

SCIENCE, NATURALISM, AND RESURRECTION

The universe is organically resting on . . . the future as its sole support.

(Pierre Teilhard de Chardin)¹

If the news of Jesus' resurrection from the dead was hard for his disciples and early Christians to believe, in an age of science it seems even more so. Science cannot make sense of singularities, that is, unique events whose antecedent causes are not fully specifiable in terms of universal and inviolable physical laws. Even the singular origin of the Big Bang universe seems to fall outside the arena of scientific understanding. Science is at home with generalizations made after observing large numbers of events whose habitual recurrence points to an unintermittent fabric of laws and regulations that entertain no exceptions. But it squirms anxiously in the presence of unprecedented events. Its response is to look for ways to reduce the exceptional to what is already known, to suppress the truly unique by fitting it into the universal.

Even so, however, it is not science as such that renders the resurrection, and for that matter any other religious revelations, incredible. As a self-limiting method of inquiry into physical causes, science is simply not wired to pick up any signals of the radical kind of transformation of reality that a resurrection faith would entail. Science is cognitively impervious to singularity or contingency as such, but it is not correct to say that it is *incompatible* with resurrection. Science would simply pass by such an event without notice. On the other hand, *scientific naturalism* does stand in opposition to a resurrection faith. A label apparently introduced over a century and a half ago by T. H. Huxley, "scientific naturalism" is the belief that nature, as available to science and ordinary experience, is literally *all* there is. Scientific naturalists—of whom there are many today—claim that since nature is all there is, the universe must be self-originating. There is nothing distinct from nature that could ground its existence. And since there is nothing beyond nature, the universe can have no purpose or goal toward which it is being moved or attracted. It follows, then, that all causes are natural causes and that there can be no miracles or any other events that cannot be explained exhaustively by scientific method. Thus, the emergence of life itself is a completely natural process explicable in chemical and physical terms; and the emergence of mind, ethics and religion can be

¹Pierre Teilhard de Chardin, *Activation of Energy*, trans. René Hague (New York: Harcourt Brace Jovanovich) 239.

fully accounted for also in terms of evolutionary mechanisms. Finally, according to scientific naturalists, there can be no life beyond death.²

According to Duke University philosopher Owen Flanagan, just to cite one of many possible examples, nothing could survive death since science has disproved such a possibility. Nevertheless, once we have resigned ourselves to this harsh fact, life does not have to be sad. The universe is pointless and death is final, but human life can still be meaningful and happy. When we die we are gone for good, but we can live satisfying lives anyway. Flanagan rejects belief in life beyond death as “irrational.” Why irrational? Because there is no *scientific* evidence to support it. In Flanagan’s opinion,

most philosophers and scientists in the twenty-first century see their job as making the world safe for a fully naturalistic view of things. The beliefs in nonnatural properties of persons, indeed of any nonnatural things, including—yes—God, stand in the way of understanding our natures truthfully and locating what makes life meaningful in a nonillusory way.³

So if there were ever an occurrence that contradicts scientific naturalism (which I shall refer to in this paper also simply as “naturalism”), it would be resurrection to new life. Isn’t the most natural and intelligible state of being *complete lifelessness*? And isn’t the worldview with which naturalism is most at home an “ontology of death,” as both the Christian theologian Paul Tillich and the brilliant Jewish philosopher Hans Jonas—independently of each other as far as I can tell—have referred to it?⁴ Such a designation may seem harsh, but I believe it is accurate. At one time the universe was alive in the hearts and minds of humans everywhere. But in modern times the life was squeezed out of it, starting with the sense that our own subjectivity is not really a part of nature. I suspect that few of us are completely untouched by the idea that nonlife is the baseline state of being.

The background assumption that being is most naturally inclined to be lifeless (and mindless) helps to explain why research on the origin of life in our universe fills up the careers of many brilliant scientists today. Tacitly driving origin-of-life studies, as well as the nascent interest in astrobiology, is the intriguing question of how something so apparently “unnatural” as life could ever have come to birth out of the more normal and intelligible state of nonlife as exposed by the physical sciences. How could anything that differs so radically as living (and thinking) organisms do from the world’s “natural” deadness ever have emerged without magic, miracle or supernatural assistance from the ground state of being understood as devoid of life and mind? Modern scientific naturalists (most of whom are happy

²See Charley Hardwick, *Events of Grace: Naturalism, Existentialism, and Theology* (New York: Cambridge University Press, 1996).

