ("ilm")
    • Direct acquaintance with the state of "ilm" is immediate experience ("dhawq")
    • Acceptance of "ilm" on the basis of hearsay is faith ("iman")
What the Muslims knew

• Ghazali (Persia, b1058)
  – Sense reality is dubious
  – "God created the creatures in darkness, and then sprinkled upon them some of his light"
  – I can doubt anything except the “I”
  – Causality is based on induction (the effect always follows the cause), but in reality there is no connection between cause and effect (the cause is Allah)
  – The world is not the same as Allah, since the world has a beginning (creation)
  – Allah is unity, the world is multiplicity, and the explanation is that they are not the same
What the Muslims knew

- Judah Halevi (113x, Spain)
  - Jewish philosopher
  - Proto-zionism
What the Muslims knew

• Abu Bakr Muhammad ibn Bajah (Spain, d. 1138)
  – When the virtuous state degenerates, the philosopher has to emigrate and carry out a life of loneliness
  – The ultimate goal of the philosopher is to achieve the perfect virtue (as Farabi and Sina preached) that will reunite him with Allah in the ultimate contact or “ittisal”
  – The ittisal is made possible by divine intervention, as meditation alone would not be enough to understand Allah
What the Muslims knew

• Abu Bakr bin Tufayl (Spain, b1105)
  – Inspired by Sufism
    • There is no other being than Allah
    • The finite soul is an illusion that must be abandoned in order to understand the truth
    • Total annihilation of the soul is the ultimate goal
  – Inspired by Neoplatonism
    • Harmony of reason and revelation
    • Philosophical truth (achieved through reason) is superior to religious truth (achieved through faith)
What the Muslims knew

• Abu al-Walid Muhammad ibn Ahmad ibn Muhammad ibn Rushd/ Averroes (Spain, b1126)
  – Commentaries on Aristoteles reveal that Farabi and Sina had misinterpreted Aristoteles and Ghazali had attacked what he wrongly believed to be Aristotelian theory
  – A Neo-Platonic Aristotle
  – Latin translations (often via Hebrew) from 1217 spread throughout Europe and launch the vogue of Aristotelian philosophy
  – Very little influence on Islamic philosophy by Aristotelian philosophy
What the Muslims knew

- Abu al-Walid Muhammad ibn Ahmad ibn Muhammad ibn Rushd/ Averroes (Spain, b1126)
  - Only one truth that appears as two truths: religion for the uneducated masses and philosophy (falsafa) for the educated elite
  - There is no conflict between reason and revelation: whenever there is a conflict between philosophy and the scriptures, the scriptures must be interpreted as allegories
  - Only the philosophers are capable of interpreting correctly the allegories
  - Ultimately, shari’a and falsafa are in agreement
What the Muslims knew

• Ibn Rushd Averroes (Spain, b1126)
  – The world is an emanation of God, rather than a creation of God
  – Human knowledge is the effect of knowing, while Allah’s knowledge is the cause of knowing
  – Both active intellect and passive intellect are universal (monopsychism), but there are as many “learned intellects” as souls: there is only one (universal, eternal) mind and each body learns a bit of it
What the Muslims knew

• Abu Madyan (Spain, b1126)
  – Fusion of Andalusian mysticism, Sufi mysticism and study of law
What the Muslims knew

• Moses ben Maimon/ Maimonides (Spain, 1190)
  – Jewish philosopher
  – Reconciling the tenets of rabbinic Judaism with the Aristotelian philosophy
  – Faith and reason can coexist (Jewish beliefs can be deduced logically)
  – Allegorical method of biblical interpretation
  – Codified talmudic law
  – Medicine: body and soul are one
  – Eternal life = human intellect contemplating god
What the Muslims knew

- Moses ben Maimon/ Maimonides (Spain-Egypt, 1190)
  - Contempt for Islam as a barbaric ideology
What the Muslims knew

• Shahab al-Din Suhrawardī (Persia, 1186)
  – “Science of Light”
  – Dualism of light and darkness (Zoroastrian influence)
  – Light (diffuse throughout the universe) is the source of being
  – Beings are more or less “luminous”
  – The Light of Lights is the cause of all things
  – Everything else is generated via emanations from the Light of Lights through a hierarchy of lights (Neo-platonic influence)
  – Both the world and time are eternal (Aristotelian influence)
What the Muslims knew

