Commencement Address

1 Corinthians 3:1-23

On this occasion the preacher has several alternatives. First, he may make his address a summary in which he seeks to discuss all that has been spoken about in the academic courses, or considered and learned in our Seminary. The speech may be, that is to say, a kind of reminding benediction and charge pronounced over the whole business. This summary conception of a Commencement Speech, it seems to me, is quite useless. If the task of the school has not been responsibly accomplished it’s too late to talk about it now. Second, one may turn the head around and face the other way, that is, to let what one says be determined by the nature of the occasion as a commencement, as a sharp new beginning toward the fulfillment of our task as ministers.

I have elected the second way for this occasion, and for the following simply stated but not simple reason. The world is in a deep and a new kind of trouble. It is a deep trouble because the disorders that threaten us in every sphere, from the most private and personal to the most public and social, if not controlled and moved toward correction will certainly destroy us. And it’s a fresh kind of trouble because the traditional resources which the preaching of the Gospel has been bringing to these troubles are more and more seen to be van, or irrelevant, or not even understood. Many people call them escapist. It is to this trouble that Dietrich Bonhoeffer referred when he said, “The world has come of age.”

The context of Bonhoeffer’s statement makes perfectly clear what he meant. He meant to tell us that the old alliances upon which the Gospel could rely have been either repudiated or assessed as unnecessary. He is simply echoing the statement of Nietzsche many years ago when he said, “The housing problem has now arisen in the case of God.” What Nietzsche meant, of course, is exactly what Bonhoeffer means, that other ways of viewing human life and other disciplines for the study and the ordering of it have taken over so much of the territory formerly occupied by a Christian view of life as to make that view of life unnecessary or irrelevant. For instance, the discipline of sociology now investigates and describes the dynamics of society in such a way, and points out the creativity resident within it with such clarity, that many people turn away from other alternatives as simply useless or sentimental. In the neighborhood in which I live, I find many of my neighbors, Jewish and pagan, turning to neighborhood and community problems with great vigor and resolution. They are doing this not on the presuppositions of a Christian or any other kind of faith, but in the confidence that by sociological knowledge certain problems can be moved toward a solution.

There was once a time when the Christian faith was in close alliance with the philosophy of idealism. It was assumed, that is, that a certain understanding of human life and a certain assessment of the possibilities resident in human activity were alike in both the Christian message and in a philosophy of idealism. This alliance has completely broken down, and even the philosophy of idealism itself has no longer any certain confidence in its assertions. The alliance between theology and philosophy all along the line has, in fact, broken down. Contemporary philosophy is no longer concerned with matters of value or of truth, but rather in such an analysis of propositions as shall indicate what they intend to say.

This situation, and my vocation as a Church theologian within it, has made a certain New Testament text come alive with incandescent clarity. Its power is in both its mystery and its promise. It fascinates with the peculiar power of a statement that is clear enough to strike and attract the mind, and mad enough to trouble it. It is also close enough to experience to make sense; it transcends experience in such a way as to allure with the suspicion that it makes a wilder and holier sense than most of us have yet fathomed. “For all things are yours, whether Paul, or Apollos, or Cephas, or the world, or life, or death, or the present, or the future, all are yours; and ye are Christ’s; and Christ is God’s.”
All things, says the apostle. And he means "all things." The scope of the catalog with which he gives content to his statement that "all things are yours" is simply stunning in its completeness. He talks of the world in its ultimate dimensions — the world spun between life and death, in its temporal scope including past, present, and the future. And all of this, says the apostle, to those who stand within the circle of the Gospel's promise and power, all these things are yours. Not as possessions, or simply as an inner pile of energy to be exploited. That is negative. Paul here is positive. The world is deprived, so he says, of its power to seduce or enthrall or to subject man's life to its own life. Nothing in it can hurt a man anymore. And he is positive, too, in a joyful and creative sense. For he beholds the world not as a trap but as a theater, a place for joy and culture and creative ordering. Observe, too, that the apostle says that all things are ours because of Christ. When he speaks of Christ, Paul does not mean an idea or a theory, or a formal principle; he indicates rather a Godly deed whose name and career was a man, Jesus Christ. Because the believer is now participating in the life of God's man, Christ, this believer is newly organized from the inside out. The great surpassing fact of this organization is that the world which killed him is also a world in which God raised him from the dead. This means that over that apparent victory of the world is the absolute victory of God. Therefore, Christ is God's.

