apples and oranges. The physical/chemical aspects of atmospheric science can be discussed without raising any confusion about world views and metaphysical presuppositions. I don't see too much space devoted in this journal to scientific and Christian perspectives on atmospheric science, but evolution is discussed constantly because it comes loaded with metaphysical presuppositions and social implications.

Regarding Harvey's comments about my "God of the gaps" error, I am accustomed to hearing this phrase used to silence all objections to theistic evolution, so I am grateful to David Snoke for his article "In favor of God-of-the-gaps reasoning" (*PSCF* 53 [September 2001]: 153). Of course, the biblical perspective is that God fills all the gaps; he created and remains actively involved with his creation. To glorify God for his providential and creative acts is a dominant theme throughout the Scriptures. The question is not if but how he created. Theistic evolutions prefer to believe that he created according to some facsimile of Darwin's theory. That paradigm feels more comfortable in the context of the secular scientific community where few dare to challenge Darwin's emperor status, but in my view, the emperor's clothes are increasingly transparent. With sincere respect to theistic evolutionists, I think the ongoing effort to squeeze the Origin of Species out of the first few chapters of Genesis is a futile exercise.

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#### **Humans and Consciousness**

William Struthers in "Defining Consciousness: Christian and Psychological Perspectives" (*PSCF* 53 [June 2001]: 102–6) deals with the difficult question of the nature of human consciousness. This involves the ability to separate "me" from "not me" to, perhaps, its being the central processor of information that attempts to make sense of our inner and outer experiences.

The study of human beings encompasses all sorts of disciplines—cognitive science, neuroscience, philosophy, psychology, etc. However, although the existential object under study is the same, *viz*. humans, yet the subject matter of each discipline involved is totally different. This difference determines, for instance, the nature of the evidence to which each kind of knowledge appeals. Also, one ought not to equate a person's use of reason to know, which can be applied to non-scientific as well as to scientific studies, with the pursuit of knowledge solely with the aid of the scientific method.

A Christian perspective considers a human being to be body/mind/soul; whereas to science a human being may be viewed only as mind/body and mind further reduced to brain. Note, however, that John Eccles says: "It ['ego' or 'self'] is essential to the concept each of us has of being a self," and he adds, "in the religious sense it corresponds to the soul." Accordingly, consciousness cannot be determined or measured with physical devices and so it is not

the subject matter of science. Only the nonphysical self in humans can detect consciousness.

The scientific attempt to relate the function of consciousness to the ability to enhance survival and procreation considers only the aspect of history consistent with evolutionary thoughts. One ought to distinguish historical science, e.g., cosmology, evolutionary theory, etc., from physics. The former is more akin to forensic science and deals only with unique events; whereas physics is the prototype of experimental science. Of course, the introduction of history into the study of the nature of consciousness brings forth the fundamental role that miracles play in the Christian world view.

C. S. Lewis clearly indicates that the notion of miracles requires a clear and unequivocal understanding of what Nature is.<sup>2</sup> It should be remarked that the subject matter of science is data collected by physical devices. In physics, knowing is based on evidence obtained via the interactions of particles/fields. If something cannot, in principle, be measured by physical devices, then that something is outside the purview of science. This gives a clear demarcation of what science is and what it is not. This definition of science is what requires that the evidentiary data of the historical sciences must be collectible by physical devices.

The essence of consciousness, the ability to know self, is not something that can be detected with the aid of physical devices. Therefore, the study of consciousness cannot be limited to the methods of sciences. A human being is the "detector" of his or her own self and so a human being is in a sort of space with both physical and nonphysical dimensions. The latter is what C. S. Lewis calls "Supernature." Conceptual thought, free will, moral autonomy, the notion of God, etc. are all unique to humans and cannot be reduced to the purely physical. Of course, different levels of conscious experience are related to brain-states but self cannot be reduced to such physical states. It is analogous to electrical charge that must always be accompanied by mass but cannot be reduced to it.

#### **Notes**

<sup>1</sup>W. H. Thorpe, *Purpose in a World of Chance* (London: Oxford University Press, 1978), 81.

<sup>2</sup>C. S. Lewis, *Miracles* (New York: The Macmillan Company, 1947), 10.

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### "AGOG versus GOG"

Stimulated by the article by David Snoke entitled "In favor of God-of-the-gaps reasoning," (*PSCF* 53, no. 3 [September 2001]: 152) I think I must declare I am AGOG and think that GOG and MAGOG are not good enough.

Let me start to explain with two quotations from C. A. Coulson, onetime holder of the Rouse Ball Chair at Oxford University (from *Science and Christian Belief,* London: OUP, 1955). The first is from a letter of Isaac Newton to the master of his college at Cambridge, Trinity. He says: "The

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diurnal rotations of the planets could not be derived from gravity, but required a divine arm to impress it on them" (p. 20). The contrast was that the theory of gravitation was able to explain the orbital motion of the planets around the sun.

