

Contemporary Cosmologies and Christian Faith

Fred Simmons

Over the last two hundred years the natural sciences have so profoundly altered our understanding of the universe and the life it has come to support that many religious communities have yet to integrate these discoveries fully with their faith. In some instances religious communities continue to deliberate about how to reconcile scientific insights with their religious beliefs; in others, religious communities fail to recognize the potential religious relevance of particular scientific developments. I think Christians have responded to the recent revolutions in the physical and life sciences in both ways, and I propose to distinguish between a stricter and looser sense of cosmology to illustrate this.

As I shall use the term, cosmology in a strict sense refers to the study of the origin, dynamics, and destiny of the universe.¹ In a looser sense, I take cosmology to denote the study of the origin, dynamics, and destiny of life.² I consider this latter study a form of cosmology—albeit in a looser sense—because the origin, dynamics, and destiny of life ineluctably involve life's environment, which is ultimately the cosmos. Cosmologies in a strict and looser sense are thus not distinguished by differences in methodologies (say experimentation and inspiration) or types of account (say mathematics and myth) but instead by differences in scope and subject. Cosmology in a strict sense primarily concerns matter and energy in its myriad forms and manifestations; cosmology in a looser sense principally addresses organisms and their proximate abiotic environment. Hence, while cosmology in a strict sense encompasses all of physical reality, cosmology in a looser sense generally considers factors beyond our solar system only indirectly. As such, this distinction between a strict and looser sense of cosmology does not represent a distinction between scientific and philosophical, theological, or artistic kinds of cosmology. After all, some natural scientists investigate the origin, dynamics, and destiny of the universe, while others examine the origin, dynamics, and destiny of life; philosophers, theologians, and artists treat both topics, too. Accordingly, cosmology in a strict and looser sense alike may not simply be relevant to various religious faiths but also a dimension of them.

Christians, for example, have appropriated or elaborated cosmologies in both a strict and looser sense as facets of their overall theological worldview. Of course as a religion with roots in the ancient near East, Christians have historically embraced cosmologies informed by once widely accepted interpretations of the earth and its life that recent scientific discoveries have discredited. As a consequence, many Christians have perceived a need to revise their cosmologies in light of contemporary science. However, because the scientific discoveries of the last 200 years have fundamentally revolutionized our understanding of the universe and the life it has come to support, some Christians

¹ In their *The View from the Center of the Universe: Discovering our Extraordinary Place in the Cosmos*, Primack and Abrams address cosmology in this strict sense and offer a similar definition (New York: Penguin, 2006; page 16).

² I develop this sense of cosmology in *Life and Value: What Ecology May Mean for Christian Ethics and Faith* (forthcoming).

have had difficulty accepting the cosmological changes these scientific advances suggest. Moreover, I believe that many Christians who have accepted recent cosmological discoveries have not realized these changes' potential religious implications. As the scientific findings have become more portentous the perennially subtle and complex relationship between natural science and Christian natural theology has become more contentious and so Christians have yet to agree upon what these scientific discoveries mean for their cosmologies or their faith.

While Christians' efforts to achieve some consensus on the Christian significance of contemporary astrophysics, evolutionary biology, and ecology is thus wholly appropriate, the intensity of these disputes has largely obscured other respects in which our new understanding of the universe and its life may fundamentally affect Christian faith. After briefly surveying some notable Christian engagements with contemporary cosmology in both a strict and looser sense to identify areas attracting Christian attention, I will explore a cosmological development whose potential Christian importance has been largely overlooked and indicate how it might impact Christian thought.

Let's begin with cosmology in the strict sense, that is, the study of the origin, dynamics, and destiny of the universe. Although astrophysicists have revolutionized our conception of the cosmos in the last two hundred years, Christians' efforts to assimilate contemporary cosmology in this strict sense have not been particularly controversial, likely because most Christians have concluded that recent astronomical discoveries do not affect their basic faith commitments. For example, many Christians find the big bang theory congruent with the Judeo-Christian doctrine of creation *ex nihilo* even if contemporary science undercuts the geocentrism implied in Genesis' initial chapters and the canonical Wisdom literature.³ Similarly, while contemporary interpretations of cosmic *dynamics* have led to a new school of Christian thought—process theology—and prompted some theologians to propound a panentheistic doctrine of God, the Abrahamic faiths' traditionally categorical distinction between Creator and creation has meant that new understandings of cosmic processes have often had little impact on these religions' core commitments.⁴ Admittedly, our present appreciation for the universe's staggering temporal and spatial expanse may jeopardize the credibility of Christian anthropocentrism, but it need not do so and many Christians deny that their faith is properly anthropocentric in any case.⁵ Finally, contemporary understandings of the *destiny* of the universe have also had negligible influence on fundamental features of Christian faith for several reasons. First, contemporary cosmology has yet to achieve consensus about the long-term future of the universe, and so religious communities have not had to contend with well-established scientific doctrines on this score. Second, Christian eschatology is itself diverse and generally acknowledged as partial, and hence it can readily embrace multiple scientific perspectives. Third, Christian eschatology

³ Polkinghorne is perhaps the most prolific contemporary Christian advocate of the compatibility of current astrophysical understandings of the universe and Christian conceptions of creation.

⁴ Cobb, Griffin, and Keller are three significant American process theologians; several more twentieth century Christian thinkers have proposed a panentheistic interpretation of God's relationship to the world.