But the apostle continues to say, "and ye are Christ's." Therefore nothing of the world has ultimate. The Church of which you are shortly to be ordained ministers exists fundamentally to accept this, to declare this, to become a living community in which this fact is like a bubbling yeast in which all men are called to think through how life may be penetrated with the power of Christ. This text reminds us that the great issue for our time is simply a new and terrifying challenge to solve the oldest problem between the Christian message and the world — the problem of nature and grace. By nature I mean simply the creative world with all of its powers, potencies, and problems. In older days the term nature evoked the simple biblical image of "the cattle on a thousand hills." But a contemporary man knows that for millions of people that image is no longer one which points him to the place where he meets nature. Nature for the contemporary man is rather the technology in a thousand shops and laboratories, the teeming millions of men in a thousand cities, rock-
does sometimes look back nostalgically at the small town and country parishes which are set in a tranquil, pastoral situation, far removed from the noises and complexities of technology and the torments in human association which now beset our whole people. But the problems of the contemporary city if seen with sufficient imagination are just as exciting to the Christian mind, and as fair a field for the promises of God, as over the rural situation was.

The other night I flew into Midway Airport from across Lake Michigan from the east. It was night, and as I looked down I saw the lights of the ships on the lake, carrying oil and grain and ore. I thought of the ports from which they came and the vast city whose people and work they serve, sparkling with its million lights, lights indicative of the million tasks and duties, responsibilities, and joys, and problems that beset this huddled people. And when I reflected that within this galaxy of lights there is organized a magnificent integration of responsibilities, hospitals that never close, forces of protection that are never off-guard, ways of maintaining health and sanitation that are fantastically complex and dependable, I became aware that one can love the city, too!

A great urban center presents a different quality of possibility than moves a farmer as he sows the small seed to become the stuff in the great barns. But the vision, though different, is equally challenging. The Church, the realm of grace, dare not so embrace the world of nature as to identify her resources simply with its older, simpler, less troubling possibilities.

God is not the same as the world — and grace is not the same as nature. But God came into the world and in Jesus Christ established a relationship which, once accomplished, can never be undone or ignored. When we try to dig back of the particular formulations with which our particular church celebrates the Reformation and get at the root differences between Reformation and Pre-Reformation Christianity, we begin to see that the sixteenth century represented the victory of grace over nature. And we are so placed before subsequent history as to know that the centuries that followed have represented the victory of nature over grace.

Our task, as I understand it, is to restore the right relationship of nature and grace — in obedience, in word and in thought. Steel is nature plus technology, but what is done with steel is a problem that involves the dimensions of nature and grace. White men are nature, and non-white men are nature, too. But for these to live together as men and not avoid, or simply suffer, or haughtily acquiesce in the presence of the other requires something that nature does not provide. Politics, in a sense, is nature; and it is necessary and good, for it exists for order and order is of God. But to envision public order as a field of grace has not sufficiently engaged our Christian mind.

This sermon has made no effort to speak of the task of the minister in relation to the Church, to the people of the parish. These are not unimportant matters, and on the occasions of your ordination and installation wise and kind words will be spoken about these things. Your faculty duty has been to open and stimulate and furnish your minds. It is, therefore, our peculiar hope for you that in your solitary thought, in your preaching and teaching you remain aware that you are sent from the Church, through the Church — but to the world, God’s tormented creation, that it may know all things natural to be transformable and redeemable by grace, and all things gracious restless and yearning until they find natural embodiment.


9

CREATOR SPIRIT
IN THE EVOLVING WORLD

THE VIVIFIER

Consider the idea of God emerging from human engagement with the natural world in our day. In photographs taken from space, our home planet looks like a bright blue marble swirled around with white clouds. Floating against a background of endless black space, it is a precious little spot that alone among all the planets, moons, and asteroids we have explored to date is covered with a membrane of life. Astronauts who have seen this view with their own eyes speak of its power to change their deepest feelings. Saudi Arabian astronaut Sultan bin Salman al-Saud, part of an international crew, recollected: “The first day we all pointed to our own countries. The third day we were pointing to our continents. By the fifth day, we were all aware of only one Earth.” Astronaut Rusty Schweigert, who walked on the moon, noted from that vantage point that Earth is so small you can block it out with your thumb. “Then you realize,” he mused, “that on this beautiful warm blue and white circle, is everything that means anything to you,” all of nature and history, birth and love. And then you are changed forever.

Since the 1960s this picture has become the common heritage of all Earth’s people. It symbolizes a new awareness of planet Earth
growing among people around the globe, an understanding shaped by a unique dialectic. On the one hand, we stand in wonder at the intricate workings of this world as uncovered and popularized by contemporary science. On the other hand, we lament in distress at how human predation is rapidly spoiling this natural world. In this dual ecological context of wonder and wasting, people of faith are rediscovering an ancient theme, namely, the presence and action of the creative Spirit of God throughout the natural world.