³Owen Flanagan, *The Problem of the Soul: Two Visions of Mind and How to Reconcile Them* (New York: Basic Books, 2002) 167-68.

⁴Hans Jonas, *The Phenomenon of Life* (New York: Harper & Row, 1966) 9-10; Paul Tillich, *Systematic Theology*, vol. 3 (Chicago: University of Chicago Press, 1963) 19.

to be labeled materialists or physicalists) take the essential deadness of nature as an unbreakable continuum into which the apparently remarkable facts of life and mind must eventually be resolved by the power of scientific analysis if they are to become fully intelligible. In this way naturalists can realize their goal of leveling what seems initially remarkable down to what is really quite unremarkable.

Meanwhile, their religious opponents often ironically embrace an ontology of death also as the most natural and intelligible state of things. This view of nature allows special interruptive acts of God to stand out as all the more exceptional and supernatural. For example, creationists and Intelligent Design advocates are willing to go along with their naturalist antagonists as far as understanding the nonliving world of nature is concerned.⁵ The advantage of their sharing this very modern view of nature is that it sets the stage for punctuating the blank everydayness of the world with dramatic divine displays. Without a preponderant backdrop of normal, natural passivity the power of God might not be made visible at all. Accordingly, the resurrection of Jesus may be featured as the most significant of all divine interruptions of the natural paleness of being.

In their encounter with scientific naturalism, existentialist theologians of the twentieth century also sometimes conceded that nature is essentially lifeless. In order to make sense of Jesus' resurrection Rudolf Bultmann, for example, located the mighty acts of God in a realm of freedom that was thought of as existing apart from nature. In this scientifically inaccessible arena, Bultmann proposed, all the religious drama necessary for faith can take place without disturbing nature's normality.⁶ This ingenious apologetic strategy has the advantage of not requiring scientists to give up their working assumption that nature is at bottom a lifeless set of mechanisms. It has proven to be satisfying to some scientists and theologians as a way of saving both their science and their faith. The drawback of the existentialist theological program is that it places the core of our humanity outside of nature, and it fails to consider the possibility that Christian resurrection faith may have something to say about what's going on in the universe at large.

⁵See Phillip E. Johnson, *The Wedge of Truth: Splitting the Foundations of Naturalism* (Downers Grove IL: InterVarsity Press, 1999); Jonathan Wells, *Icons of Evolution: Science or Myth? Why Much of What We Teach about Evolution Is Wrong* (Washington DC: Regnery, 2000); Michael J. Behe, *Darwin's Black Box: The Biochemical Challenge to Evolution* (New York: Free Press, 1996); William A. Dembski, *Intelligent Design: The Bridge between Science and Theology* (Downers Grove IL: InterVarsity Press, 1999); for critiques of Intelligent Design Theory see John F. Haught, *God after Darwin: A Theology of Evolution* (Boulder CO: Westview Press, 2000); *Deeper than Darwin: The Prospects for Religion in an Age of Evolution* (Boulder CO: Westview Press, 2003); and Kenneth R. Miller, *Finding Darwin's God: A Scientist's Search for Common Ground between God and Evolution* (New York: Cliff Street Books, 1999).

⁶Rudolf Bultmann, *The New Testament and Mythology and Other Basic Writings* (Minneapolis: Augsburg/Fortress Publishers, 1984).

Is there then a reasonable and robust alternative to both naturalism and religious dualism, one that can take seriously the discoveries of science and at the same time situate the resurrection of Jesus—and our own hope to share in it—in some other metaphysical space than that permitted by scientific naturalism? In order to work my way toward such an alternative it will be helpful, first, to ask how the modern ontology of death arose in the first place (including theology's own complicity in shaping this worldview). Then, after looking at a possible response to this question I shall sketch (and no more than that) a theological worldview that is appreciative of scientific inquiry while at the same time being open to the astounding news of the resurrection from the dead.

