One final comment is in order. This case represents a modern-day example of "possession." It helps us better to understand this often misused and misunderstood word and to appreciate the anxiety, pain, conflict, and anguish that lie behind it. After Christ had exorcised the "demons" from the Gadarene, we are given a picture of a person who had become quiet, contented, and at peace. As a consequence of the "miracle" of her cure, Sybil presented a similar picture.

102

Aspects of Science and Religion

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THE HUMAN QUEST By Richard H. Bube Waco, Texas: Word Books 1971 262 pp \$5.95

I dragged my feet on reading *The Human Quest*, because I had been turned off by the boisterous style of Richard Bube's frequent contributions to the *Journal of the American Scientific Affiliation*, and by the suspicion that this book would prove to be about social problems — which I do not enjoy *reading* about. As it turned out, Bube's style is rather subdued, and the discussion of "social implications" occupies only the tenth (last) chapter of the book.

Actually, the book is on the science-philosophy-religion interface, like *Issues in Science* and Religion by Ian G. Barbour (reviewed in Autumn 1969 SPECTRUM).¹ Both books present a concise history (Bube chapter two), devote several chapters to comparisons of the methods of science and religion (chapters three to five), deal with classical concepts of causation and classical proofs of the existence of God, explore inferences from quantum mechanics and cosmology, defend evolution (chapter nine), and are well organized. Both reject the "immortality of the soul" (pp. 146-149). Both espouse critical realism; both take pains to stress that there are no "uninterpreted facts" (pp. 57, 78, 140). Although Barbour did not conclude his book with a social problems chapter, later he did publish on the subject elsewhere.²

The Human Quest is very well written; it has good footnotes and an adequate index. Provocative questions follow each chapter and would be advantageous if the book were used in a Christian college or a state university classroom. Non-Christians would find only a couple of places objectionable. One theme worth noting is the author's concept that understanding can and must take place at various levels. According to my limited knowledge, and according to the writer of the foreword, this is a *new contribution to epistemology*. For example, the sentence "I love you" can be exhaustively described as a specific combination of (a) alphabetical letters, (b)letter sounds, (c) words, or (d) grammar; it can be evaluated in terms of (e) the context in which it was said or (f) the ultimate content. The elements of levels, b, c, and d are produced by the combination or interaction of the elements of the levels "below."

This concept is the basis of the author's ontology (FIGURE 3, chapter seven). Reality is a series of levels: nonmaterial (energy, and $E=mc^2$); nonliving material (particles, atoms, molecules, nonliving matter); simple life (cells); nonhuman living (plants, animals); human (man, society); and ultimate (God). The elements of any level except the highest one are produced by the combination or interaction of the elements of the levels below. This combination or interaction is opposed to the "vital force" (something from outside added to nonliving matter to make life) sort of explanation, but it is *not* simply reductive. What the author has in mind is a systems approach: elements of some of the lower level, when placed in correct relationship, produce something more in a higher level — something that is *not* an illusion. Bube uses this systems concept to dispose of popular notions that there is a distinct boundary between living and nonliving, between having a soul and not having a soul, between thinking and not thinking (cf. "Can computers think?"). This ontology is similar to that of Teilhard de Chardin's. (However, Bube judges Teilhard's Christian evolutionism destructive, because it gives mankind a false hope.)

A somewhat different aspect of the concept is illustrated by another clever example: the difference in understanding of *Gulliver's Travels* obtained by a child and by an adult sociologist. The child's understanding is just as correct as that of the sociologist's and just as necessary for a complete description of the book. Still another example: what is a cow? Only a Christian knows fully why the cow acts the way it does, because the Christian can add to correct bovine physiology and psychology the equally correct knowledge of God's purpose for the existence of the cow.

This aspect of Bube's dimensional epistemology seems to me to parallel the ancient concept that any event could be exhaustively described only when each of six causes was stated: (a) the efficient cause, which is the domain of science (the cow eats because its blood sugar is low, triggering certain muscular actions); (b) the teleological, future or final, cause (p. 119), which is recognized by Bube as valid (the cow eats to produce milk for mankind); (c) the vital cause, also recognized by the strongly theistic author (the cow's eating is a manifestation of the constant preserving power of God); (d) the formal or innate cause (cows just naturally eat); (e) the material or passive cause (the cow exists; it wouldn't eat if it didn't exist); (f) the cosmological or prime cause (the cow eats because of creation; i.e., if the universe had not been created the cow would not eat).

I have found this ancient concept *very* useful in analyzing arguments about bootlegging (prohibition was not the *only* cause), bird songs (territorial disputes are not the *only* reason), and highway deaths (poor railroad crossings are not the *only* explanation). On a grander scale it has helped in thinking about the causes of sin (there was no reason — *efficient* cause — for its existence) and the factors leading to Christ's death (deterrent, atonement for sin, example, anger of people at his life, etc.).

Ι

The author uses this second aspect of his dimensional epistemology to defend his theism (which allows for miracles) and to fight off behavioristic views of the nature of man. Bube agrees with Schaeffer³ that behaviorism has helped to drive mankind over the line of despair into irrational types of belief (pp. 129, 135, 218). To counter it, Bube says that, though he may be a complex machine, man is not *only* a complex machine (pp. 134, 110-114, 151-152); conversion may be a psychological event, but it is not *only* a psychological event. He puts it this way: "Science has no *onlys.*"

In a third aspect of his many-level-description concept, Bube embraces the Copenhagen interpretation of quantum mechanics: the duality of waves and particles and the uncertainty principle are generalized into the principle of complementarity (chapter eight). The principle of complementarity is then applied by analogy to attack the problem of individual free will versus physical or social determinism, and the paradox of freedom versus God's foreknowledge.

