E P I S O D E 6

SCIENTIFIC AGE

I. Church Attacks on Copernican Science Were Philosophical

Galileo's and Copernicus' works did not contradict the Bible but the elements of Aristotle's teaching which had entered the Church.

II. Examples of Biblical Influence

- A. Pascal's work.
 - 1. First successful barometer; great writing of French prose.
 - 2. Understood Man's uniqueness: Man could contemplate, and Man had value to God.
- B. Newton
 - 1. Speed of sound and gravity.
 - 2. For Newton and the other early scientists, no problem concerning the why, because they began with the existence of a personal God who had created the universe.
- C. Francis Bacon
 - 1. Stressed careful observation and systematic collection of information.
 - 2. Bacon and the other early scientists took the Bible seriously, including its teaching concerning history and the cosmos.
- D. Faraday
 - 1. Crowning discovery was the induction of the electric current.
 - 2. As a Christian, believed God's Creation is for all men to understand and enjoy, not just for a scientific elite.

III. Scientific Aspects of Biblical Influence

- A. Oppenheimer and Whitehead: biblical foundations of scientific revolution.
- B. Not all early scientists individually Christian, but all lived within Christian thought forms. This gave a base for science to continue and develop.
- C. The contrast between Christian-based science and Chinese and Arab science.
- D. Christian emphasis on an ordered Creation reflects nature of reality and is therefore acted upon in all cultures, regardless of what they say their world view is.
 - 1. Einstein's theory of relativity does not imply relative universe.

- 2. Man acts on assumption of order, whether he likes it or not.
- 3. Master idea of biblical science.
 - a) Uniformity of natural causes in an open system: cause and effect works, but God and Man not trapped in a process.
 - b) All that exists is not a total cosmic machine.
 - c) Human choices therefore have meaning and effect.
 - d) The cosmic machine and the machines people make therefore not a threat.

IV. Shift in Modern Science

- A. Change in conviction from earlier modern scientists.
- B. From an open to a closed natural system: elimination of belief in a Creator.
 - 1. Closed system derives not from the findings of science but from philosophy.
 - 2. Now there is no place for the significance of Man, for morals, or for love.
- C. Darwin taught that all life evolved through the survival of the fittest.
 - 1. Serious problems inherent in Darwinism and Neo-Darwinism.
 - 2. Extension of natural selection to society, politics and ethnics.
- D. Natural selection and Nazi ideology.
- E. The new authoritarianism: not the crudely dictatorial regimes of Hitler and Stalin. New regimes will be subtly manipulative, based on sophisticated arsenal of new techniques now available.
 - 1. To obtain organs for transplants forces acceptance of new definition of death. Possible abuses.
 - 2. Without the absolute line which Christianity gives of the total uniqueness of Man, people have no boundary line between what they can do and what they should do.
 - 3. Moral and legal implications of Artificial Insemination by Donor (A.I.D.)
 - 4. Skinner's social psychology and the abolition of Man.
 - 5. Tell people they are machines and they will tend to act accordingly.
 - 6. Each theory of conditioning leads to social application.
 - a) Koestler: tranquilizer to cure human aggression.
 - b) Clark and Lee: controlling aggressions of politicians.
 - c) Kranty: control reproduction through the water supply.
 - 7. Who controls the controllers? –The unasked question.
 - a) The basic question begged: the psycho-civilizer as King?
 - b) If people are machines, why should biological continuation have value?

V. Need to Reaffirm That Which Was the Original Base for Modern Science

Questions

- 1. Explain the important contributions to science made by biblical principles.
- 2. How should our knowledge of the biblical view of work and nature affect our own attitudes to research, study of the Bible, and the use of our minds?
- 3. Does this segment help you to understand how and why men of great intellectual refinement in Nazi Germany could accept what was going on?
- 4. "Without the absolute line which Christianity gives of the total uniqueness of Man, people have no boundary line between what they can do and what they should do." Discuss.

Key Events and Persons

Copernicus: 1475-1543 Francis Bacon: 1561-1626 Novum Organum Scientiarum: 1620 Galileo: 1564-1642 Pascal: 1623-1662 Isaac Newton: 1642-1727 Principia Mathematica: 1687 Michael Faraday: 1791-1867 Charles Darwin: 1809-1882 Origin of Species: 1859 Herbert Spencer: 1820-1903 Albert Einstein: 1879-1955 Russel Lee: 1895-Heinrich Himmler: 1900-1945 B.F. Skinner: 1904-1990 Arthur Koestler: 1905-Kenneth B. Clark: 1914-Murray Eden: 1920-Kermit Kranty: 1923-Skinner's Beyond Freedom and Dignity: 1971

Further Study

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E.A. Burtt, The Metaphysical Foundations of Modern Science (1932).
Arthur Koestler, The Watershed. A Biography of Johannes Kepler (1960).
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C.S. Lewis, That Hideous Strength (1945).
C.S. Lewis, The Abolition of Man (1972).
D.M. Mackay, The Clockwork Image (1974).
Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution. Wistar Symposium Monograph, no. 5 (1967).

B.F. Skinner, Beyond Freedom and Dignity (1971).