Religion and Science
1450-1750
The Early Modern Era saw the Globalization of Christianity despite its divisions in Europe.
European Christendom fragmented with the Protestant Reformation
Luther’s claims of corruption tapped into frustrations and tensions of European Society
German artist Louis Cranach shows Martin Luther and his followers using a giant quill to write their demands for reform on a church door.
Sale of indulgences
Forgiveness of sins in exchange for money
Pope Leo X issued a call for a new indulgence to finance a new, larger St. Peter’s Church
Anglicanism

Henry VIII wanted to divorce his first wife Catherine and marry Anne Boleyn because Catherine had not produced a male heir.
The Catholic Church tried to reform, with three Councils of Trent, founding of the Jesuit Society of Jesus by St. Ignatius Loyola.
Results of Protestant Reformation

• Undermined the authority of Catholic Church

• Offered a new vision of humankind’s relationship with God

• Plunged Europe into witch hunts, persecutions, and wars
Political Implications of Protestant Reformation

- Early modern Europe developed independent European states
- States acquired empires and wealth from commerce
- England and Netherlands had constitutional states with representative parliaments, France, Spain, Austria and Prussia had absolute monarchies.
- Wealthy merchants played a key role in politics
- Europeans feared Muslim empires which were larger and more powerful than they were.
Ottoman seige of Constantinople
Ottoman sieges of Vienna

1529

1683

Ottoman sieges of Vienna
Europeans justified their imperial power and wealth by converting native peoples to Christianity.

This is why the spread of Christianity was associated with European empire.
Virgin of Guadalupe
Appeared to Mexican peasant Juan Diego in 1531
One theory is that the Virgin of Guadalupe was presented to the Aztecs as a sort of Tonantzin, Mother Earth goddess
In 1810 Miguel Hidalgo Costilla initiated the bid for Mexican independence with his words “Death to the Spaniards and long live the Virgin of Guadalupe!” When Hidalgo's mestizo-indigenous army attacked Guanajuato and Valladolid, they placed the image of the Virgin of Guadalupe, which was the symbol of their enterprise, on reeds painted different colors and they all wore a print of the Virgin on their hats.
Nahua indigenous people of Mexico still celebrate traditional agricultural cycles and believe the natural world is sacred.
Sierra Norte de Puebla region
Taki Ongoy dancers of Peru resisted Christian missionaries
Jesuits in China
and
New thinking
Jesuit missionaries show a map of China
Breaking from the strict Confucian mold, Wang Yang Min asserted anyone, no matter what socioeconomic status or background, could become as wise as the ancient sages Confucius and Mencius, and that the writings of the latter two were not the only source of truth, but merely guides that could have flaws if carefully examined. In Wang's mind, a peasant who had many experiences and drew natural truths from these was more wise than an official who had carefully studied the Classics, but had not experienced the real world in order to observe what was true.
Kaozheng
A new direction in China, elite scholars should seek truth from facts with precision, verification, accuracy, and rigorous analysis
Japanese Christian martyrs executed in persecution of Japanese Christians in 1600’s
Spread of Islam
1450-1750
Trends in India

Bhakti – direct connection to the divine
Sikhism – brotherhood of mankind
Bhakti – a branch of Hinduism which stressed direct connection to the divine through songs, dance, rituals, and poetry
Guru Nanak, founder of Sikhism, with his companion Mardana, converting a robber
Birth of Modern Science
Why did it occur in Europe?

• Traditions of separation of Church and State

• Many legally independent institutions such as cities and towns, guilds, universities and professional associations

• Autonomy of universities allowed them to pursue truth free from dictates of Church or state authorities
Muslim diagram of eclipses of the moon by Biruni in 1000’s inspired European thinking during the scientific revolution
Maragha Observatory

Copernicus used astronomical and mathematical knowledge from this Muslim observatory in the 1200’s located in what is today Iran.
Muslin glassmaking led to discoveries in optics
Aristotle
Drawing by Flemish anatomist Andreas Vesalius in 1500’s
Nicolaus Copernicus
(1473-1543)
Johannes Kepler (1571-1630)
Galileo Galilei (1564-1642)
Jupiter’s moons
Antoine van Leeuwenhoek, Dutch microscopist, saw bacteria and red blood cells in the 1600’s.
Isaac Newton (1642-1727)
The Enlightenment

New ideas rooted in reason, skepticism of Church’s authority, and interest in natural laws
Immanuel Kant (1724-1804)
Thomas Hobbes (1588-1679)
LEVIATHAN
Of
THE MATTER, FORME,
and POWER OF A COMMON
WEALTH ECCLESIASTICALLY
and CIVIL.
By Thomas Hobbes
of Malmesbury.
John Locke (1632-1704)
Voltaire (1694-1778)
Montesquieu (1689-1755)
Jean Jacques Rousseau (1712-1778)
DU CONTRAT
SOCIAL;
OU
PRINCIPES
DU DROIT
POLITIQUE.

Par J. J. Rousseau, Citoyen
"de Geneve.

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Fœderis æquas
Æcrid. XI.

Edition Sans Cartons, à laquelle on a ajouté
une Lettre de l'Auteur au seul Ami qui lui
reste dans le monde.

A AMSTERDAM,
Chez MARC - MICHEL REV.

M. DCC. LXII.
Darwin  Marx  Freud