DOES SCIENCE CLARIFY GOD'S RELATION TO THE WORLD?

by James S. Nelson

Abstract. Central to the work of Arthur Peacocke on science and religion is the intention to develop a reasonable faith within an intelligible framework of meaning. Showing the inadequacy of reductionism is necessary for this purpose. Knowledge of God is related to what science can tell us about creation. From an evolutionary framework, characterized as a delicate balance that issued in humans, and manifested through contingency and chance, God's actions are expressed as exploring the potentialities of creation. The creation is understood to be in God, but God is more than the world, as in panentheism. God suffers with the creation in love, and the focus of human meaning is expressed in Jesus Christ, the Incarnation, the sacrament of God.

Keywords: anthropic principle; contingency and chance; evolutionary framework; Incarnation; panentheism; reductionism; sacrament.

There are many ways to construct a Christian theology for the contemporary situation, but any such theology should be informed by the best thinking of the time. For Arthur Peacocke, religious statements should be informed by scientific knowledge so as to establish "a reasonable faith that would be plausible and believable in a cultural world dominated by the sciences" (1991, 487). Similarly, Peacocke aims to judge the affirmations of religion by reason, based on experience, because we confront the question of God and construct models of God according to the world as we know it. Peacocke sees the experience of God as the primary source of revelation, and theology as the rational interpretation of this revelation; and what can be known through science is crucial for this interpretation.

Peacocke's thought is set within an English theological tradition that values reason and experience as important bases for theology.

James S. Nelson is Associate Professor of Religion and Philosophy, North Park College, 3225 West Foster Avenue, Chicago, IL 60625.

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However, he does not thereby provide a developed epistemology that allows identification of value connections between these disciplines, nor is the notion of religious experience developed enough to give evidential support to claims about God. These issues are highly philosophical, but they are foundational to any examination of the interaction between science and religion.

Anyone who takes both science and spiritual reality seriously must face the issue of reductionism—that is, whether knowledge claimed by one reality can be explained by, and reduced to, a reality below it in a hierarchical structure. Can sociological knowledge be explained by biology, or can biology be reduced to chemistry and physics? This issue has long been central to Peacocke's thought. In "From DNA to DEAN" he asks: "Are we nothing but DNA's way of making more DNA? Or are we, on the other hand, *persons*—centers of self-consciousness, communicating by words and symbols our thoughts and feelings and intuitions, all of which are as real as DNA?" (1991, 477). For Peacocke, reality comprises hierarchical levels of complexity, each to be interpreted and explained by methods and concepts appropriate to it. What is real at the atomic level is not more real than a social or personal reality.

Such an approach seems not only attractive but necessary for an endeavor that takes theology seriously and as scientifically and philosophically correct. But the ontological justification for the approach is still to be analyzed. Questions need to be asked about how the methods and concepts of various realities refer to what is known, and how they establish and verify the claim to be true. What Peacocke says about these issues of reductionism is often illuminating, but his answers to these questions too often lack justification.

Central to the problem of relating science and religion is a framework of understanding distinctive to the scientific worldview: that the world has undergone a process of evolution. Because this process is seen as continuous, only natural causes are believed necessary to explain what has happened in the past.

For the theologian, however, "science sharpens the question, What kind of universe is it that the original fluctuation in a quantum field, the primeval mass of baryons and quarks and neutrinos and light quanta, could over aeons of time, by their own in-built potentiality and form, develop into human beings who espouse values (e.g., truth, beauty, goodness) and could become a Mozart, an Einstein—or Jesus of Nazareth?" (1991, 491). Built into the potentialities of creation are those qualities and characteristics that have evolved into what we currently know of this world; and what the process has produced in the human points to the meaning that the

evolutionary process has had all along, as it has come from the hand of God. Humanity's relationship to the universe is close and intimate, so that what we know ourselves to be—persons of conscious purpose who seeek meaning and intelligibility—bespeaks a universe that is, in fact, a meaning-producing world. In other words, creation and evolution issue from a God who at the beginning instilled potentialities that unfolded, by the process of evolution, into the reality humanity experiences as its existence—and into the entire cosmos.

Ingrained in the physical laws of the universe are the very delicate parameters that appear necessary to an environment that could allow humans to evolve. Thus they point to a so-called anthropic principle, whereby the balances of forces of this creation are precisely those that make possible the existence of self-conscious beings who have purposes and seek meaning.