In seeking understanding here, we are not well served by the theology of recent centuries. For one thing, unlike Orthodox theology of the Greek and Russian churches, modern theology in the West has shortchanged pneumatology, the study of the Spirit. It has treated the Spirit, in Walter Kasper’s words, like the Cinderella of theology, the one who stays home doing the drudgely work while the other two get to go to the ball. Modern theology has also neglected the natural world as a subject of religious interest. This began to happen at the time of the Reformation. Prior to that, God, the human race, and the natural world formed three pillars of theology, a three-legged stool that together comprised Christian as well as Jewish and Islamic philosophical and theological reflection. But the fierce conflict over how we are saved from sin, with Protestants insisting on Christ’s redemptive work being effective by faith alone and Catholics holding out for faith and good works, caused a focus on the human dilemma that blinkered eyes to the rest of creation. As happens in any fight, people lost sight of the wider reality. In the centuries that followed, Catholic theology tied the Spirit very tightly to church office and the teaching of the magisterium, while Protestant theology fastened onto the Spirit’s work of justification and sanctification in the individual person. This focus on humanity led both sides to forget biblical, patristic, and medieval theology’s witness to the cosmic presence and activity of the Spirit from the beginning, throughout history, unto the end.

In revisiting this ancient theme for our day, then, ecological theology needs to work on two fronts at once, the Spirit and the natural world. The Nicene Creed offers a subtle clue by identifying the Spirit as “the Lord and Giver of life,” in Latin Dominus et vivificantem, the one who vivifies, the Vivifier. This clue to the Spirit’s work in the world receives further precision from a trio of metaphors crafted by the third-century North African theologian Tertullian. First, if God the Father can be likened to the sun, the Christ is a sunbeam, that is, of the same substance as the sun and coming forth to earth. And the Spirit? The Spirit is the sunbeam, the spot of warm and light where the sun arrives and actually has an effect. This pathway repeats in the example of water: there is an upwelling spring in the hills, the same water in the river flowing through the valley, and the irrigation ditches (the Spirit) where the water reaches plants and actually enables them to grow. Similarly, this thinker compared the trinitarian God to the root, the shoot, and the fruit of a tree, that is, the tree’s deep unreachable foundation, its visible sprouting forth into the world, and its flowers, fragrance, fruit, and seeds (the Spirit), which beautify and nourish the world. These are metaphors for the one God who exists as incomprehensible mystery beyond the world, comes forth incarnate in history, and—here is the point—provides the material world with graceful vigor.

It is crucial to remember at the outset that the Spirit is never less than God. The Creator Spirit is always God, who actually arrives in every moment, drawing near and passing by with life-giving power. The stunning world opened up by Big Bang cosmology and evolutionary biology on the one hand, and the vulnerability of life on Earth needing protection on the other, is leading ecological theology to glimpse the Spirit’s presence and activity in a reality with new contours, as the living God who is the source, sustainer, and goal of the whole shebang.

THE NATURAL WORLD

Wonder

Keeping in mind the image of Earth from space, consider four aspects of the planet and its place in the universe.

- First: it is all very old. In billions of years, the key numbers are 14, and 4. The universe originated in a primordial flaring forth, rather elegantly named the Big Bang, about fourteen billion years ago (more precisely 13.7 billion years ago, according to current scientific consensus). From that explosive instant onward to this day, the universe has continued to expand as galaxies and their stars come into being and pass away. Our own sun and its planets emerged about five billion years ago, coalescing from the dust at
gas left by previous generations of stars that exploded in their death throes. On planet Earth about four billion years ago, a new eruption occurred, life, emerging in communities of single-celled creatures deep in the primeval seas and evolving into the more than one million species present today.

In his book *The Dragons of Eden*, Carl Sagan uses the timetable of a year to dramatize the sequence. If the Big Bang occurred on January 1st, then our sun and its planets came into existence September 9th. Life on Earth originated on September 25th; and the first humans emerged onto the scene on December 31st at 10:30 P.M. Placing this timetable onto a graphic physical structure, the American Museum of Natural History in New York built a spiraling cosmic walk that traces the history of the universe. Starting at rooftop level with the Big Bang, each normal-sized step down the walkway covers millions of years. At the bottom, one steps over all of human history in a line as thin as a human hair. We human beings are newborns in the universe, only recently arrived.

» Second, the universe is incomprehensively large. There are over one hundred billion galaxies, each comprising of billions of stars, and no one knows how many moons and planets, all of this visible and audible matter being only a fraction of the matter in the universe, which, being not well understood, is called "dark." Earth is a small planet orbiting a medium-sized star toward the edge of one spiral galaxy. We are but a speck.

» Third, the universe is complexly interconnected, everything being related to everything else to some degree. Speaking of the redness of human blood, for example, British scientist/theologian Arthur Peacocke wrote, "Every atom of iron in our blood's hemoglobin would not be there had it not been produced in some galactic explosion billions of years ago and eventually condensed to form the iron in the crust of the earth from which we have emerged." Quite literally, human beings and all creatures on this planet are made of stardust. The story of biological evolution, moreover, makes evident that we humans share with all other living creatures a common genetic ancestry tracing back to the original single-celled creatures in the ancient seas. Bacteria, pine trees, blueberries, horses, the great gray whales—we are all kin in the great community of life. In Abraham Heschel's beautiful metaphor, this makes human beings the cantors of the universe, able to sing praise and thanks in the name of the whole cosmic community of which we are a part.

