COMMENT:

"Science and Religion"

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In an eminently fair and constructive spirit, Ortner identifies the central problem in the dialogue between science and religion as a difference in thought processes, in methods of dealing with evidence, and in the communication of ideas. He suggests that to make the dialogue more productive we must achieve a working consensus on the methodological aspects before we attempt to deal with the substantive issues. His suggestions deserve thoughtful consideration.

In any serious dialogue a consensus on methodology is logically prerequisite to dealing effectively with the issues themselves. Without prior consensus on hermeneutics, dialogue can be frustrating and unproductive. It may be that the procedural differences to which Ortner addresses himself do not result so much from any inherent disparity between science and religion as from differences between minds that are prepared to deal objectively with complex problems and minds that are not. There is more similarity than dissimilarity between sound theological reasoning and sound scientific reasoning.

A MATURE FAITH

Under the aegis of the Holy Spirit, faith and reason are altogether compatible. The person whose primary concern in dialogue is to defend what he already assumes to be true, rather than to apprehend truth, does not have the frame of mind to recognize truth even when it is within his grasp. Sensing a threat to the security of his faith at what may seem a vulnerable point, he is not disposed to evaluate the evidence objectively. Accordingly, those who aspire to participate in the dialogue between science and religion should first possess a mature faith that can calmly consider any problem, however perplexing it may be. A sincere, positive desire for truth and a willingness to accept whatever truth may be found are prerequisite to any successful quest for truth. Mature faith is not blind, nor is it fearful in the face of the direst threats of men or devils.

At the point where science, a priori, sets up a purely mechanistic cosmogony of the universe and prescinds from everything that cannot be subjected to sensory and rational investigation, the ways of science and religion inevitably part. Only the extrasensory perceptive capacity of faith is sensitive to supernatural realities. He who, as an a priori postulate, rules faith out of the universe will conclude that God does not exist. By his unwillingness even to examine the evidence about God in an objective frame of mind, he contravenes the very scientific criteria in whose name he takes this supposedly scientific stance. In this he is more narrowminded than the man of mature faith who, as a result of "blind faith" in his a priori assumption that there is no God, is disposed to examine all of the evidence fairly. Granted, "the complexity of nature does not prove the existence of God, unless one assumes his existence to begin with." On the other hand, it does not prove the nonexistence of God, unless one assumes his nonexistence to begin with. Faith is required either way, and I protest that there is adequate ground for faith in God, apart from that which may be deduced from a sensory investigation of the natural universe.

The degree to which a person is able to conceive of "a God who established general laws involving the relationships between matter" is one measure of the maturity of his faith and reason. This does not rule out that "God's involvement is direct, personal, and tangible" on occasion, but simply affirms both that a mature concept of God recognizes the economy of miracle and that God is honored by a universe and by rational beings that do not require his constant tinkering in order to keep in running order.

Ortner notes that science discourages "blind faith." But so does theology — or at least it should. Blind faith can be equally misleading in a study of the Bible or of science. To be sure, blind faith is preferable to no faith at all, but it is inherently weak and defenseless. A mature faith, with its eyes open to all of the facts and their involvements, is viable and secure.

A MATURE MIND

A mature mind, as well as a mature faith, is essential to participation in purposeful dialogue between science and religion — a mind that understands itself, its thought processes, its own finite and personal limitations. Anchored to ultimate realities by faith, a mature mind will be disposed to

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examine any and all evidence objectively, and to modify preconceptions to comport with whatever proves to be truth. Mature faith agrees that "there is always a residual possibility of being wrong," without in any way compromising faith itself. Accordingly, it will reserve the right to acknowledge that it has been mistaken at this point or that. This is not to consign faith to a permanent state of uncertainty, but to recognize one's finite limitations and to be willing to shed one's low-vaulted past from time to time in order to build more stately mansions of understanding, appropriate to the ultimate truth to which mature reason yields absolute allegiance, as mature faith does to its Author.