1. ORIGINS OF THE ONTOLOGY OF DEATH

The emergence of life, science seems to be telling us, is a purely natural process, and that means explicable fully in terms of the nonliving. Modern science, especially in combination with the recent discovery of deep cosmic time, has given the impression that our universe is *essentially* lifeless. Only the most unlikely concatenation of accidents (combined with routine physical processes) has allowed life to arise at all. By all accounts life seems unplanned. In order to dramatize this point imagine that you have on your bookshelf a set of thirty large books. Each is 450 pages long, and every single page represents one million years of cosmic time. Taken together, the thirty tomes tell the story of our 14 billion year old universe. The Big Bang takes place on page 1 of volume 1, and the next twenty-two volumes are utterly devoid of any actual living beings.⁷ By the latest estimates, life on earth does not make its debut until volume 22, about 3.8 billion years ago. And even after life appears, it is not in a hurry to achieve anything spectacularly interesting until about fifty pages from the end of volume 29, when the so-called Cambrian Explosion begins and then continues over the next several pages. During this period life becomes many times more complex than before. Even so, the emergence of "mind" or "thought" does not take place until the last several pages of volume 30. And, finally, the entire history of modern humans takes up only the last tenth of the last page of the very last volume.

Most of the volumes in this set seem, at least to the scientific naturalist, to feature an interminable deadness, and life appears only as a late and apparently unplanned anomaly. The scientific discovery of deep cosmic time, therefore, has made it seem all the more likely that life has only a precarious foothold in the universe. Modern thought, however, had already prepared us for the idea that the universe is uncomfortable with life. The assumption that nature is essentially lifeless

⁷It is possible, of course, that life has appeared earlier in other parts of the universe. But, even so, such occurrences would still have had to wait until galaxies formed and heavy chemical elements, especially carbon, were created. This could only have taken place some billions of years after the Big Bang. So the question remains: Why so long?

was sanctioned by modern religious thinkers who wished passionately to defend the notion of God's absolute sovereignty over nature. Robert Boyle and others assumed that the most appropriate way to defend the idea of divine transcendence and power is to conceive of nature itself as pure passivity, and the essential deadness of a mechanistic universe did not seem out of keeping with a kind of theism in which God is in complete control. To attribute any kind of intrinsic creativity or spontaneity to the physical universe would have diminished the sense of God's power over the universe and thereby would have placed the world in a competitive relationship with its creator.⁸ Of course, theistic religion has always had to make room for human freedom—and hence the possibility that at least one sector of the world can resist the mighty will of God. This exception could be established easily by the dualistic expulsion of mind (and freedom) from nature.

However, to understand the deepest origins of the modern ontology of death it is necessary to go back much further than modern theology, Cartesian dualism and mechanistic materialism. The philosopher Hans Jonas traces the origins of our modern sense that death is the natural state of being back to a period far before modernity. Generally speaking, he surmises, our prescientific ancestors, up until about the time of the Renaissance, felt the entire world to be saturated with life. *Panvitalism* was the prevalent worldview. That is, people viewed *aliveness* as the pervasive state of being. And so, whenever an animal or person died, such an event could only be perceived as a digression from the natural state. Death has no intelligible place in a panvitalist ontology, so the utter passivity characteristic of the dead must be an illusion. And since death cannot be truly real, prescientific people spontaneously developed the notion of a "spirit" or soul as the persistent inner core of living things. After dying, the spiritual dimension still lived on, and the essential aliveness of those deceased could continue to be celebrated ritually, their true being incorporated into the consciousness and memory of the community.⁹

Vestiges of this animism, of course, still live on in our religions. The idea of a noncorporeal core of existence has been consoling to millions. However, the risk of such a view is that the corporeal may eventually appear to be essentially lifeless and only temporarily animated. According to Jonas it is this incipient dualism of premodern thought that prepared the way for the eventual radical expulsion of mentality and vitality from the realm of the physical. The logical conclusion that the material universe is essentially and pervasively dead was not widely entertained explicitly by our religious ancestors. But after the birth of modern science and especially the geological and astronomical disclosure of the temporal and spatial limitedness of life, the physical universe has come to be thought of as essentially devoid of life. Death has become the metaphysical norm, the natural state of things, and life the unintelligible exception that needs to be explained. According to Jonas,

⁸See David Ray Griffin, *Religion and Scientific Naturalism: Overcoming the Conflicts* (Albany NY: State University of New York Press) 107-35.