Fourth, the universe is profoundly dynamic. Even as you read these words, new space is coming into being as the universe continues to expand outward. Galaxies whirl around their central black hole; our planet revolves yearly around our star and rotates on its axis every day; whole species emerge, thrive, and go extinct, as do individuals whose time span ranges from birth to death. No longer, then, can theology contrast nature's regularity with human history, or oppose the fixed pagan gods of氮 with the mobile God of the Israelites on the move in history. Nature itself is historical.

This dynamism accounts for the emergence of the human species itself. From the evolutionary life and death of single-celled creatures flowed the advancing tide of life: creatures that live in shells, fish, amphibians, reptiles, insects, flowers, birds, and mammals, among whom emerged human beings whose brains are so richly textured that we experience a reflective consciousness and freedom, or in classical terms, mind and spirit. Zesty with energy, evolves to life, then to consciousness, then to the self. From the weed to the peach to the person. Human thought and love are not something injected into the universe from without, but are the flowering in us of deeply cosmic energies, arising out of the very physical dynamism of the cosmos, which is already self-organizing and creative. In this telling, human persons are not aliens set down in a strange physical world but an intrinsic part of the evolving story. In Salie McPah's inspired appellation, we are "earthlings," creatures who belong here. Our personal yearnings and cultural creativity encapsulate the energetic vitalism of the cosmos itself. Our little group of historical time concentrates the world and exciting undertaking going on in nature itself. This makes us distinct but not separate, a unique strand in the cosmos, yet still a strand of the cosmos.

On the one hand, wonder. But on the other hand, distress, for this strand has entered a new and threatening chapter on our home planet.

*Wasting*

We humans are inflicting deadly damage on our planet at an accelerating pace, compromising its identity as a dwelling place for life. Overconsumption, unbridled reproduction, exploitative use of resources, and efflorescent pollution are rapidly depleting life-supporting systems on land, in the o
and in the air. Every year, for example, 20 percent of Earth's people in the rich nations use 75 percent of the world's resources and produce 80 percent of the world's waste. An example: Chicago with three million people consumes as much raw produce in a year as Bangladesh with ninety-seven million people. Such overconsumption is driven by an economy that must constantly grow in order to be viable. Its greatest goal is a bottom line in the black without counting the ecological cost. Another example: in 1950 the world numbered two billion people. At the turn of the millennium we numbered six billion. If predictions hold, by the year 2030 there will be ten billion persons on the planet. If someone born in 1950 lives to be eighty years old, Earth's human population will have multiplied five times during his or her lifetime. To translate these statistics into a vivid image: another Mexico City is added every sixty days; another Brazil joins the planet every year.

The carrying capacity of Earth is being exhausted by this human use; our species consumes resources faster than Earth's power to replenish itself. This assault on the planet, intended or not, wreaks ecological harm of great magnitude. The unhealthy frenzy is well known: global warming, holes in the ozone layer, clear-cut forests, drained wetlands, denuded soils, polluted air, poisoned rivers, overfished oceans, and, over all, the threat of nuclear conflagration. Appallingly, widespread destruction of ecosystems has as its flip side the extinction of the plant and animal lives that thrive in these habitats. Ours is a time of a great dying off. By a conservative estimate, in the last quarter of the twentieth century 10 percent of all living species went extinct. When these living beings, these magnificent animals or little plants go extinct, they never come back again. We are killing birth itself, wiping out the future of our fellow creatures who took millions of years to evolve. Their perishing sends an early-warning signal of the death of the planet itself as a dwelling place for life. In the blunt language of the World Council of Churches, "The stark sign of our times is a planet in peril at our hands."

The picture darkens as we attend to the deep-seated connection between social injustice and ecological devastation. Poor people suffer disproportionately from environmental impoverishment; ravaging of people and ravaging of the land on which they depend go hand in hand. In the Amazon basin, for example, lack of land reform pushes dispossessed rural peoples to the edges of the rain forest, where in order to stay alive they practice slash-and-burn agriculture, in the process destroying pristine habitat, killing rare animals, and displacing indigenous peoples. In wealthy nations, the economically well-off can choose to live amid acres of green while poor people are housed near factories, refineries, or waste-processing plants that heavily pollute the environment. Birth defects, general ill health, and disease result. The bitterness of this situation is exacerbated by racial prejudice, a environmental racism presses people of color to dwell in these neighborhods.

