

THE LOGOS: LORD OF THE COSMOS, AND RECENT TRENDS IN SCIENCE AND RELIGION¹

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“In the beginning was the Word, . . . the Word was God . . . , and without him was not anything made that was made” (John 1:1-3). The acceptance of this profound concept has spawned three positive trends in recent discussions of science and religion.

Although current leading Christian thinkers in the discussion of science and religion represent contrasting approaches to origins, these same theologians and scientists are deeply committed to some form of faith vision, which holds that the cosmos represents the Creation of God the *Logos*, as outlined in John 1:1-3.² This means that whether by the lure or persuasion of future realization, as in process theology;³ whether by invisible “non-interventionist objective special divine action” at the quantum level, as suggested by thinkers such as Robert John Russell;⁴ or whether inferred at the empirical level, as indicated by William Dembski and others in the intelligent design movement,⁵ scientists and theologians who are Christians concur in the stunning proposition that without some kind of divine input, nothing was made that was made.

¹This article is adapted from a presentation to the Berkeley 2000 Science and Religion Symposium with the theme, “God and the Cosmos,” Berkeley, California, August 16, 2000. Some traces of the oral delivery style have been left unaltered.

²See Joël Delobel, “Christ, the Lord of Creation,” *Louvain Studies* 16:2 (1991): 155-169.

³John Polkinghorn, “Chaos Theory and Divine Action,” in *Religion and Science: History, Method, Dialogue*, ed. W. Mark Richardson and Wesley J. Wildman (New York: Routledge, 1996), 245.

⁴Robert John Russell, “Does the ‘God Who Acts’ Really Act? New Approaches to Divine Action in the Light of Science,” *Theology Today* (1997): 43-65; see esp. 51. See Russell, “Quantum Physics in Philosophical and Theological Perspective,” in *Physics, Philosophy and Theology: A Common Quest for Understanding*, ed. Robert John Russell et al. (Vatican City State: Vatican Observatory, 1988); and Russell’s article, “Special Providence and Genetic Mutation: A New Defense of Theistic Evolution,” in *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action*, ed. Robert John Russell, William R. Stoeger, and Francisco J. Ayala (Vatican City State: Vatican Observatory Publications, and Berkeley, CA: Center for Theology and the Natural Sciences, 1998), 191-223.

⁵William A. Dembski, *Intelligent Design: The Bridge Between Science & Theology* (Downers Grove, IL: InterVarsity, 1999); see also idem, “Reinstating Design Within Science,” *Rhetoric & Public Affairs* 1 (1998): 503-518.

Echoing and expanding this point, physicist and theologian Peter Hodgson writes that "God is the supreme Lord of nature, who can make and unmake its laws and bring it into being, modify it, or extinguish it at will."⁶

However, the word "*Logos*" in John 1:1-3 carries significant new meaning for today's scientists and theologians. The range of meanings in the original Greek includes concepts such as "word," "logic," "reason," and "information." Taking, for example, a minimal meaning of *logos* as "information" yields the following translation: "Without divine information, was not anything made that was made." This interpretation might inform our understanding of the origin, for example, of the genetic code and its language.

Moreover, the creative divine input by the *Logos* is commonly held by Christians to be of at least two different, but vitally important, kinds of creative power, which are briefly summarized in Col 1:16-17. First, the passage tells us that "all things have been created by Him" (Col 1:16). That this original Creation is understood as *ex nihilo* is suggested by Heb 11:3: "By faith we understand that the worlds were prepared by the word of God, so that what is seen was not made out of things which are visible." This implies that matter is not some reality existing eternally alongside God, but that it and we are ultimately and absolutely dependent upon God for our being.

Second, Colossians indicates that Christ's creative power does not stop with creation *ex nihilo*. Rather, according to v. 17, "in Him all things hold together." Hebrews 1:3 expresses the same idea: "He . . . upholds all things by the word of His power." These passages imply that Christ is continually sustaining the being of all reality. Thus because of Christ's continuous activity, there are no gaps in his sustenance of all reality.⁷

In broad perspective, these texts also imply that Jesus Christ upholds the electroweak force, the strong nuclear force, and gravity. However, the galactic universe does not run on its own inherent power, but is continuously perpetuated by divine power.⁸

⁶Peter E. Hodgson, "God's Action in the World: The Relevance of Quantum Mechanics," *Zygon* 35 (2000): 514. Hodgson heads the Nuclear Physics Theoretical Group and the Nuclear Physics Laboratory, University of Oxford.

