Science, Religion, and Fundamentalism

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Science and Religion

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- This is one of the functions of religion.
- There is every reason for science to be part of religion.
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- Science makes the world explicable and predictable.
- This is one of the functions of religion.
- There is every reason for science to be part of religion.
- Historically, it has been (until mid-19th c).
- We have reinvented this history.
Science and Religion

• There has been dispute over interpretation of scripture.
• But this is not due to science.
• It is a perennial phenomenon.
Science and Religion

- Pythagoras (570-495 BCE)
- First theorem in world history.
- Beginning of Western mathematics.
- Reassurance that humans have immortal souls.
Science and Religion

• Nicolaus Copernicus (1473-1543)
  • Saw the universe as reflecting the glory of the Creator.
  • Believed that Aristotelian cosmology did not do it justice.
    • His heliocentric system reflected “the movements of the world machine, created for our sake by the best and most systematic artisan of all.”
  • The Pope and several Catholic bishops urged him to publish his ideas.
Science and Religion

• Tycho Brahe (1546-1601)
• Insisted that science harmonize with theology.
• Rejected Copernican view partly on Biblical grounds.
Science and Religion

• Galileo Galilei (1564-1642)
• Church was interested in science.
• Pope encouraged Galileo’s research, but Galileo insulted him in *Dialogue Concerning the Two Chief World Systems*. 
Science and Religion

- Johannes Kepler (1571-1630)
- Devout Lutheran, saw evidence of the Trinity in the heavens.
- His laws of planetary motion are inspired by desire to find divine order in the universe.
Science and Religion

- Rene Descartes (1596-1650)
- His science was part of a general effort to find a rational foundation for religion and philosophy.
  - His work was inspired by three dreams he had on night of the Vigil of Feast of St. Martin, which he interpreted as messages from God.
- His proof of the existence of God is climax of *Meditations*.
Science and Religion

• Gottfried Leibniz (1646-1716)
• His explanatory principle is that universe must be optimal because it is designed by God to be the best of all possible worlds.
• For example, law of refraction.
Science and Religion

- Isaac Newton (1642-1727)
- Wrote more on religion than on science.
- Saw divine intelligence in nature.
- Believed that his *Principia* supported belief in God.
  - “I had an eye upon such Principles as might work with considering men for the belief of a Deity.”
Science and Religion

- Charles Darwin (1809-1882)
- Described himself as agnostic.
- Evolution of species was much-discussed theory long before Darwin, promoted by numerous clerics.
- Darwin’s theory of natural selection was embraced by several religious figures.
  - Objections were generally not Biblical.
- We have reinterpreted this era.
Science and Religion

• When did we forget the connection between science and religion?
• As two phenomena developed:
  • Science as a profession
    • “Natural philosophy” became “science” in 19th c.
    • “Scientists” (coined in 1833) became professionals by 20th c.
    • Secular priesthood.
  • Rise of modern **fundamentalism**.
Fundamentalism

- Origin of the term:
- Niagara Bible Conference (1876-1897).
- Emphasized dispensationalism.
  - Eschatology: Jesus’ second coming and the rapture.
  - Based on literal reading of book of Revelation.
- This is not unusual for revitalization cults.
  - For example, cargo cults.
Fundamentalism

- Cargo cults – New Guinea, Melanesia, Micronesia, and elsewhere.
  - Began with colonialism, reached peak during and after WW II.
  - Reaction to social and technological change brought by Western colonials and military.
- Westerners brought cargo to soldiers in planes.
- Natives thought cargo was intended for them.
Fundamentalism

• Cargo planes signaled return of their ancestors, who brought cargo as gifts.
• Planes carried ancestors in suspended animation.
  • They would resurrect after landing.
• Natives built mock-up airports to attract planes.
Fundamentalism

• Still active – John Frum cult (Vanuatu)
  • John Frum is apparently an American serviceman (John from America).

• John Frum will return on February 15 (year?) to bring the kind of wealth that Westerners enjoy.
  • According to Chief Isaak Wan Nikiau, leader of cult, John Frum is “our God, our Jesus” and will eventually return.

John Frum day parade
Fundamentalism

• Fundamentalism is a reaction to rapid social and technological change in late 19th c. United States.
  • Industrialization, urbanization, massive immigration.

Homestead, PA, 1890s
Fundamentalism

- Fundamentalism is associated with literal reading of scripture.
  - “Return to fundamentals.”
  - This implies a rejection of “scientific worldview.”
- We distance ourselves from fundamentalism by distinguishing science and religion.
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- Rise of “neo-orthodoxy.”
  - Karl Barth, Reinhold Niebuhr, Jacques Ellul
  - Religion and science should be separated.
  - They address different problems

- So we reinvent the history of science.
Fundamentalism

• Islamic Fundamentalism:
  • Best-known form is Wahhabism.
    • Founded by Muhammad bin Abd al-Wahhab (1703-1791)
  • Rough parallel with Puritanism in England
    • Effort to purify Islam of pagan influences by returning to the fundamentals.
    • Strict interpretation of scripture.
Fundamentalism

• Al-Wahhab joined forces with Muhammad ibn Saud to form first Saudi state, 1744.

• Resurgence of Wahhabism among Saudis in 1920s.
  • Reaction to arrival of modernism after WW I.
  • Abdul-Aziz bin Saud established modern Saudi state in 1932 with assistance from Wahhabist Bedouins.

• Wahhabism remains dominant in Saudi Arabia today.
  • Source of strict observances there.
Fundamentalism

- Taliban
  - “Islamic Calvinists”
  - Influenced by Deobandi fundamentalism in India (19th c.)
- Reaction to instability in Afghanistan after Soviets left.
  - Return to traditional lifestyle of Pashtun (Pashtunwali)
  - Fiercely independent mountain people.

Pashtun village council (hujra)
Fundamentalism

- Saudi support for Taliban induced Deobandi schools to emphasize Wahhabi ideas.
  - Result: very strict interpretation of Sharia law.
Fundamentalism

• Why fundamentalist extremism?
• Heavy reliance on doctrine, ideology, and proof-texting as coping mechanisms.
• Can create an alternate reality.
Fundamentalism

• Psychological basis: a stage of development
• Lawrence Kohlberg’s developmental stages
  • Avoid punishment (early childhood)
  • Self interest (late childhood)
  • Social conformity (early teens)
  • Law and order, fundamentalism (college age)
  • Social contract, tolerance (mature adulthood)
  • Universal principles, wisdom (60+, if ever)
Fundamentalism

- Why fundamentalism today?
- Rapid change, cultural disruption
  - Revitalization cults
  - Return to fundamentals
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- Rapid change, cultural disruption
  - Revitalization cults
  - Return to fundamentals
- Reliance on ideology
  - Since early 20th century
  - Marxism, Communism, Neoliberalism ("market fundamentalism")
Fundamentalism

• Reaction to fragmentation of religious functions.
  • Explanation – Secular science
  • Literature – Secular entertainment media
  • Predictability – Technology and social systems
  • Support – Secular medicine, psychology and self-help
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• An effort to put it back together –
  to re-connect (re-ligion).