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SCIENCE AND FAITH

In this brief survey of the mutual relations of faith and science, Dr Carl Henry stresses the changed attitudes among scientists who now flirt freely with previously forbidden metaphysics.

The topic is "Science and Faith," not "Science or Faith." That is highly appropriate. A century ago not a few scientists were disposed to categorize faith as unpardonable ignorance. Today faith is more widely recognized to be an indispensable element of all human understanding, not excluding that of scientists. Faith is an integral feature of both scientific and religious thought.

In science, faith provides an explanatory principle that supposedly best fits and explains the data. Max Planck spoke of the "imaginative vision and faith" that stimulates the scientist to sponsor new hypotheses. Like Newton, Planck and Einstein were strongly motivated by faith in the orderliness of nature. Other scientists have been motivated by faith in the interconnectedness and symmetry of nature. Moreover, the scientific community assumes what it cannot with absolute certainty demonstrate, namely, that the scientific method is basically sound.

Most also believe that honesty in reporting results is desirable, although in some countries scientists modify or rearrange their results politically.

The biblical view of faith centres, of course, in a personal redemptive relationship to the God and Father of Jesus Christ. But it also takes note of faith in a wider sense. Hebrews 11:1 speaks of faith as "the substance of things hoped for, the conviction of things not seen." Faith is subscription to convictions for which empirical warrants are lacking. What distinguishes blind faith from intelligible faith is that the latter has adequate evidential supports whether such evidence is empirical or trans-empirical. In each case evidence must be appropriate to the object of inquiry. Biblical faith is grounded in the self-revelation of the living God, verified by the prophetic-apostolic witnesses, and tested by the criterion of logical consistency.
Scientific theories are not the result of inductive inference; they are a product of creative imagination. On the basis solely of empirical methodology, the scientist has no legitimate metaphysics at all. The day is long past when science could claim special honour on the ground that it does not traffic in metaphysical concerns. Without some metaphysical assumptions, science can hardly get underway. Some of the most noteworthy advances in modern experimental physics have been engendered by imaginative metaphysical theories.

Scientists often emphasize that they are preserved from postulating imaginary beings like elves or spirits (some would add God also) by the fact that their hypotheses are empirically tested. Scientists a few generations ago spoke confidently of causality, whereas in our day they speak more guardedly only of a sequence of events. A brilliant mathematician like Whitehead spoke of "prehensious" and "neutral entities." Natural selection, gravitational fields, atoms and electrons are among the invisible postulations of science. Whether scientists believe in elves may well depend upon which generation of scientists one asks.

In any event, two things are clear. First, mathematical formulas represent a statistical averaging of a limited range of data. Scientific readings need not represent the way in which nature actually and objectively functions. The scientist does not tell us how nature is objectively constituted, but only what works best for purposes of prediction and control. In short, he is more occupied with what is useful than with what is objectively true. Second, because of the limits of the empirical method, every claim the scientist makes is subject to revision. He must stand ready to alter each and every pronouncement. Such revision is the price of progress in empirical science. Empiricism supplies no bases for fixed and final truth about anything.

Scientists sometimes claim to hold an advantage over theologians in that they deal with empirically observable realities, whereas theology is preoccupied with non-empirical metaphysics. The force of this claim depends, obviously, on an unspoken assumption. That assumption is that metaphysical realities are less significant or less real because they are not empirically observable or verifiable. But I have already emphasized that this empirical limitation does not keep scientists themselves from flirting with all manner of metaphysics. Yet more can be said. One might reply, with equal force, that theology has over the physical sciences the advantage of dealing with invisible spiritual realities. Revealed religion does not flirt with those Homeric gods with which scientist-metaphysicians play touch-and-run from generation to generation. It deals with the one living God known in His self-revelation.
The Christian faith is not the enemy of science but is, in fact, the mother of science. Many philosophers have pointed out the theological and philosophical assumptions which led to the rise of science in the Western world rather than in the Orient. Whitehead singled out, first, the Hebrew-Christian emphasis on a sovereign God of creation, so that all reality was to be explained not by many gods or principles but by a single explanatory principle, and second, the classical Greek emphasis on reason. The Greek view, however, included Plato's notion of the obduracy of matter — its resistance to the eternal forms — and Aristotle's notion of the overpotency of matter so that the forms could not wholly contain it. But Christianity traced the whole of finite reality to one sovereign Mind and Will. We know, of course, that Western science soon came to regard Christianity not as its mother but, rather, as an estranged mother-in-law. Christianity emphasized that God is related to created reality in a variety of ways, including the repetitive and the miraculous. But science was interested in prediction and control, and could not tolerate the unpredictable intrusion of a sovereign Will. In our day many scientists view Christianity not simply as an estranged mother-in-law but as an outlaw.

Christianity teaches that man is, by creation, a creature of faith. He will embrace either the living God or some false god or alternate principle of ultimate explanation or value. The scientific world is full of "Homer gods" although many scientists — some of world prominence — are devout Christians. Christian theology does not debunk or demean science because it can give only an empirical reading of events. Such knowledge has vastly aided our comfort and convenience even if it has not made us wiser or better. There is surely room for a two-tier approach to reality by methods appropriate to particular objectives.

Science can make no claim to depict objectively the course of nature, far less history, and still less the nature of the invisible world. There can be no decisive empirical arbitration of what could have occurred in the past or of what will occur in the future. Neither the biblical miracles nor an eschatological climax of human history are ruled out by science. On the basis of so-called current scientific laws one cannot rule out any particular event in the past or future. In fact, counter-instances or unforeseen exceptions make for progress in science.

The factuality of miracles turns on the adequacy of testimony and evidence, not on observation limited to the present or upon an empirical method which does not deal with the transcendent. To assume that empirical observation is the only method of knowing the real world is merely to assume that all reality is perceivable by the senses. Yet the ancient Hebrews knew that the living God is invisible, immaterial spirit. Only false gods and graven images
fall within the arena of empirical perception. Theology is not
without false gods, but it is not without adequate criteria for
identifying the true God.

[Based on an address recently given by the author at Hong Kong
Baptist College, Hong Kong]

OCCAM'S RAZOR

"There are some people who, brandishing 'Occam's razor' and
fascinated by it, think it right for science to ignore half the
properties of living things because they seem to complicate the
issue; Occam's excellent principle [Entia non multiplicanda
praeter necessitatem] must be used with care and not, as so
often waved in front of us to introduce an entirely false
simplification of the problem" Alister Hardy in I.T. Ramsey (Ed)
Biology and Personality, 1965.