⁷Perhaps this might suggest a "gap-less economy," at least at the sustaining level, to use Van Till's phrase (Howard J. Van Till, "When Faith and Reason Cooperate," *Christian Scholar's Review* 21 [1991]: 42-43).

⁸On this point Ellen G. White writes that "not by its own inherent energy does the earth produce its bounties, and year by year continue its motion around the sun. An unseen hand guides the planets in their circuit of the heavens" (*Education* [Mountain View, CA: Pacific Press, 1952], 99). Cf. *idem*, "The God of nature is perpetually at work. His infinite power works unseen, but manifestations appear in the effects which the work produces. The same God who guides the planets works in the fruit orchard and in the vegetable garden" (*Testimonies to the Church*, vol. 6 [Mountain View, CA: Pacific Press, 1948], 186).

The acceptance of this basic Christian faith vision has produced three discernable trends in the contemporary discussion of science and religion.

Openness to New Evidence of Intelligent Design

A significant contemporary issue concerns whether the inference to intelligent-design natural structures can be drawn in some sense empirically, or whether the claim that nature is intelligently designed is made exclusively by faith. This question has spawned lively and fruitful discussion in recent years as some philosophers, theologians, and scientists, working in the interface between theology and science, are exploring evidence that seems to suggest that this is possible.⁹ Even thinkers with deep concerns about the new intelligent-design movement, such as William Hasker, indicate that the formulations by academic and scientific thinkers, such as Alvin Plantinga and Michael Behe, are much more sophisticated and operate on a different level than the arguments offered by the classic natural theologian, William Paley (1802), and, therefore, these newer articulations deserve a hearing.¹⁰

Indeed, the Center for Theology and the Natural Sciences (CTNS) at University of California, Berkeley takes a stance similar to Ernan McMullin toward the intelligent-design movement. However, building on the commendable commitment to openness and humility in scientific investigations encouraged by the John Templeton Foundation, CTNS has recently awarded a \$100,000 grant to William Dembski, author of the book *Intelligent Design*, to further his research in this area.¹¹

Plantinga implies that the need for adopting a new scientific method not limited wholly to methodological naturalism can be partly inferred empirically by considering the traditional macroevolutionary accounting for the development of a population without eyes into a population with eyes. Plantinga points out that in such a macroevolutionary process there would be many adjacent points in the pathway that would have no selective advantage in going from one point to the next. In light of this he wonders whether this would be the path taken. If indeed this path is not

⁹See, e.g., William A. Dembski, *Intelligent Design*, chap. 4, "Naturalism and Its Cure," in which the author cites evidence that design is empirically detectable; and also chap. 5, "Reinstating Design Within Science," where Dembski shows that specified complexity is how we detect design empirically.

¹⁰See, e.g., William Hasker, "Darwin on Trial Revisited: A Review Essay," *Christian Scholar's Review* 24 (1995): 479-488.

¹¹John Templeton Foundation, "Winners of the PCRS/Templeton Grants for Research and Writing on the Constructive Interaction of the Sciences and Religions" (<http://www.templeton.org/pers_winners.asp > Sept. 2000).

taken, Plantinga states that this consequence seems to suggest the need for an approach not limited to methodological naturalism.¹²

The intelligent-design movement is receiving attention not only in major academic centers, such as in Berkeley, California, but also in European universities, such as the University of Aberdeen and three other renowned Scottish universities supporting the Gifford Lectures on natural theology. In May of this year these four universities sponsored a special International Gifford Bequest Lectureship entitled: "Natural Theology: Problems and Prospects." Philosophers and scientists, including Michael Behe, were invited to the Lectureship to discuss issues including the future of the empirical inference to intelligent design.

It was my privilege to chair and to respond at a session of this Lectureship,¹³ in which Michael Thrush of Notre Dame University read a paper criticizing Michael Behe's notion of irreducible complexity. Shortly after this presentation, and as the concluding lecture of the Lectureship, Michael Behe explained the notion of irreducible complexity and responded to concerns by Michael Thrush and key world-class biologists.

