

Ernan McMullin, Cosmic Purpose, and Divine Timelessness

with William R. Stoeger, SJ, "Ernan McMullin on Contingency, Cosmic Purpose, and the Atemporality of the Creator"; and Ernan McMullin, "Cosmic Purpose and the Contingency of Human Evolution"

ERNAN MCMULLIN ON CONTINGENCY, COSMIC PURPOSE, AND THE ATEMPORALITY OF THE CREATOR

by William R. Stoeger, SJ

Abstract. This article reviews, and offers supportive reflections on, the main points of Ernan McMullin's provocative 1998 article, "Cosmic Purpose and the Contingency of Human Evolution," reprinted in this issue of *Zygon*. In it he addresses the important science-theology issue of how the Creator's purpose and intention to assure the emergence of human beings is consonant with the radical contingency of the evolutionary process. After discussing cosmic and biological evolution and critically summarizing recent solutions to this question by Keith Ward, John Polkinghorne, Arthur Peacocke, Alvin Plantinga, and others, who presuppose in different ways that God is subject to time, McMullin compellingly argues for the traditional position, that God is unconditioned by time, and this enables God to work purposefully through contingency, randomness, and chance just as easily as through law-like regularity.

Keywords: atemporality; contingency; creator; evolution; God; human beings; Ernan McMullin; purpose; time

It is a real honor and privilege to present and reflect on this thought-provoking article by Ernan McMullin, "Cosmic Purpose and the Contingency of Human Evolution" (1998; reprinted in this issue of *Zygon*). I knew Ernan well over a period of about 25 years, and interacted with him at least several times a year on issues in science and philosophy, and science and theology. We were involved together in at least seven or eight small workshops and study groups over those years. One of them—a two- or three-year study group sponsored by the Center of Theological Inquiry in Princeton—led to

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Ernan's paper, along with six other papers on the importance and role of time in dealing with key questions in the theology and science interface. Those papers, including one of my own, were published with Ernan's in that same number of *Theology Today*.

Since that time, I have often gone back to Ernan's article to probe and deepen my critical understanding of his careful reasoning about how the contingency or chanciness of the evolutionary process is consonant with the overall purpose of a Creator—as proclaimed, for instance, by the revelation of the Creator's purpose in creating, or insuring the emergence of, human beings. The central component of establishing that consonance is Ernan's carefully argued reassertion of the atemporality of the Creator. The arguments for this complete transcendence of God from time and space have a long history going back most prominently to Augustine, but they have been repeated and refined by many others since then.

Here I shall not analyze Ernan's article in detail. I shall simply summarize its main points and then reflect on the importance and validity of his controversial conclusion, that the Creator and the Creator's purposive creative action transcends time—or, more precisely, is unconditioned by time. This position—despite its long history and continued prominence in some Christian theology and philosophical theology—is often challenged in significant ways by other philosophers and theologians, particularly by those influential in the area of theology and the natural sciences. McMullin recognizes this, of course. In fact, this is one of his reasons for writing this article. He gives a brief synthesis and critique of the positions of Keith Ward, John Polkinghorne, and Arthur Peacocke regarding what they consider as God's temporally conditioned action in nature to carry out God's purposes in creating life and human life, without micromanaging or interfering in the natural evolutionary process.

MCMULLIN'S PRINCIPAL QUESTION

The key issue McMullin addresses in this article, as I briefly indicated above, is how the attainment of God's purposes, as revealed in tradition and Scripture, of bringing life and intelligent rational beings "made in God's image and likeness," can be reconciled and achieved despite the randomness and contingency of evolutionary processes. If God's purposeful creative action proceeds similarly to ours, it is nearly impossible to see how God could employ evolution to fulfill God's intended goal. That is, as McMullin expresses it, if God must rely on orchestrating the overall process by extrapolating from earlier physical or biological states to later ones using God's knowledge of the laws of nature, it is very difficult to see how this would be effective in fulfilling what God intends (399; page references herein refer to the reprint in this issue). This is simply because of the intrinsic unpredictability of many of the processes and networks of

processes involved throughout the unfolding of evolutionary history. There are various ways scientists, philosophers, and theologians have suggested to resolve this mismatch between means and divine end. In the next section, we shall review McMullin's treatment of some of them.