The concept of description on many levels seems to be the book's major new theme as compared with Bube's earlier contributions in *The Encounter between Christianity and Science*⁴ (reviewed in Spring 1972 SPECTRUM).

Π

The second theme of interest to SPECTRUM readers is inevitably the treatment of the history of the earth (chapter nine), since Bube is well known for his writing on behalf of special and general evolution.

The sins of earlier attackers of evolution are reviewed: failing to distinguish between microevolution, the general theory, and evolutionary philosophies; attributing the ills of the world to evolutionary thinking; focusing on a few contradictions instead of appreciating the overall picture; and, on the hint of a counterattack, retreating into versions of the Flood, with convenient miracles.

The *challenges* to evolution by more contemporary flood geology are dealt with summarily: evolutionists use circular reasoning; they do not allow for floods and other catastrophes; they have resurrected "spontaneous generation;" they ignore the second law of thermodynamics; and they still have no explanation for "missing links."

III

For insight as to the basis for this strong position, note criticism of earlier traditional interpretation of the Bible to date Creation at *precisely* 4004 B.C. Read that hyperconservative Christians and non-Christian scientists both erroneously insist that the Bible be read literally. Recognize that Bube avoids such problems by interpreting the early chapters of Genesis to be a sequentially correct description of the exercise of God's power in the evolution of life forms here on earth. He pictures Genesis as a "prophecy of the past" in which numerical relationships are of uncertain interpretation and of no importance. Here he follows the strong current of thought among scientists-turned-writers (e.g., Reid, van der Ziel, etc.⁵).

The Human Quest eloquently defends Creation (pp. 192-208) but does not attach it to any specific time — not to 4004 B.C., not to the time when man first was given a soul, not to 4.5 billion years ago, not even to the time of the "big bang." This complete dissociation of Creation and the events studied by science is supported by the observation that God could have created at *any* time — say fifteen minutes ago — and we would never know the dif-

104

ference. Bube might even agree that some *part* of the universe might have been created a few minutes, or years, or millenniums ago, and we would never know the difference. Furthermore, science really doesn't *care*. It makes no difference to science if the universe or some part of it has been here for eons or if it just looks that way. (Seventh-day Adventists should not construe this in support of a recent, 'mature'' creation and flood (p. 189), because ''physical data for a universal flood are simply not found.'') Bube is shelving the Genesis record and the scientific studies of the origins of the earth on two different *levels*.

A mother tells her little girl about the "facts of life." Years later she tells the same girl, now a teenager, quite a different thing. The first explanation, which dealt primarily with two people liking each other very much, was just as necessary a part of the complete description of sex as was the second explanation. This is an analogy to the Genesis and science stories (pp. 122-123). Incidentally, the analogy presents Bube's case that technical data in a higher-level, value-oriented explanation are to be ignored (in this case, the baby is "in mama's tummy").⁶

One may inquire on what basis Bube accepts the Bible, if he dissociates what it says from specific data. Bube ignores technical data in the Bible only when the persons who wrote were not witnesses to the events (on-the-spot witnesses). When it comes to archaeology and history, he does not ignore the data. In fact, his Christian faith is based on (a) archaeological support of biblical-historical events and on (b) personal experience (p. 95). The events include the lives of the historical Jesus and of the Apostles (pp. 91-92, 120). Bube says, "If Jesus of Nazareth, called the Christ, did not rise from the dead at a particular time in history, at a particular place in history, the claims and promises of the Christian faith are worthless."

I wonder how Bube would react (cf. p. 121) to learning of Josiah Litch's prediction (based on numerical data in Revelation 9) that the Ottoman Empire would be humiliated in 1840.⁷ I wonder how he would react to finding out about the rapidly improving scholarship associated with the Creation-Flood model, where both narrow and broad problems are being attacked with more and more sophisticated techniques.

Would such opportunities lead him to change his hermeneutics? Would they enable him to have *increased* confidence in the Bible? Would they open to him an even greater witness for the Christ?

REFERENCES AND NOTE

1/ Ian G. Barbour, Issues in Science and Religion (Englewood Cliffs, New Jersey: Prentice-Hall Incorporated 1966).

2/ Ian G. Barbour, An ecological ethic, Christian Century 87:1170 (October 1970).

3/ Francis A. Schaeffer, *Escape from Reason* (Downers Grove, Illinois: Inter-Varsity Press 1968).

Schaeffer, *The God W ho Is There* (Downers Grove, Illinois: Inter-Varsity Press 1968).

4/ Richard H. Bube, *The Encounter between Christianity and Science* (Grand Rapids, Michigan: William B. Eerdmans Publishing Company 1968). 5/ James Reid, *God, the Atom, and the Universe* (Grand Rapids, Michigan: Zondervan Publishing House 1968).

Aldert van der Ziel, Genesis and Scientific Inquiry (Minneapolis: Denison Publishing Company 1965).

6/ I am indebted to Gerhard F. Hasel of Andrews University for a discussion on this point.

7/ Ellen G. White, *The Great Controversy* (Mountain View, California: Pacific Press Publishing Association 1950), pp. 334-335.

105