Behe showed how, at the genetic level, irreducibly complex biological machines exist, such as the immune response and flagellum, which defy fortuitous piece-by-piece development because all parts are required to be present at the beginning for function to occur. As he lectured, the hall became increasingly quiet. At one point the house air conditioning was turned off, adding clarity to each word Behe spoke. Highly trained academicians were hearing, as it were, a voice from the past, albeit a freshly articulate one. Ideas thought to have been retired long ago were being argued with a new clarity, scientific plausibility, and freshness, giving the occasion a historic dimension, while highlighting a recent trend in science-and-religion discussions.

We now turn to a second trend, which addresses a challenge discussed for centuries.

Increasing Willingness to Address the Difficult Question of God and Natural Evil

A second encouraging trend in science-and-religion discussions is the increasing willingness of thinkers who represent various orientations regarding origins to address the classic challenge of natural evil, or what

¹²Alvin Plantinga, "When Faith and Reason Clash: Evolution and the Bible," *Christian Scholar's Review* 21 (1991): 25; see also idem, "Methodological Naturalism?" in *Facets of Faith & Science*, vol. 1, ed. Jitse M. Meer (Lanham, MD: University Press of America, 1996), 177-221.

¹³The International Gifford Bequest Lectureship was held in Kings College, University of Aberdeen, Scotland.

today we might call paleonatural evil and the character of God. This problem has been classically raised, for example, in David Hume's *Dialogues Concerning Natural Religion*¹⁴ and in J. S. Mill's *Nature*.¹⁵

However, willingness to address the problem of God and natural evil has not always been the case, as documented in a recent Ph.D. dissertation written by Gregory Elder at the University of California, San Diego. Elder shows that while major English religious bodies readily accepted Darwin's theories immediately upon the publication of his *Origin of Species* in 1859, these same religious institutions intentionally avoided discussing the difficult theodical issues raised.¹⁶

Happily, this situation is beginning to change, and CTNS is among those leading the way. The founder and director of CTNS, Dr. Robert John Russell, shared his convictions on this point with me recently. His words may be paraphrased: "I do not mind that we have discussions of design in the science-and-faith dialogue. Such matters are useful. But there is something that is very important. In fact, we need to blow the whistle and tell folk that it's time to get out of the pool, we have a serious issue to address: that is the question of death, suffering, disease, and the character of God." I appreciate and commend Bob for his concerns in this respect. While approaches to this difficulty may differ, Christians can press together in shared concern and explore the Scriptures, seeking counsel and guidance from the Word of God in this matter as illumined by the Holy Spirit.

Responses to this issue seem to cluster around the concept of the relation of God to the world, but in terms of various characterizations of divine creative method. For example, Philip Clayton describes the difficulty and hints at a tentative solution as follows:

A God who allows countless billions of organisms to suffer and die, and entire species to be wiped out, either does not share the sort of values we do, or works in the world in a much more limited and indirect way than theologians have usually imagined. Since revelation rules out a pernicious God, it may ultimately be that one must let go of the idea that God directly brings about the details of the evolving biological world.¹⁷

¹⁴David Hume, *Dialogues Concerning Natural Religion* (London: Routledge, 1991).

¹⁵John Stuart Mill, "Nature," in *Nature: The Utility of Religion and Theism*, reprint of the 3d ed. (New York: Longmans, Green and Co., 1923), 3-65.

¹⁶Gregory Parviz Elder, "Chronic Vigour: Evolution, Biblical Criticism and English Theology" (Ph.D. dissertation, University of California, San Diego, 1990). See especially the concluding chapter.

¹⁷Philip Clayton, "Metaphysics Can Be a Harsh Mistress," *CTNS Bulletin* 18 (1998): 18. Clayton is Professor and Chair of Philosophy, California State University, Sonoma, and is associated with CTNS.

While adopting a more classical posture toward this challenge, Dr. James Gibson, director of the Geoscience Research Institute, also suggests that the way one characterizes the divine method of creation directly impacts one's concept of the character of God.¹⁸ Gibson's claim concurs with a strategically important biblical passage in Rev 14:7. Here the heavenly messenger calls all human beings living just before the return of the resurrected Lord to worship "Him who made the heaven, earth, the sea and the fountains of waters." In general, the messenger implies that God wishes to be worshiped as Creator in our day.