To be sure, "traditional Christianity" phrases its concepts in what seem to be "absolute statements." By its very nature, revealed truth is as nearly absolute as anything within the realm of the finite can be. A mature Christian, however, recognizes that even these absolute declarations are probably not irreformable statements of ultimate reality, but are accommodations of that reality to the limited comprehension of finite minds. A residual margin of error in our finite understanding of even revealed truth is always possible.

The simplistic mentality that is content to dismiss a problem with the end-all argument that "God did it" or "Satan did it" is not ready to enter into rational dialogue. Some minds operate on a very literalistic level; others are able to function effectively on the level of abstractions. Some minds apparently were not endowed with the capacity — or perhaps never cultivated the willingness — to recognize and evaluate evidence and to reason through to logical conclusions. Those whose minds are better informed are obligated to be patient with the less well informed, to respect their needs and rights to be as they are, and to recognize that this frame of mind may not be susceptible to significant modification. We must live at peace with all men — respecting them as God's children and accepting them as fellow pilgrims in quest of eternity — even though we may not be able to see everything through their eyes.

THE "BELIEF SYSTEM"

The Christian "belief system" — to use Ortner's apt phrase — can hardly avoid being "absolute and unchanging" with respect to those ultimate realities that constitute its essence. However, human apprehension of ultimate reality is always incomplete and imperfect. A mature faith will hold unflinchingly to those ultimate realities and yet will be fully aware of the fact that its understanding of them is inherently finite, thus incomplete and imperfect. In its awareness of these limitations, a mature faith will be ready to exchange preconceptions for truth and will not be embarrassed to acknowledge its flaws. A person who is least informed on a subject is often the most dogmatic in his concept of it; the more he learns, the more cautious he becomes. His adamant, dogmatic attitude reveals an immature mind seeking security. A well-informed person of mature faith does not need to be dogmatic in order to feel secure. In other words, a tendency to speak dogmatically is characteristic of immature intellectuality and immature faith.

Although it appeals to reason, and a man is free to accept or reject it, revelation is inherently authoritarian, inasmuch as it is extrinsic to human experience. How could it be otherwise as long as God is infinite and man is finite? Religion is concerned with absolutes that are not subject to direct sensory observation and rational evaluation, whereas science prescinds from data that are not subject to such evaluation. It is desirable to maintain absolute faith in the ultimate realities about God, but too often this faith is a relatively blind faith in one's *opinions about* God and truth. Finite grasp of truth will always be relative, incomplete, imperfect. It is possible to have absolute faith in God and in his revealed Word without concluding that one's concepts of God and his Word are flawless. These observations, coupled with the agape principle, lead to the conclusion that, in the quest for truth, it is ever appropriate to maintain an attitude of humility and to regard with respect and confidence others who are engaged in the same quest, even when their perspective of truth differs considerably from our own.

DISCRIMINATION BETWEEN FACT AND FICTION

Ortner observes that "probably no ability is more important in a scientist than the ability to view existing knowledge critically." This is just another way of saying that it is important to discriminate meticulously between fact and fiction. Is this frame of mind less important in our study of revelation than in our observation of natural phenomena? Ortner uses the word "critical," not in the negative sense, but in the positive sense of searching for facts, for reality, for truth — of unwillingness to be misled by the phantom of preconceived opinion or the mirage conjured up by such intellectual hocus-pocus as biased selection of data or the use of non sequiturs.

FACTS VERSUS INTERPRETATION

In both science and religion it is vital to distinguish between the facts and one's interpretation of the facts, inasmuch as the two may not always be identical. Science-related problems arise not so much from the seemingly disparate data of reason and faith as from faulty interpretation of the available data. It is not ultimate truth about the natural world that troubles us, but our limited understanding of it. God is the Author of both, and we assume that what he says to us through the natural world comports with what he says to us through his revealed Word. Otherwise the natural world would confront the Bible-believing Christian with an unsolvable paradox. The scientist may not have all the facts or an accurate understanding of what he accepts as fact; but it is equally possible for the theologian to have an incomplete or inaccurate understanding of the revealed Word.