• Shahab al-Din Suhrawardi (Persia, 1186)
  – Zoroastrian symbolism
What the Muslims knew

- Shahab al-Din Suhravardi (Persia, b1153)
  - Beings that are made of both light and darkness cannot apprehend themselves directly but need an external source of light
  - Pure Light can apprehend itself directly
  - All souls seek union with the Light of Lights
  - This is equivalent to a journey back to the origins of the soul
  - Primacy of essence over existence
  - The Sufis are the true successors of the early Greek sages
What the Muslims knew

- Ibn Arabi (Spain, b1165, Sufist):
  - Unity of existence
  - There is no being other than Allah
  - The universe is a single being
  - Each prophet provides a version of that being (a kalimah)
  - Divinity and humanity are aspects of the same entity
  - The (rational) soul is able to perceive the unity of the whole and its own being the whole, and, when it does, it disappears as a separate entity
  - This annihilation is its destiny, its paradise
  - Grand synthesis of Sufi thought
What the Muslims knew

• Ibn Arabi (Spain, b1165, Sufist):
  – Reality cannot be known by a subject as an object
  – Human consciousness is a mirror of divinity
  – God and human consciousness determine each other
  – God reveals himself to himself through human consciousness
  – That revelation is perpetually changing
What the Muslims knew

- Ibn Arabi (b1165, Sufist):
  - The human condition is one of longing, of both joy (for having experienced the divine) and sorrow (for having lost the divine), similar to the state of a rejected lover
  - The Sufi who achieves perpetual transformation is able to participate in the act of self-revelation (of creation)
  - The world then appears to be destroyed and recreated at every moment
  - The divine is being recreated in every moment
What the Muslims knew

- Ibn Arabi (b1165, Sufist):
  - “Thomas Aquinas was read from Spain to Hungary and from Sicily to Norway. Ibn al-‘Arabi was read from Spain to Sumatra and from the Swahili Coast to Kazan on the Volga.” (Marshall Hodgson)
What the Muslims knew

• Abu Abd Allah Muhammad al-Idrisi (Morocco, 1100)
  – "Nuzhat al-mushtag Fi Ikhtiraq al-Afaq/ Roger's Book" (1154, Sicily)
    • geographical encyclopedia
    • world map
    • description of various regions of the world
What the Muslims knew

• Salah Al-Din/ Saladin
  – Conquered Egypt and Syria
  – 1187 Battle of Hittin vs Crusaders (conquers Jerusalem)
  – 1192 Saladin vs Richard III
What the Muslims knew

- Shihaboddin Yahya (Persia, b 1155)
  - Everything emanates from the Light of Lights
  - Four universes
What the Muslims knew

- Al Jazaari (Seljuq Eastern Anatolia)
  - “Kitab fi marifat al-hiyal al-handasiyya/ The Book of Knowledge of Ingenious Mechanical Devices” (1206): automata
What the Muslims knew

• Sack of Baghdad (1258)
What the Muslims knew

- Ibn Taymiyya (b1263)
  - The universe created by an act of divine will, not an emanation
  - Man a created being not an emanation
What the Muslims knew

• Sunni Islam (13th c)
  – Fusion of schools of law, schools of theology and Sufism (but Hanbalis reject theology)
  – Sufis as saints who can mediate between humans and Allah

• Shiite Islam (13th c)
  – Sects instead of schools of laws
What the Muslims knew

• Sunni Islam (13th c)
  – Collaboration between the new nomadic and illiterate military elite (e.g. Seljuks) and the ulama (who know how to administrate a state but need a military regime to provide security for the state)
  – The masses are finally converted to Islam
What the Muslims knew

• Kabbalah (Spain, 128x)
  – Moses de Leon: “Sefer ha-zohar” (The Book of Splendor) or “Zohar”, written in Aramaic
  – Focus on esoteric knowledge about the nature of God and its relationship with the human world
  – Judaism and of the history of Israel become symbols for events and processes in the inner life of God
What the Muslims knew