However, the message also suggests something new, which has deep significance. The words constitute a definite allusion to the fourth commandment of Exod 20:11, which affirms a rapid, death-free and destruction-free method of divine creation. Perhaps through this message God intends for contemporary humans to reconsider the particular method of creation, which implies the goodness of God as Creator. Thus the affirmation of a death-free method of creation constitutes a powerful basis for worship, because God is thereby shown to be a truly benevolent Creator and thus worthy to be worshiped.

We turn now to a third encouraging trend in science-and-religion discussions.

A New Shouldering of Responsibility to Care for God's Creation

The words of Joël Delobel, professor of New Testament exegesis in Belgium, can capture the spirit of a refreshing third new trend in the thinking of Christians regarding God and the world in science-and-religion discussions.¹⁹ Delobel states: "To consider the cosmos as 'creation,' and thus as . . . [continuously] created by God, is an attitude of pure belief which exceeds the bounds of verifiable experience. Such a vision has consequences . . . [it] gives a deeper dimension to all care for the world."²⁰

This biblically based faith vision means that the Christian should no

¹⁸L. J. Gibson, "Theistic Evolution: Is it for Adventists?" *Ministry* 65 (1992): 22-25.

¹⁹The literature in this movement is rapidly increasing. A few important sample sources include the following titles: I. Bradley, *God Is Green* (New York: Doubleday, 1990); C. De Witt, ed., *The Environment and the Christian* (Grand Rapids: Baker, 1991); W. Grandberg-Michaelson, *Ecology and Life* (Waco, TX: Word, 1988); W. Pratney, *Healing the Land: A Supernatural View of Ecology* (Grand Rapids: Baker, 1993); S. B. Scharper and H. Cunningham, eds., *The Green Bible* (Maryknoll, NY: Orbis, 1993); T. Stafford, "God's Green Acres," *Christianity Today* (June 15, 1998): 32-37; and Dennis W. Woodland, "Christian Environmental Stewardship," *Lake Union Herald* (December 1996): 12-13.

²⁰Joël Delobel, "Christ, the Lord of Creation," *Louvain Studies* 16 (1991): 168.

longer be captive to the assumption of much of modern culture, which severs God from Creation and subjects it to humanity's arrogant power. In this context, the last words of the book of Jonah constitute a moving insight into God's interest in saving not only humans, but also animals: "And should I not have compassion on Nineveh, the great city in which there are more than 120,000 persons who do not know the difference between their right and left hand, as well as many animals?"

Unfortunately, as Lynn White noted, there has been misinterpretation of the intent of two phrases in Gen 1:26: "dominion over" and "subdue it."²¹ The true and contextual meaning refers to the sense of to "manage," "oversee," "care for," and "be steward of."²² Botanist Dennis Woodland, of Andrews University, outlines four of nature's principles of sustainability: First, ecosystems use sunlight as their source of energy; second, ecosystems dispose of wastes and replenish nutrients by recycling; third, the size of consumer populations in nature is maintained in such a way that overgrazing does not occur; and fourth, for ecosystem sustainability, biodiversity must be maintained. In light of these principles, Woodland challenges individuals to do the following: to (1) become energy-use conscious, (2) become ecoconsumers when shopping, (3) begin recycling domestic waste, (4) encourage institutions to make their campuses into arboretums, (5) label campus trees to encourage care for and appreciation of God's green earth, (7) support local conservation groups, (8) spend more time in nature, and (9) "think global, act local."²³

Conclusion

We have touched upon three important trends—new design arguments, the issue of God and natural evil, and increasing the care of God's creation—emerging in consequence of a Christian faith vision embracing the cosmos as the creation of the *Logos*, Jesus Christ. Taking this vision to heart permits us to praise God daily as by faith we discern new instances of his superb workmanship and wonderful care in nature.

²¹Lynn White, "The Historical Roots of Our Ecologic Crisis," *Science* 155 (1967): 1204-1207.

²²Dennis W. Woodland, "Christian Environmental Stewardship," *Lake Union Herald* (1996): 12-13.

²³Ibid.