In counterbalance to this principle, however, is the contingent nature of a universe that is characterized by chance processes. Its exact nature is the result of so many factors that regular prediction of an outcome is impossible. "Therefore, the full gamut of the potentialities of living matter could only be explored" (Peacocke 1984, 70). For Peacocke, the role of chance is to elicit all the possibilities in the inherent stuff of the universe so that a creative "ringing" of possibilities may be evoked. Thus chance is necessary for the creativity of the process, as random events open the evolution of the universe to the unique and novel. This view of an open, flexible universe is different from the closed, mechanistic view of reality based on earlier science.

In characterizing the world process as anthropic and contingent, Peacocke, who intends to throw new light on the nature of God in relation to the world, expresses his intent as follows: "So the concept of God as the deterministic Law-Giver prescribing all in advance seems inadequate and even false, and we begin to search for metaphors associated rather with probing experimentation, exploration, and improvisation, as representing more appropriately what God is up to in his continuous creative activity" (1984, 65). From this framework, Peacocke describes God's activity in the world by a striking metaphor: "Chance is the search radar of God, sweeping through all the possible targets available to its probing" (1984, 71).

At this point, Peacocke has described something about how science understands the process of the universe, characterized as contingent, open-ended, flexible, and given to chance events. This knowledge is then used to claim that God is related to the events in the universe. However, an explanation that accommodates both scientific knowledge and knowledge of how God is able to act is lacking. It is not that

the *causal joint* (to use Austin Farrar's term) between God and the world is to be specified. At stake is the meaning and intelligibility of divine activity in creation. There is no doubt that, for Peacocke, not only does God sustain the world, but events in the world express and reveal the divine intention. What is not clear is how particular God's actions are and whether his position allows for what used to be called *special providence.*

To give meaning to divine activity, Peacocke develops the analogy of the mind's relation to the brain/body. He rejects a dualist view of mind/body in favor of an identitist theory that sees mind—at least enough mind to be self-conscious—as an emergent of the brain complex. I experience myself as an agent of my actions, but not in such a way that I am another thing, a mind, alongside my body. I am my body in action, expressing intentions and meaning. I am a person in and through my body, and experience and express myself in action in my brain/body unity, though, by my experience, I am more than my body. Thus there is a transcendent dimension to my existence, which is not understood dualistically, so that the self that is experienced does not intervene into the body/brain. If God's relation to the world is understood by such a model, God acts in and through the processes of the universe but transcends it, while not intervening in the lawlike structures of creation, as the mind does not intervene with the brain.

In Peacocke's recent thinking on this issue, in *Theology for a Scientific Age* (1990, chap. 9), the notion of "top-down" or "downward" causation is effectively used to show how, based on an analogy from certain scientific evidence, God can be conceived as acting in the world by affecting it as a whole in a top-down manner. Although Peacocke's discussion of this matter is extremely valuable, he could strengthen his case in at least two ways: (1) he could develop the implications of recent work on mental phenomena within cognitive psychology, and (2) he could develop the ontological implications of the claim of top-down causation not only for scientific knowledge, but extrapolated to spiritual concepts. In this way Peacocke's antireductionism, having been more richly elaborated, would also be more convincing, especially in regard to the crucial question of God's special activity.

Peacocke affirms God's unique transcendence; he sees God, the all-embracing reality, as distinct from the world. God's "otherness" is fundamental to the divine reality in the ultimate incomprehensibility of being. But God is also immanent—that is, *in* the world, sustaining and acting in it, and expressing the divine nature through the creation. Peacocke uses the term *panentheism* to balance the transcendence

and immanence of God, so that the world is in God but God is more than the world. *Panentheism* is defined as "the belief that the Being of God includes and penetrates the whole universe, so that every part of it exists in him, but that his Being is more than, and not exhausted by, the universe" (1984, 64). This is a very attractive model for relating God and the world.

A major question for panentheism is the following: How close and in what way should God and the world be brought together? To say that God is in the world and sustains it is one thing and is surely an affirmation of traditional Christian theology, but to say that the world is *in* God, in a sense that goes beyond the former affirmation, may tie the world too closely to God. The issue therefore is this: Does panentheism really make the world a part of God, so that the divine life is vulnerable to the events in the universe? If this is so, the divine being and power are put at risk in a way not similar to the costly love manifested in Jesus Christ. It was to protect the ultimacy of God from such improper vulnerability that the ancient doctrine of the impassibility of God was affirmed.