Before doing that, it is helpful to make clear that McMullin's concern "is not whether purpose can be discerned in the evolutionary sequence," leading to affirming a purposeful agent (348). It is simply to see whether, given some knowledge of the Creator, from philosophy and theology, there is any way of establishing the "consonance" of the achievement of divine purpose with the contingency of the evolutionary process (348). Thus, this is not a question about what can be inferred from our growing scientific understanding of human evolution. We must continue to take that very seriously. It really is about how we are to conceive God as Creator in God's relation to the nature and to what results from the evolutionary process.

McMULLIN'S SUMMARY OF THE TWO PHILOSOPHIES OF EVOLUTION

Before presenting and supporting his resolution of this issue, McMullin discusses two philosophical interpretations of the evolutionary process. The first is more necessitarian, emphasizing what the proponents argue is the ultimate inevitability of life and consciousness emerging from cosmic and biological evolution, and the second privileges contingency and uncertainty. His reason for examining these options in this context is that the first, if it turns out to be correct, would provide at least a possible solution to the perceived mismatch between contingency and cosmic purpose. In the second case, however, it would be very difficult to reconcile the divine intention of insuring the emergence of human-like life and consciousness with the reliability of the natural processes at the Creator's disposal.

In the course of this discussion McMullin provides a number of helpful guideposts. In particular, he points out that the overall contingency of the course of evolution can be understood in two radically different ways (345), as either the very low probability of this particular outcome (e.g., human beings as we actually are), or the very low probability of a more general type of outcome (intelligent, rational, freely choosing, social beings of some sort). Of course, though the first may hold, the second may not. Within our universe as a whole, there may be a strong likelihood of the emergence of rational social beings of some kind, despite the substantial contingency of the detailed form they will take. We do not know enough yet from astrobiology to say whether this is the case or not. But it is one of the bases for the stance many necessitarians take. Prominently mentioned among them by McMullin are Christian De Duve, Frank Drake, and Carl Sagan—and Teilhard de Chardin, on clearly interdisciplinary grounds. A

more recent well-known exponent of this tendency is Simon Conway-Morris (2004), who represents those specialists emphasizing on scientific grounds the convergent character of key biological evolutionary outcomes, despite the divergent effects of some of the detailed processes.

On the other side of this divide are those paleontologists and biologists who argue for the radically infeasible random or chance character of evolutionary outcomes. Among those of note mentioned by McMullin are Jacques Monod and Stephen Jay Gould. There are other biologists and philosophers of biology who occupy middle ground, recognizing the impressive contingency of the evolutionary process, but also the progressive trends in evolution along certain lines. Some like Theodosius Dobzhansky see natural selection as counterbalancing random processes and establishing definite progress toward complex forms of life, and even human life (347). Others, like Elliott Sober, while allowing some establishment of evolutionary trends, deny that these would in any way be predictable, precisely because of the continual contribution of so many different random processes (347). Thus, a Creator who had to rely on detailed knowledge of a complex of evolving systems at a particular time to ensure a particular eventual outcome that Creator intended would be unable to do so.

Of course, one could run hundreds of trillions of evolutionary experiments representing an extremely large number of possible starting points, varieties of laws of nature, and evolutionary histories, thus expecting that at least one or a few of these would yield what the Creator intends. One could look at our universe that way, considering each star system as a separate experiment. Or, even more expansively, we could consider a multiverse of untold numbers of universes—each one a collection of trillions upon trillions of such evolutionary attempts. McMullin considers this type of solution. He describes it as the vastness and multiplicity of cosmic systems “swamping contingency in order to achieve a distant end” (350), for example, the purpose of the Creator. But even these solutions run into the uncertainty of the eventual achievement of divine purpose (350). Furthermore, it is worth reflecting on what Francisco Ayala once pointed out in a private communication to me and several others in a discussion group on astrobiology. Though we may eventually be able to show that the emergence of life is to be expected, given our astronomy, physics, and chemistry, it is a giant leap from there to the emergence of rational, self-reflective conscious beings. It took 4.6 billion years of chemical and biological evolution on our planet to arrive at rational, self-reflective consciousness on one little fragile twig of the vast evolutionary bush. That seems a very unlikely outcome, even given the presence of life. In how many venues in our universe has that happened? We don’t know, but, on the basis of our knowledge of astrobiology so far, informed speculation would say only on a very tiny fraction of the number of planets in our universe. Certainly on one! But on how many more, if any? On a super-cosmic scale, the fine-tuned character

of our universe for complexity and life adds to that uncertainty. There are a very large number of many potential universes which would be devoid of life—and even of chemistry as we know it. Of course, as McMullin also points out, the fact that our universe appears to be fine-tuned for complexity and life, does provide the necessary conditions for life and consciousness, and in this light, “contingency is regarded [by some] as a *sign* of cosmic purpose” (358). McMullin strongly resists setting much store in this approach.

