

Science and Religion Debate

“It is grander to think and investigate for yourself than to repeat a creed . . . I look for the day when reason, throned upon the world’s brain, shall be the King of Kings and the God of God’s.”

Robert G. Ingersoll

American Politician and Lecturer (1833 – 1899)

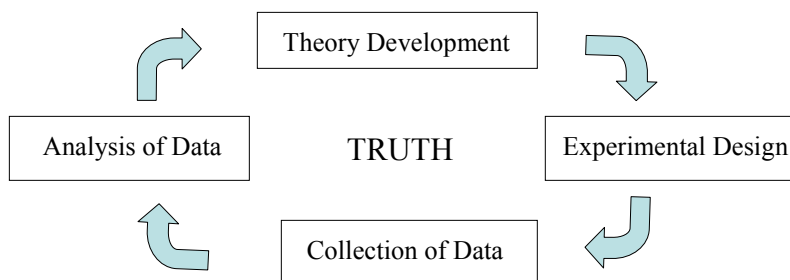
Introduction to the Debate

- Rooted in philosophy and theology
 - “Worldview”
 - Or one’s basic assumptions
- Philosophy of science
 - Need to understand the philosophical differences to understand the debate

Philosophy of Science

- The Basis of Modern Science
 - Empiricism:
 - Knowledge comes from experience
 - Experience must be “objective”
 - Positivism:
 - Truth is fixed in meaning
 - Theory comes from facts and is retained based on tests.
 - Science progresses through gradual accumulation of facts.

Scientific Method



The Post-Modern Response

“Science has been said to be opposed to faith, and inconsistent with it. But all science, in fact, rests on a basis of faith, for it assumes the permanence and uniformity of natural laws--a thing which can never be demonstrated.”

-Tyron Edwards (1809-1894)

“The only absolute truth is that there are no absolute truths.”

-Paul Feyerabend (1924-1994)

Disagreements with Empiricism

1. The collection and interpretation of data are theory-laden, not value-free.
2. Scientific theories are not determined solely by facts.
3. The scientific method is not simply an unbiased activity.
4. Science does not progress through the gradual accumulation of facts.

Experiment.

Postmodern Response

1. Collection & interpretation of data are theory-laden
 - a. Bruner and Postman (1949)
 - b. Scientists' commitment to their theories
 - c. Kuhn's *The Structure of Scientific Revolutions*
2. Scientific theories are not determined solely by facts.
 - a. Multiple sources determine theories
 - 1) "Fashions and Fads"
 - 2) Individual experience
 - 3) Prior experience

Postmodern Response

3. The scientific method is not simply an unbiased activity.
 - a. Scientists and their "web of beliefs"
 - 1) Guidelines for change are ambiguous.
 - b. Many factors influence confirmation/falsification.
 - 1) What a scientist values in a theory.
 - 2) Other values (feminism, empiricism, capitalism)
 - 3) The values of those whom a scientist respects
 - 4) The limitations of the scientific community (publishable)
 - c. The end product is a result of empirical work and personal and cultural values.

Postmodern Response

4. Science does not progress gradually.
 - a. Kuhn's analysis of progress happening in "revolutions"

Postmodern Response

- Truth is...
 - Ultimately relative.
 - Knowable only within a specific personal or cultural setting.
 - Often contaminated by those who define it.

References

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