Feminist analysis clarifies further how the plight of the poor become exemplified in poor women whose own biological abilities to give birth are compromised by toxic environments, and whose nurturing of children is hampered at every turn by lack of clean water, food, and fuel. Women initiated projects such as the Chipko movement in India, whereby village women literally hug the forest trees to prevent lumber interests from cutting them down, thus ensuring clean water, fuel, and fruits; and the Green Belt movement started by Nobel Peace Prize winner Wangari Maathai in Kenya whereby women plant millions of trees and receive a small income for nurturing them, show how protecting and restoring the Earth interweave intrinsically with the flourishing of poor women and their communities. Poverty and its remedy have an ecological face.

When people begin to think about God in relation to this world, the stunning natural world opened up to our wonder but being destroyed by our wasting leads to a whole new approach. In former times, the basic conception of the world was that it was created in the beginning and remained a static entity; God's activity consisted primarily in maintaining what had already been established. Now that we realize that the world is becoming that genuinely new things come into being by evolution and other processes, fresh ideas of divine presence and agency are needed. To date these have centered on the Spirit of God, called the Creator Spirit in the great medieval hymn Veni, Creator Spiritus. As it integrates the revelatory experience of personal God into an expansive cosmological setting, ecological theology replete in its fullest measure with social justice and eco-feminist insights, is mapping yet another new frontier.

DIVINE PRESENCE

Attending to the idea of the Creator Spirit brings to the fore the belief that the presence and activity of God pervade the world and that therefore th
natural world is the dwelling place of God. This divine presence can be explored under three rubrics: it is continuous; it is cruciform; and it abides in the mode of promise.

Continuous Presence

At the end of his popular book *A Brief History of Time*, physicist Stephen Hawking asks a famous question: "What is it that breathes fire into the equations and makes a universe for them to describe?" In the integrity of his adherence to atheism, he leaves the question open. Biblical faith offers a different option, daring to believe that it is God's own Spirit who breathes life into the equations, thereby bringing forth this exuberant universe. The mystery of the living God, utterly transcendent, is also the creative power who dwells at the heart of the world sustaining every moment of its evolution.

The mental model that allows for the most intelligible interpretation of this presence is pantheism (all-in-God). In recent centuries theology worked mainly with the model of theism. This construal infers God to be the highest member of the order of being. It insists on God's difference and distance from the world while paying little attention to divine nearness. Its opposite model is pantheism (all is God), which erases the difference between created and uncreated, thereby collapsing God and the world into each other. Unlike either of these patterns, panentheism envisions a relationship whereby everything abides in God, who in turn encompasses everything, being "above all and through all and in all" (Eph 4:6). What results is a mutual abiding for which the pregnant female body provides a good metaphor.

Martin Luther, who had a rich and sophisticated understanding of divine presence, used a homely example of a grain of wheat to illuminate the point:

How can reason tolerate that the divine majesty is so small that it can be substantially present in a grain, on a grain, over a grain, through a grain, within and without... entirely in each grain, no matter how numerous these grains may be? And how can reason tolerate that the same majesty is so large that neither this world nor a thousand worlds can encompass it and say 'Behold, there it is'?... Yet, though it can be encompassed nowhere and by no one, God's divine essence encompasses all things and dwells in all. (*WGT [Weimar Ausgabe] 23.134.34–23.136.36*)

Seen in the light of this continuous divine presence, the natural way instead of being divorced from what is sacred, takes on a sacramental character. Sacramental theology has always taught that simple material things—water, oil, bread, and wine—can be bearers of divine grace. This is so, it becomes clear, only because to begin with the whole physical world itself is the matrix of God's gracious indwelling. Matter bears the mark of the sac and has itself a spiritual radiance. In turn, divine presence is sacramentally mediated in and through the world's embodiment, not necessarily in absolutely, but graciously and really.

The indwelling Spirit of God moves over the void, breathes into chaos, quickens, warms, sets free, blesses, and continuously creates the world, empowering its evolutionary advance. Bringing the Spirit back in the picture this way leads ecological theology to envision God not as beyond the apex of the pyramid of being as in modern theism, but with and around the emerging, struggling, living, dying, and renewing circle of life and the whole universe itself.

The Cruciform Pattern

There is yet more to be said. For the natural world is not only beautiful in harmonies; it also presents us with an unrelentingly harsh and bloody picture, filled with suffering and death. The bodily existence of every living creature requires eating other creatures, be they animals or plants. Predation and death are an inescapable part of the pattern of biological life. On a grand scale, the history of life itself is dependent on death; without it, there would be no evolutionary development from generation to generation. Where God amid this suffering and death over millions of millennia? The temptation is to deny the violence and escape into a romantic view of the nature world. But there is another option, namely, to face the pain and interpret in the light of the gospel.

