

Four Models for Understanding the Relationship Between Religion and Science

I. Conflict

A. Areas of conflict

1. Creation and evolution
2. Freudian psychoanalytic theory calls into question the legitimacy of the religious way of life by suggesting that its roots are in wish fulfillment and repression (Totem and Taboo; The Future of an Illusion; Moses and Monotheism)
3. Einsteinian relativity theory which drastically reinterprets our conceptions of space, time and causality and thus challenges us how God relates to the world (see Einstein's Relativity: The Special and General Theory).
4. Technological advances in computers and artificial intelligence seem to endanger the unique status of homo sapiens (originally, see A. M. Turing, "Computing Machinery and Intelligence," *Mind* 59 (1960); D. Hofstadter and D. Dennet, *The Mind's I*).
5. Biotechnology and the discovery of the DNA molecule threaten to put the secret of life into the hands of scientists.

B. Scientific materialism or philosophical naturalism

Many evolutionary scientists adopted the perspective of PN (Philosophical naturalism) as the control belief and basis of evolution.

- (1) that physical nature alone is real;
- (2) all phenomenon are configurations of matter or nature;
- (3) there is no supreme being or supernatural realm governing nature or overseeing humanity;

¹ Taken from Michael Peterson, et. al. *Reason and Religious Belief*, 3rd ed. (New York: Oxford UP, 2003), pp. 246ff.

(4) natural processes are responsible for the origination of life and diverse life forms.

This control belief led to the full-fledge world view of evolutionary naturalism which holds the following:

(1) that humanity stands alone in an essentially hostile universe;

(2) that humanity has no overarching purpose;

(3) reject religion as an illusion, and view science as the only hope for the progress of humanity and as the only way to explain human experience, existence, and destiny.

Science immediately enters the realm of the philosophical and the metaphysical which formerly had been the province of theology and religion.

1. Logical positivism (A. J. Ayer, 1910-1989)

Only statements that have meaning are those verifiable or falsifiable by empirical data and experience.

Terms expressing unobservable entities are merely expressions of subjective, psychological states.

2. Carl Sagan: "The cosmos is all that is, ever was or ever will be."

C. Christian theism

1. Basic control beliefs

a. God

b. Revelation

c. Creation (including humans as imago Dei)

d. Fall

e. Redemption

2. Alternative interpretations of these beliefs in relation to the question of science

a. Metaphorical interpretation (St. Augustine)

b. Anglican and Catholic traditions

D. Biblical literalism

1. Scientific creationism: uses Genesis as the basis for true science
2. Scopes Monkey trial: sought to prevent the teaching of evolution in the public schools because it is contrary to the Bible

D. Aims, objects, and methods

1. Objects: When the proper objects of theology include the same natural and physical phenomena that science studies, the stage is set for conflict and competition.
2. Aims: When the aims of theology and science are both to provide an explanation for natural objects and for life, then conflict and competition result.
3. Methods: when the method of theology and the method of science are both felt to render certain results, when theological method and scientific method are seen as equally certain to produce true knowledge, then conflict and competition will result.

When the objects, aims, and methods of religion and science are the same, and not differentiated, the way is open for conflict and competition which is permanent, especially when the two disciplines rest on competing and conflicting *weltanschauung*.

II. Independent or Separate Spheres

This view results when the objects, aims, and methods of science and theology are seen as quite different.

Religion and science function in entirely separate spheres and thus any possibility of conflict is eliminated (but when they do, one is going to suffer by being omitted from the game of setting forth truth).

Compartmentalization has been the approach of many including: neo-orthodoxy, existentialism, positivism, ordinary language philosophy.

A. Protestant neo-orthodoxy

1. Neo-orthodoxy : Karl Barth (1886-1968)--because of the unique nature of the objects, methods and aims of science and religion, there is no possibility of conflict.

a. Objects of theology and science: the former with God's self-revelation in Christ and Scripture, the latter the natural, empirical world.

b. Methods of theology and science: theologically, sin has blinded human reason from the knowledge of God, and its absolutely necessary for God to disclose himself to us via revelation.

The mysterious and transcendent God can only be known by his making himself known via revelation.

Scientifically, the realm of nature can be known via the application of human reason. No disclosure is needed.

c. The aim of theology and science: the latter is for encounter with God, and the latter is a better understanding of the empirical world.

B. Existentialism

These two above positions are fideistic: they both remove religion from the realm of natural science and rational critique. They inhabit hermetically sealed compartments that can never meet.