One of the other guideposts McMullin provides is his recognition of “the frank anthropocentrism” of this issue under discussion. As he says, Western theology—and I would add philosophy—are inherently anthropocentric (348). They are deeply immersed in the human—human origins, behavior, meanings, values, destinies, knowledge. Part of the challenge is to bring our scientific understanding to bear on these questions, while acknowledging that the questions themselves require investigation and informed development and testing of hypotheses which transcend scientific methods.

MCMULLIN ON THEOLOGIES CONCEIVING GOD AS TEMPORAL

As a prelude to offering his own solution to the question at hand, reconciling the contingency of human evolution with God’s cosmic purpose as revealed in Christian Scriptures and Tradition, McMullin takes critical look at some of the recent thought on this subject. A number of prominent theologians and specialists in theology and science have argued that God is subject to the limitations and conditions imposed by time. Among those whose positions McMullin briefly examines in this regard are W. H. Vanstone, Keith Ward, John Polkinghorne, Peter Van Inwagen, Alvin Plantinga, and Arthur Peacocke. A frequently mentioned justification for insisting on God’s temporality is that God’s loving relationship with creation—with human beings in particular—means that God must be vulnerable and responsive in relationship. That means, according to many theologians, that God must be subject to the constraints of time. Otherwise, they maintain, God cannot really be loving, or love itself, and our freedom of choice would be impossible. In other words, for God to avoid being static and isolated, and be, instead, the reservoir of dynamism and relationality, God must be subject to time.

With this presupposition of divine temporality, along with evolutionary contingency, McMullin asks how then God determines the fulfillment of his purposes through the processes of evolution (349). One possibility we have already mentioned at the end of the last section is simply that the trillions of trillions upon trillions of star systems somehow ensure that God’s purposes will be fulfilled in at least one of them. But, of course, as McMullin implies, in this case there really is no assurance that all the

conditions that together are sufficient for the emergence of human-like life will ever be fulfilled.

Others, like Polkinghorne, William Pollard, Robert Russell, and others, propose that God could act directly under the cover of chaotic behavior or quantum indeterminacy to guide the processes toward God's intended goal, without contravening the laws of nature or the expectation values of quantum processes. Arthur Peacocke suggests that God could act effectively to guide evolution by interacting with the universe as a whole, but without specifying how this would be done.

Finally, still others, like Van Inwagen and Plantinga, opt for God's special, miraculous action within nature to bring about God's overarching purposes. This would always involve God's intervention in the processes of nature—in some way or other.

Obviously, as already pointed out, the common presupposition in all these proposals is that God is a temporal being. In the next section, we shall summarize and comment upon McMullin's arguments for his own strongly preferred resolution of these issues—a return to the traditional position of God's radical atemporality.

DIVINE ATEMPORALITY AND PURPOSE

In the final section of McMullin's article he reviews the long history of the conviction "that the Creator stands outside the temporal process entirely" (354) and reprises and explains in some detail the arguments for that position. This provides his resolution to the main issue he is exploring—how can we coherently maintain that the Creator can achieve the Creator's purpose of bringing about rational, freely choosing beings like ourselves through a congeries of processes as rife with contingency and indeterminism as evolution is? McMullin's answer, basically, is that, precisely because God and God's basic act of creation are atemporal, in the sense that "temporal notions simply do not apply to the Creator as Creator" (355), God can and does "work" in and through a highly contingent history of natural processes to attain God's purpose, just as well as God can through more determinate and regular processes. Because God exists and acts fundamentally outside time—though the results of God's creative action include the emergence of time and sustaining the temporal world in existence and order—the randomness and "chancy" character of evolution cannot subvert God's purpose. "The act of creation is a single one, in which what is past, present or future from the perspective of the creature issues as single whole from the Creator" (355). Thus, "a Creator . . . does not rely on the regularity of process to know the future condition of the creature or to attain ends" (357). The contingency of the natural process is real, to be sure, but just as real—even more real, though deeply

mysterious—is the Creator’s all-embracing transcendent immanence of and in all that is.