Those who believe that Jesus is the Wisdom of God made flesh seek life and destiny as the most important lens through which to interpret the character of the living God, not comprehensively, for the mystery remains but truly. What do we glimpse through this lens? In terms of divine relationship to human beings, we glimpse a merciful love that knows no bounds. Jesus' ministry, replete with scenes of healing, exorcising, feeding, forgiving and preaching the reign of God, made the love of God experientially avai
able to all, the marginalized most of all. His unjust execution on the cross linked divine compassion deeply with the sinful condition of this world, with its painful suffering and terrifying death. His resurrection reveals that by so entering these depths, the Spirit of God opens the promise of new life through and beyond death. Together as one paschal mystery, the cross and resurrection of this Jewish prophet who ministered in a graciously inclusive way become the revelation of divine solidarity with human beings in our sin and pain, awakening resistance and grounding hope.

Seeing the living God as Creator not just of human beings but of the whole world in which we humans are embedded, ecological theology finds warrant to cross the species line and extend this divine solidarity to all creatures. It proposes that the Creator Spirit dwells in compassionate solidarity with every living being that suffers, from the dinosaurs wiped out by an asteroid to the baby impala eaten by a lioness. Not a sparrow falls to the ground without eliciting a knowing suffering in the heart of God. Such an idea is not meant to glorify suffering, a trap that must be carefully avoided. But it works out an implication of the Creator Spirit’s relation to an evolutionary, suffering world with an eye to divine compassion. Nature’s crying out is met by the Spirit, who groans with the labor pains of all creation to bring the new to birth (Rom 8:22). This is the pattern of cross and resurrection rediscovered on a cosmic scale.

Abiding in the Mode of Promise
The scientific account of the expanding cosmos and of the evolution of life on this planet makes it clear that the universe, rather than being a settled phenomenon, can be described today only in terms of an open-ended adventure. In the beginning was a homogenous sea of radiation. Rather than remain at a granular level of existence, the universe has unfolded extravagantly over time, emerging in increasingly elaborate array into forms ever more complex and beautiful. Biologists such as Stephen Jay Gould warn against interpreting this story as a necessary directional, linear march from the Big Bang to the human race. The story of life is more like a branching bush, with humanity itself one recent twig on one branch of the bush. While granting this point, Peacocke and others argue that since the universe as a whole has in fact moved in a certain direction from its cosmic origins, it obviously has propensities toward ever more complexity, beauty, and ordered novelty. Taking the long view, we can see that from the beginning

the universe is seeded with promise, pregnant with surprise. “More” regularly comes from “less.” The cosmic story has been one of restless advent rich in fecundity that produces the genuinely new.

This unfinished openness of natural phenomena places the world squarely within the parameters of biblical faith. For this faith forever encounters a God of promise who approaches from the future with a call “come ahead.” From the call to Abraham to travel to a new land, capped by the surprising gift of a child to him and Sarah in their old age and sterility; to the summons to the enslaved Hebrew people to cross out of Egypt into freedom; to the commission to the women disciples at the empty tomb of Jesus to go and tell the news of his resurrection; divine presence in human history is rife with surprise.

Reflecting on the world’s evolutionary history in tandem with the stories of faith, theology proposes that we understand the Creator Spirit be the generous wellspring of novelty not only for human beings but for the whole natural world. Indwelling the world with creative power, the Spirit sets it off on a grand adventure, saying at the Big Bang, in effect, “Come, become, explore, bring forth the new, because more is still possible. And we will be with you.” Nature, it appears, bears a raw openness to the future. More than a sacrament of continuous divine presence, more than a locus of divine compassion, it is also the bearer of a divine promise. The living, ever dawning God abides in the world most intimately in the mode of promise “Behold, I make all things new” (Rev 21:5).

To sum up: ecological theology proposes that the Creator Spirit dwells at the heart of the natural world, graciously energizing its evolution from within, compassionately holding all creatures in their finitude and death and drawing the world forward toward an unimaginable future. Through the vast sweep of cosmic and biological evolution, the Spirit embraces the material root of life and its endless new potential, empowering the cosmic process from within. The universe, in turn, is self-organizing and self-transcending, energized from the spiraling galaxies to the double helix of the DNA molecule by the dance of divine vivifying power.

DIVINE AGENCY
The creative, suffering, promising presence of the Spirit in the natural world raises in direct fashion the question of divine agency. How does God act
an evolutionary, emergent universe? Modern forms of theism assume that God intervenes in the world at will to accomplish divine purpose apart from natural processes. But the scientific picture of the universe indicates that this is not necessary. Nature is actively organizing itself into new forms at all levels. Even the emergence of life and then mind can be accounted for without special supernatural intervention. The bitterness of contemporary debates between some scientists and religious adherents of "intelligent design" flows precisely from these contrasting assumptions, with the former finding no trace of divine activity in the physical world while the latter posit some sort of direct divine action and overall plan. The fundamental view of divine agency that both parties hold, however, is no longer adequate.