• Kabbalah (Spain, 128x)
  – The Godhead: a dynamic multifaceted flow of force
    • God as he is in himself, the unknowable, immutable En Sof (Infinite).
    • Emanations from En Sof in the form of ten sefirot (planes), through which the divine power radiates to create the cosmos
    • The ten sefirot are (sexual) symbols of God’s inner life and archetypes for everything in the world of creation
  • Human actions influence the life of God (humans must contribute for the ten sefirot to operate)
What the Muslims knew

• Levi ben Gershom/ Gersonides (France, 134x)
  – Jewish philosopher
  – God has limited knowledge of the world of humans (he only knows the general principles)
  – God created the world from pre-existing matter, not ex nihilo, and at the moment when that matter was ripe for creation
  – God spends eternity contemplating himself (no change in knowledge or will)
What the Muslims knew

• Abd al-Rahman Ibn Muhammad Ibn Khaldun (Tunis, 1375)
  – Theme: the processes of social and political change
  – The need for a leader is based on the animal part of human nature
  – Individuals identify with a group and subordinate their own personal interests to the group interest
  – The sense of solidarity is based on tribal solidarity ("asabiyya")
  – Asabiyya gives rise to a new civilization and political power
  – Political organization is a common good because it preserves order and peace
What the Muslims knew

• Abd al-Rahman Ibn Muhammad Ibn Khaldun (Tunis, 1375)
  – No dynasty or society can last forever: their power decays soon after attaining maturity (just like organisms decay after attaining their maturity)
  – Civilisation decays
  – Cyclic repetition of rise and fall in human civilization
    • Asabiya (solidarity) leads to the emergence of a rural tribe
    • The tribe then moves to the comfort of the city and acquires hadara (civilization)
    • The worldly life of the city soon weakens the asabiya and causes civil strife that leads to the downfall of the dynasty
What the Muslims knew

• Abd al-Rahman Ibn Muhammad Ibn Khaldun (Tunis, 1375)
  – Religion helps create an inter-tribal asabiya for the state
What the Muslims knew

- Abd al-Rahman Ibn Muhammad Ibn Khaldun (Tunis, 1375)
  - Labor is the source of value
  - Demand for an object is based on the utility of acquiring it and not necessarily the need for it
  - Prices are determined by supply and demand
  - “(Man) obtains (some profits) through no efforts of his own, as, for instance, through rain that makes the fields thrive, and similar things. However, these things are only contributory. His own efforts must be combined with them, as will be mentioned. (His) profits will constitute his livelihood, if they correspond to his necessities and needs. They will be capital accumulation if they are greater than (his needs).”
What the Muslims knew

• Abd al-Rahman Ibn Muhammad Ibn Khaldun (Tunis, 1375)
  – Economic growth continues so long as there is an extra effort which creates capital accumulation, which in turn, combined with effort, leads to more production
  – "When tax assessments and imposts upon the subjects are low, the latter have the energy and desire to do things. Cultural enterprises grow and increase, because the low taxes bring satisfaction. When cultural enterprises grow, the number of individual imposts and assessments mount. In consequence, the tax revenue, which is the sum total of the individual assessments, increases”
  – Through foreign trade, people's satisfaction, merchants' profits, and countries' wealth are all increased.
What the Muslims knew

• Abd al-Rahman Ibn Muhammad Ibn Khaldun (Tunis, 1375)
  – "The Negro nations are as a rule submissive to slavery because they have attributes that are quite similar to dumb animals."
What the Muslims knew

• Ibn Battuta (Morocco, born 1304)
  – 1325-1354 travels in Africa, Asia, Europe
  – Over 120,000 kms
What the Muslims knew

• Hasdai Crescas (Spain, born 1340):
  – Anti-Maimonides Jewish philosopher
  – Logical refutation of Aristotelianism
  – Influenced by the Christian physics of Ockham and Buridan
  – The void exists and in fact an infinite void exists
  – There are infinite worlds, not just ours
  – Love is the ultimate goal, not knowledge
What the Muslims knew

- Al-Malik al-Afdal Ibn Rasul (Yemen, born 1363)
  - Multi-lingual dictionary in Arabic, Persian, Turkic, Greek, Armenian, Mongolian
What the Muslims knew

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