1. Atheistic

a. Subjective dimension: human, personal, relational aspects of life

b. Objective dimension: cold, rational, hard science studies objects

2. Theistic

a. Soren Kierkegaard (1813-11855) said that scientific knowledge is impersonal, and abstract, and objective and religious knowledge is deeply personal and subjective.

The objects of science are material objects and things, while the objects of religion are personal and moral realities.

b. Martin Buber (1878-1965) Science is an "I-It" relationship from person to things, whereas religion is an "I-Thou" relationship between persons.

Thus the aim of religious knowledge the reciprocity between two selves--the believer and God.

Religion cannot be known in the neutral categories of dispassionate natural science.

Hence, the methods are also very different: science is detached and rationalistic, and the believer is that of intense personal involvement.

C. Linguistic analysis

In contrast to positivism which said that meaningful language only applied to science, OLP noted the variety of functions language performs.

Taking a cue from Wittgenstein, OLP says that science and religion are two distinct but equally legitimate language games each with its own special categories of speech and logic.

OLP is not so much concerned with whether these respective language games are true per se, but are content simply to study the use of language in these various forms of life

--esp. how they are used by human beings seeking to accomplish certain ends, scientifically (prediction and control) or religious (worship and comfort).

Hence, with different forms of life informing different language games, the likelihood of conflict is eliminated.

III. Dialogue

A. Boundary questions: issues that shape and circumscribe science

1. Presuppositions of science

a. Physical nature is real, that it is an objective reality apart from us.

b. Nature is intelligible and knowable (a basic achievement of western civilization). If the world is either not there (#1) or not knowable (#2), why study it?

c. Nature is uniform and operates systematically and predictively on the basis of cause and effect in a closed or open system.

If not, there could be no patterns in nature to discover, and there would be no way to predict the scientific future.

d. Nature is good and worth studying

2. Greek metaphysics (Plato and Aristotle)

a. The true nature of things is found in their forms

b. Objects of science are the essential non-empirical forms of things

c. Properties could be deduced from the definitions of their essences rather than empirically

3. Judeo-Christian doctrine of creation

Michael Foster (1905-1959) said that the JCT doctrine of creation provides the philosophy of nature necessary for science and the overthrow of Greek ideas that retarded it:

A world which is created by the Christian God will be both contingent and orderly. It will embody regularities and patterns, since its Maker is rational, but the particular regularities and patterns which it will embody cannot be predicted a priori, since he is free; they can be discovered only by examination. The world, as Christian theism conceives, is thus an ideal field for the application of scientific method, with its twin techniques of observation and experiment.

4. The limits of science

a. Science reaches a point physically beyond which it cannot go or offer meaningful explanations

b. At that point, theology may say something meaningful about God as the creative ground of existence the structure of the universe.

c. Theology may offer explanations of the meanings of things, whereas science provides explanations for the cause of things.

d. Theology can offer insights into the ethical uses of scientific knowledge

B. Methodological parallels

1. Communal paradigms

Thomas Kuhn, *The Structure of Scientific Revolutions*, has shown how science includes personal involvement, disciplinary matrices, and is not as objective as believed.

2. Research programs

Nancy Murphy and Imre Lakatos both say that the study of science and theology revolves around a research program that preserves a core of essential concepts and offers ways of examining adverse data and make theoretical judgments. Three steps:

a. The core of the theological research program should contain the theologian's judgment about how to sum up the essential minimum of the relevant community's faith

b. To develop auxiliary hypotheses to be explained by the core and whose fruitful modification could help protect the core

c. To seek data that help confirm the core theory and the auxiliary hypotheses.

3. Observer participation

Holmes Rolston affirms the role of personal involvement in science as in theology is becoming clearer, esp. in light of the Heisenberg Uncertainty Principle and the Theory of Relativity.

4. Role of models

Sallie McFague and Ian Barbour show how models as an imaginative mental construct account for observed phenomena. See quote, 251

IV. Integration

How both science and religion are necessary to account for a unified and comprehensive understanding of reality.

A. Natural theology

- a. Uses empirical evidence and human reason to establish the existence and nature of God (to a limited extent)
- b. Teleological arguments, especially the anthropic principle and intelligent design have been most recent innovations in this area

B. Theology of nature

Arthur Peacocke says must use science to tutor, reformulate and reinterpret traditional theological doctrines.

Nature is characterized as dynamic and evolutionary, with a history of emergent novelty, brought about by chance and law

The natural causal creative nexus of events is itself God's creative action.

The objects of science are interpreted as mediating God's presence and activity in the world (process thought)

C. Systematic synthesis

Science and religion together produce a comprehensive metaphysical system, a unified worldview.

A. N. Whitehead's process philosophy as an example