Disputes within theology over divine agency can be just as fierce as those between science and religion. At least six positions claim a seat at the table. Single-action theory understands God to have acted once, in the beginning; since then, God sustains the world while the details of cosmic history are just how it all happens to work out (Gordon Kaufman, Maurice Wiles). Positioning much more divine involvement, process thought holds that God provides initial aims to every conceivable event, and acts by the power of persuasion to lure the world in a desired direction (Alfred North Whitehead and friends, including John B. Cobb, David Griffin). Making an analogy with the agency of embodied human persons, a third position envisions the world as the body of God, with God acting in the world the way the soul acts in the body (Sallie McFague). Using information theory, the top-down causality position understands that God acts in the world by way of the influence of the whole upon the parts (Arthur Peacocke). The "causal-joint" theory uses the innate openness of physical processes to predicate that God acts as one of the initial conditions of an event, inputting the pattern that influences the overall outcome (John Polkinghorne, Nancey Murphy, Robert Russell).

A more classical position holds to the distinction between primary and secondary causality, seeing God as the primary cause of the world, the unfathomable Source of the world's existence, while natural forces and individual creatures are secondary causes that receive from God their power to act with their own independence. These two causes are not two species of the same genus, not two different types of causes united on a common ground of generating effects. They operate on completely different levels (itself an inadequate analogy), one being the Cause of all causes, the other participating in this power to act as things that are burning participants in the power of fire. In this view of divine agency it is incoherent to think of God working in the world apart from secondary causes, or beside them, or in addition to them, or complementary to them, or even in competition with them. God's act does not supply something that is missing from a creature and rob it of its power so that it is only a sham cause. Rather, the mystery of the living God acts in and through the creative acts of finite agents which have genuine causal efficacy in their own right.

Aquinas, who endorsed this view, held that God's governance of the world would in fact be less than perfectly good if creatures were not endowed with their own independent agency. Hence, events both ordinary and extraordinary take place according to the rhythms and dynamisms of nature's own capacities. At every moment divine agency will be physical and undetectable. It is not a quantifiable property like mass or energy, not a additional factor in the equations, not an element that can be discovered among the forces of the universe at all. But in and through the creativity of nature, the boundless love of the Creator Spirit is bringing the world to birth. As Australian theologian Denis Edwards who, along with other contemporary Thomists adheres to this position, observes, "Aquinas knew Darwin's theory of evolution, but he would have had no difficulty understanding it as the way that God creates."

I recall one conference at Berkeley where tension among these various positions ran so high that scholars actually accused each other of blasphemy. These positions, however, all have much in common. They shun an explicitly interventionist model of divine activity. They seek to make intelligible the idea that the Creator Spirit is, as ground, sustaining power, and goal of the evolving world, acts by empowering the process from within. They see divine creativity active in, with, and under cosmic processes. God makes the world in other words, by empowering the world to make itself.

**Chance**

Even granting this, what makes the conversation so dicey for theology with its belief in a provident God is the element of chance. Unlike the science of the Enlightenment period, which envisioned the universe operating in a determined, mechanistic way, today's science has revealed the existence o
extensive zones of openness in nature. In these areas what happens next is intrinsically unpredictable. This is not because we have not yet developed instruments capable of measuring such systems and thus predicting outcomes. Rather, there is something in the nature of the beast that defies total measurement.

- The microscopic realm studied by quantum physics is one such zone. Our inability to plot simultaneously both the position and speed of a single particle has even given rise to the aptly named “uncertainty principle.” Rather than simply referring to the limits of measurement and thus to our knowledge, philosophers of science now surmise that this refers to the nature of the phenomenon itself. The uncertainty principle is not just epistemological, in other words, but also ontological.

- Large, nonlinear, dynamic systems studied by the physics of chaos are another such zone. The striking feature here is that the new, self-organizing patterns that emerge are extremely sensitive to initial conditions. A favored illustration is the butterfly effect on weather. One day a butterfly flutters its wings in Beijing; the small current of air it sets in motion cascades upward in ever-amplifying intersection with other air currents; one week later, as a result, there is a major storm in New York. There is no simple cause and effect, but an open, dynamic system that can be tipped this way or that way with the most minute changes. Over time, a certain pattern will emerge as the system works over and over again. But in any given instance no sure prediction is possible.

- The biological development of species by natural selection is a third such zone. A gene mutates as a result of bombardment by solar rays; a hurricane blows a few birds off course to a new island, or the Earth is struck by an asteroid. As the environment changes, those who adapt best in prospecting and caring for their young, finding food, and warding off predators will make it into the next generation, but there is no way to foretell this in advance.