⁹Hans Jonas, *The Phenomenon of Life* (New York: Harper & Row, 1966) 9.

[F]rom the physical sciences there spread over the conception of all existence an ontology whose model entity is pure matter, stripped of all features of life. What at the animistic stage was not even discovered has in the meantime conquered the vision of reality, entirely ousting its counterpart. The tremendously enlarged universe of modern cosmology is conceived as a field of inanimate masses and forces which operate according to the laws of inertia and of quantitative distribution in space. This denuded substratum of all reality could only be arrived at through a progressive expurgation of vital features from the physical record and through strict abstention from projecting into its image our own felt aliveness.

Then Jonas adds:

This means that the lifeless has become the knowable par excellence and is for that reason also considered the true and only foundation of reality. It is the “natural” as well as the original state of things. Not only in terms of relative quantity but also in terms of ontological genuineness, nonlife is the rule, life the puzzling exception in physical existence.¹⁰

And so, for modern consciousness “it is the existence of life within a mechanical universe which now calls for an explanation, and explanation has to be in terms of the lifeless.”¹¹ The ontology of death, moreover, is supported by what I would call a “metaphysics of the past,” according to which the full explanation of present things and events lies solely in what is chronologically earlier and physically simpler in natural process. The premodern hierarchies of nature that placed humans, animals, plants and minerals on distinct levels in an essentially organic universe has given way to the assumption that pure “matter,” stripped of any essential association with life, is the ultimate foundation of life and mind. And even though some scientists and philosophers have recently tried to move beyond simplistic forms of physicalism, they cannot help being constrained by the weight of intellectual habit to situate their reflections on life, evolution and emergence within the governing framework of an ontology of death.

If this constraint were exclusively methodological, that is, if it were merely a device for bringing into sharp focus several measurable aspects of nature, it would hardly merit comment. But an innocuous method of knowing has now metamorphosed into a dominating metaphysics. And the ancient panvitalist problematic of how to account for the anomalous fact of death if everything is throbbing with life has given way to the contemporary riddle of how to explain life if the world is normally and habitually dead. Cartesian dualism, Jonas writes, was an essential intermediate stage in this transition, and in its own flirtations with dualism theology has cooperatively made room for an ontology of death as the counterpart of the world of the soul. By segregating the soul from the natural world it has firmed up the fiction of an essentially lifeless and mindless cosmos. Centuries of theologically endorsed dualism, having exorcised life and mind from nature, have thus bequeathed

¹⁰Jonas, *The Phenomenon of Life*, 9-10.

¹¹Jonas, *The Phenomenon of Life*.

to modern thought the makings of the very ontology of death that has now rendered belief in resurrection nearly impossible for countless educated people.¹²

The actual discoveries of modern and recent science that I referred to earlier have merely added an air of empirical credibility to the ontology of death that had already been established by dualism and its materialist offshoots. The awakening by science to deep geological and cosmic time, in which the universe was clearly in no hurry to produce living beings, only serves to back up the naturalist's suspicion that life was never intended to happen in the first place. Equally, the astronomical impression that life, quantitatively speaking, makes up only an infinitesimally tiny portion of the immense cosmic whole makes life on earth seem all the more an exception to the norm. Even if astrobiological conjectures turn out to be correct, and there are extraterrestrial precincts of life in the wider cosmos, the prevalent suspicion among scientific thinkers, with some notable recent exceptions among astrophysicists and astrobiologists, is that life fits only uneasily into the pervasive deadness and dumbness of the cosmos. And although the current physics of the early universe has convinced some scientists that life and mind are almost inevitable outcomes of the way the Big Bang cosmos is structured, the predominant mindset of scientists and philosophers—still habituated to modern modes of thought—is one that feels obliged to look for ways to protect the assumption that life and thought are not essential to the cosmos as such.

