

births must be controlled by nothing less than outright coercion, though hopefully "mutual coercion, mutually agreed upon." A more attractive solution might be the development of such widespread Christian love that each individual would refrain from full use of his procreative ability out of regard for the well-being of his fellow men.

But neither we nor Hardin (although for different reasons) are such optimists as to take this possibility seriously, and we are back to coercion. If we wait too long, this coercion will be imposed without regard to our wishes. We would best get busy on voluntarily relinquishing the freedom to breed.

#### REFERENCE

- 1 Bruce T. Trumbo, *A Matter of Fertility*, *Spectrum* 1, 59-63 (winter 1969).

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## A Physicist and Religion

RAY HEFFERLIN

#### ISSUES IN SCIENCE AND RELIGION

By Ian G. Barbour

Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1966 470 pp \$5.85

This book was written by a professor of physics, who is the chairman of a religion department, as a textbook to be used both in state universities and in theological seminaries.<sup>1</sup> It has four parts: (A) a historical part; (B) a brief summary of relevant religious views in the present century; (C) a section on method, wherein the methods of science, of the humanities, and of religion are portrayed as adjacent colors of a spectrum; and (D) a portion on the religious implications of the theories of science, particularly implications for our view of the role of God in nature.

My interest in this book began long before it was written, during my fourteen years of teaching physics at Southern Missionary College and (during a leave of absence) at the University of Tennessee at Chattanooga. It has been a constant pleasure to feel my students' curiosity — about the ethics of professional science (weapons research, funding of science in parochial schools), cosmology ("big bang" theory, "heat death" of the universe), changes in the stellar universe (slowing of rotation of the earth, novae), the nature of the spiritual world (fourth or other dimension?), to mention a few specifics.

I have also shared the pain of some of these same students who, without the support of sincere, consistent friends of like faith, found themselves unprepared to meet the sophisticated, predominantly irreligious atmosphere of the graduate school. I asked

similar questions while I was in college and had similar pain on arrival at graduate school. Since that time, I have been profoundly influenced by C. S. Lewis, particularly in my attitudes toward prayer, the nature of the spiritual world, determinism, and arguments on the existence of God. It was natural, then, that materials accumulated and began to surface in lecture and invited presentations. Eventually these became the course *Issues in Physical Science and Religion*, a three-semester-hour general-education offering in the physics department.

Barbour's book contributed the title to the course, and the course follows the book closely, but in A, D, B, C order. It is in this same order that some comments about the book follow.

The historical part of the book is generally cautious; for example, the trial of Galileo is quite played down. My students' reaction to the descriptions of the contributions of Hume and Kant often has been, "Why doesn't he criticize or approve?" On the other hand, the evolutionary theory is called a fact, and scriptural interpretation to the contrary is criticized (pp. 83, 96, 99-100).

The last part of the book begins with the admission that this discussion of the theories of science will reach certain conclusions: the universe should not be viewed with naive realism nor naive idealism; the universe does not admit to pure reductionism; the universe is dynamic, a process. In other pages the author concludes that indeterminacy is an intrinsic phenomenon of nature rather than a state of mind or a reflection of present scientific knowledge, and that theology must come from revelation and experience rather than from science (p. 414).

The challenge to reductionism is based, first, on the Pauli exclusion principle (pp. 295-296). The analogy to crystal motions is weak in that it implies that the non-reducible part of the universe is mere boundary conditions. By far the greater challenge to reductionism is Barbour's second one, based on *Life and Mind*. This chapter has a discourse on the nature of man (pp. 361-363) which could well improve some "Bible studies" on the mortality of the soul.

There are only two pages on cosmology (pp. 336-337). Pair creation, relativity, and other topics, unfortunately, are not treated.

The section on methodology shows a keen perception of how various philosophies begin with a commitment: logical positivism (pp. 241-242), Freud's world view (p. 257), and J. Huxley's "evolutionary vision" (later, on p. 413). Then Barbour argues at length (pp. 239-252) that religion is a respectable discipline. The argument includes an interesting page on falsifiability and is followed by an unsuccessful attempt to specify criteria for evaluating religions. He suggests that both one's science and one's religion are evaluated by one's metaphysics. The next question, "How does one evaluate his metaphysics?" is left unasked.<sup>2</sup> Unaccountably the section omits Gödel's immensely important theorem entirely. (This theorem, and others like it, prove the hopelessness of constructing self-consistent closed systems of thought at least as complicated as arithmetic).

There is some risk in presenting such material to the college student, and in asking him, for instance, whether his beliefs are based on rational propositions, and, if so, on which ones. There is often pain — the pain of finding oneself unprepared to meet the sophisticated, predominantly irreligious atmosphere of the graduate school. Here,

however, he has the support of his friends. But there have been some real rewards from these sessions, quite aside from the possible prevention of future pain. Students find themselves able to communicate fearlessly on a level deeper, or perhaps one should say a higher level, than before.

For such a course, *Issues in Science and Religion* is an excellent textbook. Synopses and summaries are numerous. Some subjects, such as linguistic analysis, appear again and again to tie new material together. The documentation is excellent. The major flaw is that the index of selected topics is almost useless. (The table of contents is more useful.) Perhaps a good index can be prepared for a later edition — of which I hope that there will be several.

#### NOTES

- 1 This information was noted in a personal communication from Doctor Barbour December 16, 1968.
- 2 Correspondence with Doctor Barbour yielded no further enlightenment except that of working on a book that "gives more attention to my own viewpoint."

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## Faith Today?

ARTHUR HAUCK

#### THE DILEMMA OF MODERN BELIEF

By Samuel H. Miller

Harper and Row, New York, 1963 109 pp \$3.00

During the height of the God-is-dead dialogue, many a self-styled theological private eye returned from his verbal sleuthing with the pious assertion that, despite the atheistic proclamations, God must still be alive, since no one seemed to have found the body. Some have declared that God has merely disappeared, is hidden, or has been eclipsed.

Miller, the dean of Harvard Divinity School, added a touch of excitement to the rampant speculations by publishing the "killer's" confession replete with the requisite motive:

I suppose, after we get over the first refusal to admit it, that we shall have to confess finally that we killed God. By 'we' I mean most explicitly We Christians. We domesticated God, stripped Him of awe and majesty, trapped Him in nets of ideas, meticulously knotted in a thousand logical crisscrosses, cornered Him ecclesiastically, taught Him our rules, dressed Him in our vanity and trained Him to acknowledge our tricks and bow to our ceremonial expectations.

After some time, it was difficult to see any difference between God and what we believed, what we did, what we said or what we were. God and *our* church, God and