Pointing to gaps in our scientific understanding and suggesting that religion explained these was described by Coulson as the "most serious and wasteful of our errors" (p. 20), the errors of Christians (who were scientists). I don't know if he was the first to use the phrase "God of the gaps" (p. 20) but I think this next quote sums up the matter, why GOG will not do, "Either God is in the whole of Nature, with no gaps, or He's not there at all" (p. 22). However, I do not believe Coulson's version of GOG was actually considered by Snoke.

What Snoke's useful essay does is show us clearly two mistakes that appear to be very common among Christians including those who are scientists.

The first mistake is to suppose that there is only one valid explanation for anything. In general this supposition is false. If I enter a room and see a kettle boiling, and ask, "Why is the kettle boiling?" some joker there might give me the scientific explanation, but what I was hoping for was the more informative explanation, "because I'm making tea." The arguments presented against AGOG use this false supposition.

The second mistake in thinking is to use God as an explanatory tool, to use him (taking his name in vain?) "to scratch our mental itches," as I once heard the late Donald MacKay describe this action. If we believe in God, as revealed in the Scriptures and mediated to us by the Spirit of the living Christ, then this particular God is the explanation of everything, and therefore, cannot be the explanation of gaps in our understanding.

I agree with Snoke that the existence of gaps indicates inadequacies in our theories or models. Such gaps should be examined. But I am arguing that the existence of the God of Jesus Christ is not a theory or model, but the basis for our living and thinking. I claim that this exchange I am having with him points to gaps of a different sort, gaps in our concepts of God; such gaps, however, have nothing to do with the existence or nature of God.

It is everyone's experience, I imagine, as it has been mine, that my conception of God undergoes change, as a result of his doing things I did not expect (predict), but that I could, after the fact, recognize as his working. These failures of prediction lead me to revise my conception. This process is also experienced normally in my relations with other persons. It is what you might expect if the God we trust is personal, as we claim.

So I am AGOG; against GOG, which stands for mistaken Christian understanding, and against MAGOG, which is our use of God for our magical purposes of control.

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## **Abandon GOG Arguments**

David Snoke's "In Favor of God-of-the-Gaps Reasoning" (*PSCF* 53, no. 3 [September 2001]: 152) may or may not be, as he suggests, "heretical" but it is wrong. It neglects basic theological questions, and the attempt to present the God of the Gaps (GOG) as a scientific theory has several flaws.

To begin with, the paper does not consider serious theological objections that can be made to this approach. GOG seems to assume that God is either the type of deity who insists on showing off and getting credit for what happens in the world, or a god who would create a universe that is in a sense incomplete, that has not been endowed with full functional integrity, or both. (Such a god might contrive to get attention by leaving gaps in creation.) One may, of course, argue that this is an accurate representation of God's character but such a claim is highly problematic from a Christian standpoint, as I have argued several times in this journal.¹ The God of whom it is said "Truly, you are a God who hides himself" (Is. 45:18) and whose mark is the cross is not the one who is proclaimed by GOG arguments.

The hiddenness of God does not, however, mean that God is inactive. Traditional Christian views of providence have held that God is at work in everything that happens in the world. GOG arguments, on the other hand, draw attention away from divine activity in the things that we are able to understand and encourage people to think of God as a kind of specialist who intervenes in the universe sporadically only to do a few things that science will not be able to explain.

In brief, Snoke has taken no notice of the arguments of Bonhoeffer, whose reflections on the subject have been one of the most influential challenges to GOG reasoning. Some attention to Bonhoeffer's statement that "We are to find God in what we know, not in what we don't know" and its grounding in the theology of the cross would have given the article some theological substance.<sup>2</sup>

So much for the issues with which Snoke does not deal. The situation is not much better with the arguments he does make.

It's true that it is legitimate, in discussing a scientific theory, to point out its "gaps," the things that it doesn't explain. Pointing out a defect in theory A, however, is not the same thing as supporting rival theory B. But there are deeper problems here.

Snoke's application of this procedure to help in deciding between the rival "theories" that there is a God and that there isn't is mistaken. "There is a God" and "There is no God" should not be thought of as scientific theories but, in the present context, as philosophical meta-theories. "There is a God" provides one answer to the limit question, "Why does a universe exist?" a question that the atheist may simply have to ignore. But GOG does not contribute anything useful to an attempt to understand details of the world which is given.

When presented as a scientific theory, GOG means making the statement "God did it" about phenomena which remain unexplained for a sufficient length of time. No Christian who holds the traditional belief that in an ultimate sense God does *everything* will argue with this,