It is fascinating to observe the lengths to which scientific naturalists will go in order to protect their assumption of the essential lifelessness of nature. For example, the renowned cosmologist Martin Rees is willing to admit that the emergence of life in *our* universe is nearly inevitable, given its initial physical conditions and fundamental constants. Life, he admits, seems to be built into the Big Bang universe from the start. So how can we understand the natural world in such a way as to preserve the idea that lifelessness is the most fundamental and most intelligible state of being? Since the existence of any universe endowed with biophilic traits seems to challenge the ontology of death, one must look for a wider cosmic setting in order to satisfy the naturalistic inclination to make the *whole* of nature essentially lifeless.

¹²The logical impossibility of explaining life exhaustively in terms of the lifeless, however, has not prevented scientists of the stature of Francis Crick from boldly proclaiming, as he does in *Of Molecules and Men*, that “the ultimate aim of the modern movement in biology is in fact to explain all of life in terms of chemistry and physics.” Francis H. C. Crick, *Of Molecules and Men* (Seattle: University of Washington Press, 1966) 10. Crick's colleague James Watson agrees, expressing the hope that life “will be completely understood in terms of the coordinative interactions of large and small molecules.” J. D. Watson, *The Molecular Biology of the Gene* (New York: W. A. Benjamin, Inc., 1965) 67. And Nobel Prize-winning biochemist Jacques Monod insists that the secret to life and its origin is “obviously” chemistry. Jacques Monod, *Chance and Necessity*, trans. Austryn Wainhouse (New York: Vintage Books, 1972) 28.

So suppose there are multiple universes that exist as the larger setting for our own. Then one can salvage the prerequisite backdrop of essential cosmic deadness by viewing our life-oriented cosmos as only one of an immensely large plurality of universes, most of which would be structurally indifferent to life. As a statistical whole, therefore, the natural world can once again be portrayed as foundationally lifeless. Along with numerous other scientific naturalists, Rees apparently believes that it is the mission of the true scientist to make room for an *intrinsic* lifelessness and impersonality at the natural and foundational level of being. Accordingly, for life and mind to retain their bearings as *essentially* alien to the underlying nature of things, all one has to do is envisage our own peculiarly life-bearing universe as a statistical aberration in an immense number of blind cosmological experiments. This speculation, for which there is not a shred of evidence—at least so far—is appealing to the naturalist since it allows the idea of an intrinsically dead cosmos to remain intact.¹³

Before I go any further, however, I want to insist that theology has no reason to object to the idea of a multiverse as such. This fascinating idea is perfectly consistent with the extravagance of divine creativity as well as with certain interpretations of quantum physics. Further, the many worlds that Rees and others hypothesize would—at least from a theological point of view—still participate in the being of God, no matter how empirically inaccessible they may be to one another. And this ontological togetherness would mean that there is still only one creation, no matter how diverse its manifestations. What I am interested in highlighting here, though, is the extent to which the naturalist mind will go, in the absence of any direct evidence, in order to preserve the belief that lifelessness is the most natural and intelligible state of being.

2. A POSSIBLE ALTERNATIVE: ESCHATOLOGICAL PANVITALISM

The question for theology then is whether there can be a *reasonable* alternative to the intellectual appeal of the naturalistic ontology of death. Could such an alternative meaningfully contextualize faith's openness to resurrection without contradicting scientific understanding and knowledge? What I propose is an *eschatological panvitalism* based on the impression that nature is not simply and solely the outcome of a past series of mechanical causes, but also the anticipation and promise of an indeterminate future—including eventually a decisive and final victory of life over death. This impression is inspired by religious hope, of course, but it is not inconsistent with certain stirrings within the world of recent scientific inquiry wherein nature is observed to be an emergent process whose various states suggest the attraction of something up ahead rather than compulsion completely by the past.¹⁴

¹³Martin Rees, *Our Cosmic Habitat* (Princeton NJ: Princeton University Press, 2001). See also Lee Smolin, *The Life of the Cosmos* (New York: Oxford University Press, 1997).