What is important is to recognize that, as in all predications we make of the Creator, our attributions of “act” and “purpose” to God are radically analogous. We are using these predicates of God in ways we don’t fully understand, and which are inadequate to the reality. God “acts” and exercises “purpose” in that “action” in a way which is radically different from the way we entertain a purpose, or act purposefully. We use these terms in order to articulate something, however imperfectly, about who the Creator is and what the Creator does, from our transcendent experiences of reality and from what we interpret as the Creator’s revelation to us. In order to render these attributions less and less inadequate we qualify what we mean and don’t mean by these terms. We are using them “symbolically” perhaps, as a way of pointing out or disclosing a reality we cannot grasp or understand, but for whose existence and operation we have some evidence. This is, in a definite sense, the role of negative theology—to purify and qualify what we try to say about God. But, as Langdon Gilkey (1990) and many others have emphasized, in speaking of God, we must always keep in mind that God is “intrinsic mystery, inexhaustible richness which is constantly being revealed but whose depths can never be adequately plumbed” (Stoeger 2008, 233).

Thus, McMullin implies that the key failure of those who rely for their understanding on a time-bound Creator is that such a “God” is not transcendent enough, and in a sense must be contained within the universe that “God” creates. Such a God is conditioned by temporal reality, and therefore it is difficult to see how that God can be a self-sufficient, self-sustaining, unconditioned source of being and order—a Creator—for all that exists or will exist. Of course, those who espouse a God beyond time and then portray that God as being static, distant, unloving and incapable of personal relationship are guilty of the same failure. Somehow, in a way that we don’t understand, the Creator combines transcendence with immanence and intimacy, and atemporality with love, personal relationship, care and communication. Within Christian theology this begins to be partially captured by conceiving God as Trinity, a community of divine persons or ways of being God in constitutive relationship with one another. God is intrinsically relational, but in an analogous and transcendent sense. We might then think that those relationships must involve some kind of “temporality”—some dynamism. Perhaps in a sense they do, but it would be a “temporality” which would be very different from the one we are familiar with and embedded in. It would be an unconditioned temporality that would be transcendent and “outside” of any time pertaining to the physical and biological worlds (Stoeger 1998).

In the course of his article, as we have already seen, McMullin carefully explains what the atemporality of the Creator means, and refers to detailed

arguments in support of it. Fundamentally, it is a consequence of the idea or model of the Creator given by the best formulations of *creatio ex nihilo*. In that framework, the Creator must be a self-sustaining, self-sufficient, completely unconditioned being which is Being itself—not being as an abstraction but whose essence is the fullness of Being. There are philosophical arguments for the metaphysical (not mathematical!) infinity and uniqueness of such a Creator. And it is also clear that such a Creator must completely transcend physical time and space (see Spitzer 2012). In light of this, we see that a temporal Creator—one which is conditioned by time and therefore by the physical world—is an incoherent and contradictory concept. Such a Creator would have to be part of the world the Creator holds in existence.

From the point of view of contemporary physics there is some definite, indirect support for this point of view. It is that, according to what we know about space, time, and gravity from the special and general theories of relativity, which have been strongly confirmed by many experiments and observations, there is no absolute space or absolute time. Time itself is always *internal* to the physical system—for example, the universe—and is a result of the dynamics of that system (Stoeger 1998, 376ff). Thus, it really is impossible to conceive the Creator as being in any way inherently time-bound, or time-conditioned with respect to the physical world.

In conclusion, McMullin has given us a compelling argued solution to the question he tackles. Is the contingency of evolution, and of human evolution in particular, consonant with the Creator's purpose of making sure that human-like beings emerge as an evolutionary outcome? This, as McMullin emphasizes, is not a question of recognizing such purpose in the evolutionary history revealed by the sciences, but simply of determining whether a Creator's purpose along with contingency can be coherently entertained. His answer is simply that these are consonant when we accept the radical atemporality of the Creator. In this short article, I have summarized McMullin's central points, and reinforced them with a few other considerations. But it cannot do adequate justice to Ernan McMullin's masterful article itself. I encourage all to read and enjoy it.

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