One has only to remember the supposedly Bible-based, earth-centered attitude of the Church toward Galileo, or Darwin's mistaken understanding of the phrase "after his kind" in Genesis 1, to realize that a misinterpretation of the data of revelation can be just as fatal (both to faith in the revealed Word and to truth about the natural world) as a misinterpretation of the data of science can be. It was on the basis of such mistaken notions as that the biblical expression "four corners of the earth" required a flat earth, or that the sun standing still for Joshua implied a stationary earth, that the Church condemned Copernicus and Galileo. But, in time, facts concerning the natural universe overcame the incubus of these and other misconceptions, and it was in no small part because of such notions that the rationalism of the next two centuries drove God from the minds of men if not from the universe. Would the course of history perhaps have been different if the Church had not been so dogmatic in its erroneous interpretation of Scripture?

Darwin had been educated as a theologian and, presumably, was somewhat versed in the contemporary biblical interpretation. As a matter of fact, it was only with reluctance that he abandoned the biblical account of the origin of life, but he evidently did so on the basis of his untenable interpretation of the Genesis expression "after his kind," in the light of the observed phenomena of the natural world. What if he had had a correct understanding of this phrase and perhaps other statements of Scripture? Would he have spawned the theory of evolution, and would modern science have irrevocably pitted itself against the revealed Word?

Likewise, misconceptions as to what the Bible actually says may become, for us, roadblocks as hazardous to our dialogue between science and religion as are the misconceptions of evolution with respect to the observed phenomena of the natural world. There is danger in misreading the Bible, and thereby being diverted, as there is in misreading the fossil record. We would be naive and conceited to suppose that only Darwin and churchmen of Galileo's time were in danger of misinterpreting Scripture. Ortner summarizes his father's estimate of the problem thus: "There is no conflict between religion and *true science*. The only problem that arises is between religion and science falsely so called." With equal logic, yet with no desire to be facetious, we might rephrase this observation to read: "There is no conflict between science and *true religion*. The only problem that arises is between science and religion falsely so called."

THE BOUNDS OF SPECIALIZATION

A wise man will avoid making dogmatic statements on any subject scientific, theological, or other — that is outside his limited area of education and experience. This applies with equal force to a scientist presuming to operate in the realm of exegesis as to a theologian in the realm of science. In this age of specialization we are more dependent than was any past generation on others who specialize in areas for which we have had neither time nor opportunity to investigate. We are bound by our personal limitations to respect the insight and judgment of men of integrity who are specialists in such areas. The theologian will say a hearty *amen* to the scientist's plea for caution about making statements on subjects outside one's area of specialty. Nor should the scientist forget that the same rule applies to him when he essays to evaluate the revealed Word.

Writers and editors can properly heed Ortner's admonition to keep uninformed or outdated statements on scientific matters from getting into print. Experienced editors constantly endeavor to avoid this trap. Often they consult persons whom they consider competent in this field or that. Evidently, however, there is still room for improvement. Editors are bound by deadlines and by other practical realities of publishing; and in their endeavor to achieve a balance between the ideal and the possible, they may, and do, make mistakes at times. The best that anyone — including editors — can sometimes do is to aim for perfection and occasionally settle for a high batting average. But alas — while the errors of others may be buried and forgotten, the editor's mistakes are published for all to see!

FORMULATION AND TESTING OF HYPOTHESES

Ortner rightly considers valid hypothesis-formulation and hypothesistesting to be vital. The role of hypotheses in advancing the frontiers of knowledge is well established. But here we encounter two equal and opposite errors. To elevate a hypothesis to the status of proved truth before it is adequately tested violates the elementary requirements of the hypothesisbuilding code. Generalization on the basis of inadequate data is a cardinal intellectual sin. To treat evidence fairly, one must not attribute to a hypothesis a higher degree of validity than the evidence warrants, lest the entire edifice collapse under a load it is not able to support. On one hand, a person will not gullibly accept a hypothesis as fact until it is so proved; on the other hand, he will not reject a hypothesis without fair examination. To reject a hypothesis on a priori grounds is no more intellectually respectable than to accept it on such grounds. Faith can always afford to be fair with the evidence.