¹⁴See, e.g., Harold Morowitz, *The Emergence of Everything: How the World Became*

Eschatological panvitalism entails a metaphysics based on the sense of nature's promise of indeterminate outcomes yet to come, rather than exclusively on a sense of what has already occurred. Contrary to the modern ontology of death, moreover, the worldview I am proposing is one that takes aliveness to be an essential characteristic of nature even if such a condition is not yet obvious or fully actual. The essential state of nature has yet to be realized and made fully visible. This means that life can be understood as irreducible to death only if our thoughts are directed forward to where cosmic process may be going, rather than exclusively backward to where it came from. Such a reversal of vision (one that is most explicit in the writings of Teilhard de Chardin¹⁵) is, I believe, one of the great contributions of biblical and Christian faith to an understanding of the world. At the origins of Christian tradition only those who were open to God's coming, especially those whose past was too inglorious to be the basis of their self-esteem, had their sight transformed in such a way as to be adequate to their Lord's resurrection. In a parallel way we today can really know life only by looking forward toward its future actualizing rather than only gazing backward to the past by way of an analytical reconstruction of life's historical antecedents and physical constituents.

The modern impression that lifelessness is foundational, after all, is the product of an impatience that assumes the present state of affairs in the universe to be the finished product of nature's past achievements rather than an unfinished stage in a process that can be fulfilled only in a not yet actualized future. Unlike prescientific consciousness, which took the life-world to be all that is actually real, an eschatological panvitalism can realistically acknowledge the present quantitative dominance of lifelessness across time and space as this has been disclosed by scientific discovery. But, as opposed to scientific naturalism, an eschatological panvitalism is highly sensitive to the many ways in which natural processes still remain open to future episodes of creativity. The final word about the truly *essential* state of nature cannot be arrived at simply by tracing life's antecedents into the dead cosmic past. A metaphysics of the past, after all, will lead inevitably to an ontology of death. Only by acknowledging the anticipatory character of nature can we begin to get a bead on life. Jesus' resurrection, in this context, is for faith the revelation of what nature anticipates, a fulfillment in which life will show itself at last to be more fundamental and ultimately more intelligible than death. Resurrection, in this setting, is not an interruption of deadness, but its final vanquishing. And so it is by anticipating nature's essential, though not yet actualized, eschatological aliveness, and not by looking only scientifically toward the earlier-and-simpler antecedents and physical constituents of life, that we shall be able to arrive at an accurate reading of nature's essential being. Theology, I believe, must no longer compromise

Complex (New York: Oxford University Press, 2002).

¹⁵Pierre Teilhard de Chardin, *The Human Phenomenon*, trans. Sarah Appleton-Weber (Portland OR: Sussex Academic Press, 1999) 1-3.

or tacitly cooperate with the modern ontology of death, but look more enthusiastically toward its final overcoming.

To those who believe that God is the author of all life, as well as the One who raises the dead to new life, the intuitions of primal panvitalism must somehow be correct after all. Along with panvitalism, theology must search for a way of maintaining that reality is *essentially* alive and only provisionally lifeless. But in the face of the quantitatively overwhelming inertness of the cosmos in its temporal past and its spatial outreach, panvitalism can best be taken as referring to the world's ultimate future. For those who put their trust in the God of biblical revelation, death cannot be the normal, natural, final or most intelligible state of things. If we believe in a God whose enemy is death we cannot make peace with any ideology that cedes ontological primacy to what is lifeless.¹⁶

A faith shaped by the hope for resurrection, therefore, will be especially critical of the ideology of death that scientific naturalism usually presents as pure scientific fact. It must also resist the compromises with scientific naturalism that the arguments of Intelligent Design proponents make in order to find a purchase here and now on what can only be a final state of nature. Given the intellectual prevalence of naturalism, Intelligent Design Theory may seem to function favorably as a way to reconnect the living God to a lifeless cosmos. Theologically speaking, however, Intelligent Design Theory provides only unsteady refuge. Not only does it embarrassingly introduce theological categories into scientific accounts of life; it only half-heartedly challenges the ontology of death that has become the worldview tacitly presupposed by contemporary scientific naturalism. It still allows for the final rule of lifelessness throughout what it takes to be the nonanimate world. A fundamental error of the Intelligent Design movement is to have assumed that it can supplant the intellectually ingrained sovereignty of death by attacking it at the level of scientific understanding, rather than striking it at the level of metaphysical assumptions.