It is not my purpose to defend such a venerable doctrine, but rather to be clear about the assertion that the world is in God. What might this assertion imply, and does it do justice to the concept of God's transcendence? Peacocke's use of the idea of panentheism is richly suggestive, but he needs to show what he means by it and how the various critiques of panentheism can be addressed.

Insight into these issues comes from characterizing the process of creation as science discloses it. The open-ended character of biological evolution, its unpredictability and creativity, its randomness and trial-and-error exploration of possibilities indicate that, as consciousness arises, so also do pain, suffering, and struggle arise. Peacocke draws this conclusion: "If we were right tentatively to see God, as it were, exploring in creation, exploiting opportunities, then we begin to get here a hint of an involvement by God in his creation that involves putting his purposes at risk—an involvement that, in a human context, might be described as suffering (1984, 67). Death and life are in a necessary balance for the continued emergence of life. If we add to this the sensitivity to pain that is a part of self-conscious life, and the impersonality of the physical laws of the universe, it becomes inevitable that natural evil, or pain and suffering, will be part of the appearance and growth of the human creation.

Again, for Peacocke this means that God suffers in and with the creation as part of the very being of divine life. Part of the divine suffering issues from the freedom of the human to do evil, so that God

is put at risk in creation because of the creativity of love. Congruent with the process of creation characterized by suffering and risk is the model of God that Peacocke favors: a Creator who, through participation in and with creation, incurs possibilities of life and death, fulfillment and woe, that strike at the heart of both humanity and God. Here we see how rich the possibilities for relating science and religion can be for developing an understanding of God, and how symbiotic the knowledge derived from science can be in relation to theological construction.

The transcendence-in-immanence of the creator God we have been describing from the work of Arthur Peacocke finds a corresponding likeness in the transcendence of human self-identity immanent in a physical body. The meaning God intends to express is immanent in creation and preeminent in the discernment and expression of meaning in the human. In our world, however, can we look to a meaning, expressed through humanity, that is adequate to God's purpose and unveils the light of the divine life in an emergent mode that is unique for manifesting God's meanings and intentions?

Such an expression of God's meaning is embodied in the Incarnation, the unity of God's spirit with the human person of Jesus Christ. Peacocke sets forth his understanding of Jesus Christ in his Bampton Lectures, published as *Creation and the World of Science* (1979), in a chapter ("Evolved Man and God Incarnate") that deserves more attention than it has received from theologians:

> In Jesus Christ, man comes to know of his capacity for sharing in the life of God as self-offering creative love and the meaning and intelligibility of the existence that God intends for him. In Jesus, then, there is revealed what God has all the time been doing and intending for man and so man is, because of this, now able freely and consciously to respond to God and to participate with God in his continuous creative work (252–53).

It is in union with Jesus Christ that God suffers with creation and that love overcomes evil. Though evil is yet a mystery, we see in Jesus Christ how it is overcome, and so also for Peacocke, who quotes from Dante's *Paradiso:* "My will and my desire were turned by love / The love that moves the sun and other stars."

Jesus Christ is thus the sacrament of God, the effective presence of the divine in and through the physical stuff of the universe, come to self-conscious expression in a human being. Christ as the sacrament of God's presence is in continuity with the creative process of evolution described by science, as new, emergent forms arise in a *"creatio continua."* For Peacocke, the sacramental unites the physical and the spiritual, to mediate God. It is for this reason that scientific knowledge of creation is essential for knowing what God is up to in

the world, as divine life and meaning are communicated in and through the union of the physical and spiritual.

As Christ and the sacramental are thus joined, we need from Peacocke a more fully developed sacramental theology. If Christ and humanity, the physical and the spiritual, were articulated more intelligibly, the reward might be rich theological meaning in consonance with scientific knowledge. It is to be hoped that such weighty theological thinking will come out of The Society for Ordained Scientists, a religious order recently founded under Peacocke for guiding its members by a rule of prayer and sacrament, centered in worship and eucharistic celebration. Such a setting for theological thinking at its best, in contact and conversation with the best knowledge available, may be optimal for the work of science and religion in showing something of the wisdom of God to our world. The work of Arthur Peacocke in the relating of religion and science has contributed not a little to this purpose.

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