A MATURE ATTITUDE TOWARD INSPIRATION

Ortner observes that some look on "a religious writer" as either "correct in every statement" or "unworthy of consideration at all." An informed concept of inspiration recognizes the presence of both human and divine elements. Problems that arise in this area are usually the result of an a priori concept of what inspiration is and how it ought to operate. A mature concept of inspiration is an inductive one based on a careful study of what inspiration says about itself and of how it has operated to bring God's message to us. A mature concept accepts inspiration as it actually is rather than as we may theorize that it ought to be. This attitude recognizes the full inspiration and authority that the Holy Spirit sought to convey; it also recognizes its own limitations and its obligation to be guided by the principles of truth thus revealed. Any depreciation of an inspired statement with a view to evading truth or duty is inherently self-deceiving and self-defeating.

WHERE DO WE GO FROM HERE?

Ortner concludes by restating the main point of his paper — the need for serious attention to "the basic differences that can compound existing misunderstandings." Thus far in the science-religion dialogue we have concerned ourselves primarily with "the explicit challenges created by rapidly expanding scientific knowledge." It is to be hoped that Ortner's suggestions will receive the attention they deserve from all who are involved in the dialogue currently in progress.

I would like to summarize with four suggestions that, in my estimation, would go far toward resolving the questions of dialogue between science and religion:

1. Let us be *honest with ourselves and fair with all the evidence* — on both sides of the debate. Let us acknowledge that we do not have all of the answers yet, either in the area of faith or in that of reason. To acknowledge these problems is not to deny faith, as long as we operate within the context of faith and the a priori conviction that there are viable answers acceptable to both reason and faith.

Those of us who approach problems in the area of science and religion from the perspective of religion could not agree more with the concepts Ortner expresses in his final section on church responsibility. Several times Ellen White commended what he refers to as "an open and honest appraisal and review of any issue." We heartily concur with the idea of "openness of discussion between science and religion." Nothing is to be lost by facing these problems; much may be lost by a refusal to do so.

2. We need a higher degree of *interdisciplinary respect and confidence* than now exists between experts in science and in religion. Each needs to listen to the other with respect for, and confidence in, his personal integrity and good will. And, as Ortner points out, each should recognize his own limitations and the professional competence of others. Little progress can be expected in our dialogue unless there is a priori confidence (as well as a basis for that confidence) in the personal integrity of other dialogue participants — a belief that they are sincere, that they will approach problems objectively, that they mean well.

3. We need a much higher degree of *interdisciplinary cooperation* between science and theology than has heretofore prevailed. To date, this cooperation has been nominal at best. Without a significantly higher level of cooperation, it is doubtful that we can expect further significant progress. Dialogue cannot be conducted on an intermittent, uncoordinated, random basis. It requires the concerted application of the best that theology and science can offer.

4. We need to develop an *interdisciplinary methodology* to help coordinate our diverse ways of thinking, our diverse procedures for dealing with evidence, and our communication of ideas to minds of different background, preparation, and experience. The theologian and the scientist each need valid hermeneutics — one for dealing with matters of faith and revelation, the other for dealing with scientific data. Hermeneutics adequate to meet the needs of both can be formed from a careful synthesis of the two.

The key feature of the methodology I propose is to list all of the viable options that both science and revelation have to offer and then to select, tentatively, that pair of options that comport most closely with each other. On one hand, the scientist will avoid the temptation to assume, a priori, that his particular interpretation of data from the natural world is absolute and that inspired statements must conform to that particular interpretation, without first considering the possible validity of alternate interpretations of the observed data. On the other hand, the theologian will avoid the temptation to assume, a priori, that his particular interpretation of the inspired Word is necessarily absolute and that the observed phenomena of the natural world must yield to his particular interpretation, without first considering the possible validity of alternate interpretations of the inspired Word. Only thus will it be possible to deal fairly with all of the evidence — and to arrive at truth. On the basis of such a procedure, it should be possible to build a model that reconciles the seemingly disparate data of the natural world with that of the revealed Word.

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