Theology needs, therefore, to find a deeper way of subverting the more fundamental intellectual and cultural enshrinement of nonlife that contextualizes contemporary science and much of intellectual culture. Rather than striking down specific scientific ideas embedded in materialist assumptions, it would be wiser to look for an alternative metaphysical setting for science to that of scientific naturalism.¹⁷

¹⁶It is true that the perishing of organisms is an evolutionary necessity, in order to make room for sufficient genetic diversity. Moreover, it is also true (as theologian Elizabeth Johnson has reminded me) that there is a sense in which the spiritual journey may include the befriending of death. Even Teilhard de Chardin advises us that we must embrace not only our activities but also our passivities (including suffering and eventually death). All I am emphasizing here is that theology cannot accept death as ultimate, either in the explanation of life or as the final state of being.

¹⁷I am not claiming that science itself is equivalent to an ontology of death, but that what makes the study of emergence so exciting is the alchemical fascination with the possibility that, out of a state of lifelessness, life and less-dramatic emergents can appear

The dominant biblical worldview is one in which life has primacy. But it can plausibly be so only because it also gives metaphysical primacy to the future. Right now, here in the present, we are witnesses to the ambiguity and perishability of life as well as to what may seem to be the finality of death, especially if our eyes are straining only toward nature's past. We cannot claim on scientifically empirical grounds alone that life is the norm and death the exception. If we are panvitalists it can only be of an eschatological variety. The end of all life, and death, must be life in abundance. But life, at least here and now, seems to be less fact than promise. If we confess continuity with our biblical past we must find a way to reaffirm here and now that life is the essential and most intelligible state of being. But from the perspective of the present the essential has not yet become fully actual. In other words, we must confess that life, at least in some important sense, has not yet happened.

A resurrection faith, I believe, pushes us toward a metaphysics of the future. That is, it implies that what is most real or essential, when seen from our present perspective, can take hold of us only as we turn toward the future. We can know the future not by grasping it the way we do things that lie apparently finished in the past, but only by allowing ourselves (and nature) to be grasped by it. By adopting the posture of hope, in other words, we can begin to sense the realness of life. On the other hand, the ontology of death, which resides in a "metaphysics of the past," believes that the fundamental essence and explanation of things can be located only in a series of temporally prior events now perished. The underpinning of this characteristically modern belief is science's methodological exclusion of considerations of purpose or final cause. This exclusion of goals and purposes is perfectly appropriate in science, of course, but such a concession does not require leaving considerations of purpose out of our more general envisagement of reality as a whole, as scientific naturalism typically proposes that we do.

The foundational state of nature is not the dead past, but the future on which the world leans as its sole support (Teilhard). What is called for is a whole new metaphysical setting for science, one that will both encourage further research but which will not ask us to throw away either common sense or religious intuition. The very same universe that some prominent scientific naturalists have characterized as aimless and pointless becomes rich with purpose as soon as we understand its Creative Source to be a self-emptying love that perpetually comes toward the present from out of the future.¹⁸ I would suggest that envisaging God as essentially Future, and nature as essentially promise (rather than as design) is the ideal framework for both science and a theology of resurrection. It permits us to reconnect the life-world (and the world of mind as well) to the universe from which it was born. Finally, it allows that natural theology need no longer look at nature in order to determine whether it measures up to limited human models of engineering

effortlessly and without straining the laws of nature.

¹⁸See Karl Rahner, *Concerning Vatican Council II*, Theological Investigations vol. 6, trans. Karl-H. Kruger and Boniface Kruger (Baltimore: Helicon Press, 1969) 59-68.

and design. Rather, its role is now one of helping us to decide whether the creative, living and emergent face of nature is mere veneer temporarily concealing an ultimate deadness, or perhaps instead the harbinger of an unimaginable future now being opened up by the Spirit of the God who raised Jesus from the dead.

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