⁵ Despite his prominence and forcefulness, Gustafson's admonition that our awareness of the temporal and spatial scale of the universe should chasten Christianity's de facto anthropocentrism has not been broadly persuasive or fostered extended dispute.

commonly presumes a radical re-ordering of reality, and accordingly may in faith gainsay whatever scientists predict. In sum, cosmology in the strict sense has not provoked intractable controversy among Christians and does not appear to harbor insights whose dissonance with prevailing Christian doctrines has gone unrecognized.

Cosmology in a looser sense, however, has both generated protracted controversy among Christians and introduced insights whose force Christians have yet fully to face. Of course debates about the origin of life and the meaning of that origin for Christian convictions have been the most prominent.⁶ Even so, current scientific understandings of life's dynamics have recently stimulated animated discussion about the possibility and propriety of human beings' compliance with the Christian injunction to love agapically given our phylogenetic history.⁷ Correlatively, evolutionary understandings of life have prompted novel characterizations of God's being that many Christians have found unconvincing.⁸

Yet despite this broad Christian interest in the potential religious implications of what we have learned about the origin, dynamics, and destiny of life, I do not believe that Christians have wholly appreciated what cosmology in a looser sense may mean for their faith. In particular, ecology has shown us that finite systems can foster organisms indefinitely because life is self-consumptive. The life cycles of organisms and the water and mineral cycles of ecosystems allow energy and elements to flow continually through the various biotic and abiotic components of the earth's several biomes. These processes are necessary for life as we know it, yet they are ultimately inimical to the life of every organism that we know. Mortality is vital for evolution because without it life would be static, confined to the forms instantiated by its immortal exemplars. Similarly, ecological systems can adapt, and thus subsist and sustain organisms, because the organisms that these systems support succumb to them. Nevertheless, since all of us live only because none of us live forever, what is good for the whole is only good for individuals for a time. Indeed, in order to be a propitious context for the flourishing of an irrepressible profusion of life, an ecologically structured world cannot simply help organisms to thrive but must also thwart them, too. As such, Christians who adopt an ecologically attractive conception of creation and assert creation's goodness as a whole will have to accept that creation harbors disvalue for all organisms.

Of course Christians have not customarily interpreted creation in this way, and Christians' conventional value theory precludes them from doing so consistently. Christians conventionally recognize only two categories of value—good and evil.⁹

⁶ Consider the well-known dispute concerning creationism and evolution, and more recently intelligent design.

⁷ Amidst a vast and burgeoning literature, Pope and Jackson defend the intelligibility and appropriateness of Christian commendation of agape while Nietzsche and his several contemporary epigones decry it.

⁸ Among many authors once again, de Chardin, McFague, and Haught are representative of some of the major Christian attempts to adjust our understanding of God in light of what we have learned about life in the last two hundred years; in response to these proposed revisions advocates of the classical Christian conception of God are legion.

⁹ The conventional Christian distinction between ontic or natural evil and moral evil illustrates this tendency, since it suggests that all disvalue is evil of one form or another.

Accordingly, if ecological processes reflect the character of God's creation rather than its distortion due to sin, then supposing Christians' conventional binary value theory, ecological processes' ineluctable disvalue for individual organisms means that creation per se involves evil for God's living creatures. However Christians' fundamental commitment to God's goodness, wisdom, power, and freedom from constraint prevents them from attributing evil to creation in itself. Given this predicament, I have argued that Christians should replace their binary value theory with one that is tripartite by distinguishing qualitatively between bad and evil.¹⁰

Although this shift in value theory alone would represent a significant and generally unrecognized way that contemporary cosmology in a looser sense might impact Christian faith, such a shift suggests several further underappreciated potential Christian implications of ecology. I shall simply mention two in conclusion. First, Christians have often attributed all conflicts of interests to the warping of the world wrought by sin.¹¹ This confidence in a unity of value and virtue underlies Christians' common commitment to eudaimonism and vision of a peaceable kingdom. However, if ecological processes represent God's creative intentions, then the conflicts of interests inherent to ecological processes reflect God's will for God's creatures. Second, Christians have conventionally interpreted salvation as a joyous communion with God and creation in relation to God that transcends all disvalue. However, since Christians believe that the God who creates is the God who saves, should cosmology in a looser sense dispose Christians to conclude that God created organisms to endure disvalue for other organisms' sakes, Christians will need to revise their conception of salvation to include disvalues like decline and death if they do not want to depict God as saving God's creatures from the life God created them to lead. Happily, the tripartite value theory I propose to allow Christians to attribute ecological processes to the created order without embedding evil in creation would also facilitate this revision, since Christians' prayers for delivery from evil would no longer entail release from all disvalue supposing a qualitative distinction between bad and evil. To be sure, Christians' conception of salvation properly depends upon much more than their interpretation of creation and doctrine of disvalue, and so contemporary ecology cannot appropriately determine the permissible content of Christian hope. Nevertheless, by potentially affecting Christians' understanding of creation and their value theory, cosmology in a looser sense may also influence Christians' idea of salvation and thereby impact what is for many the crux of Christian faith.

¹⁰ Again, see my *Life and Value: What Ecology May Mean for Christian Ethics and Faith*, where I explain how the distinction I propose between bad and evil assesses ecological processes' deleterious consequences for individual organisms as a non-evil form of disvalue and so allows creation to remain free of evil as Christians insist even if all organisms were created to decline and die as ecology suggests.

¹¹ In fact, by proclaiming that "all things work together for the good of those that love the lord and are called according to his purposes" (Romans 8:28), St. Paul may suggest that even under sinful conditions there are no genuine conflicts of interest for the righteous.