In these and other instances, contemporary science has laid bare the existence of emergent, adaptive, self-organizing systems in nonhuman nature, systems whose functioning over time has led to genuine novelty in the universe. The regular lawlike pattern rolls along; it gets interrupted by chance; but rather than everything falling apart, new, richer, more intricate

and beautiful forms of order arise at the edge of disorder. The future keeps opening up. Technically speaking, the shape of the world that we inhale today has been crafted by random events occurring within lawful regularities over eons of time. If there were only law in the universe, the situation would stagnate in a repetitive and uncreative order. But chance occurring within law disrupts the usual pattern we hold being held in check, and over millions of millennia the interplay of the two advances the world to a richer state than would otherwise be possible. Peacock suggests that this chance-within-law pattern over deep time is precisely what one would expect if the evolving universe were not predetermined but were left free to be able to explore its potential by experiment with the fullest range of possibilities inherent in matter.

This means that as far as science can fathom, the universe's unfoldment has not happened according to a predetermined blueprint. Because genuine randomness cannot be predicted, there is an open-endedness to the process by which the universe generates new modes of being that can be narrated only in retrospect. A startling moment occurred at an annual meeting of the Catholic Theological Society of America when William Stoeger, Jesuit astrophysicist from the Vatican Observatory Research Group at the University of Arizona, asked: Rewind the clock of the world back to the fit moment and let it start ticking again—would things turn out the same way? The scientific consensus is an emphatic no. There was stunned silence as then an eruption of argument as a roomful of theologians tried to wrap their minds around this idea and relate it to our basic assumptions.

Relating this insight to the indwelling Spirit of God, ecological theology proposes that as boundless love at work in the ongoing evolution of the universe, divine creativity is the source not just of cosmic order but also the chance that allows novelty to appear. Empowering the world from within, the Spirit not only grounds lawful regularities but also embraces the chanciness of random mutations and the chaotic conditions of open systems, being much more closely allied to disorder than our older natural theology ever imagined. Unpredictable upheavals might be destructive, but they have the potential to lead to richer forms of order. In the emergent evolutionary universe, we should not be surprised to find divine creativity hoisting very close to turbulence.
Theology has sought further explication of divine agency in a world of chance by analogies with divine action glimpsed in Christian teaching about grace and the cross.

**Grace**

When the Spirit offers the very life of God to human beings, they are not forced to accept. Their own freedom is respected, to the point where they may even opt for hell. It is not that the Spirit is standing by, idling in neutral; theology teaches that all kinds of promptings lure the human heart to turn toward the face of God. But coercion is not in the picture. The covenant relationship of grace requires a free human response. As with human beings, so too with the universe: the ever-faithful God is graciously courteous toward the freedom of the natural order. Rather than intervening from outside, the Creator Spirit enables ongoing creation from within (these spatial metaphors are inadequate) by endowing the universe with the capacity to transcend itself toward ever-new forms. Self-organizing, complex systems keep on introducing surprises as the world of chance occurring within lawlike structures evolves over eons of deep time. In, with, and under these processes, the generous Spirit of God energizes the ongoing creation of the world.

**Cross**

Rather than acting like Caesar writ large, Jesus did not cling to godly dignity but "emptied himself," foolishly, thereby opening up new life for others (Phil 2:5-11). This enacts a kenotic form of divine power. It is not the power of force, imposing one's will. Neither is it, as some fear, impotence. Rather, as lived out historically in Jesus Christ, it is the power of giving oneself freely in love with the effect that others are empowered: they are loved in such a beautiful way that they become capable of their own action. As on the cross, so too in the universe: ecological theology proposes that divine kenosis did not happen only once at Jesus' death but instead is typical of God's gracious action in the world from the beginning. Allowing the christic pattern of self-giving to interpret the Spirit's creative action within the evolving universe means that divine agency does not have the character of determining, even dictatoring, all occurrences. Rather, divine kenosis opens up space for the genuine integrity of finite systems, allowing chance its truly random appearance.

In view of the openness of the natural world, John Haught suggests: happily in my view, that we should no longer think of God as having a plan for the evolving universe, but rather a vision. This vision aims at bringing into being a community of love. The Creator Spirit is at the heart of this process, guiding the world in that direction, all the while inviting the world to participate in its own creation through the free working of its systems. At the quantum level, in nonlinear dynamic systems, through natural selection and by human agency—the new emerges! Grounded and vivified by such freeing power, the universe evolves in the integrity of its own adventure.

**TO LOVE THE EARTH**

Clearly, this theology of the Creator Spirit who creates, indwells, compassionately loves, and empowers the world on its great adventure has implications for all of theology. It especially undergirds an ethic of responsible assertive care for the Earth. A moral universe limited to human persons is no longer adequate. If the Earth is indeed a sacrament of divine presence, a locus of divine compassion, and a bearer of divine promise, then its ongoing destruction through ecocide, biocide, geocide is a deeply sinful desecration. In the tradition of biblical prophecy and the spirit of Jesus, the response of people of faith needs to become prophetic and challenging, promoting care protection, and healing of the natural world even if these go counter to powerful economic and political interests—and they do. We need to use all the techniques of active nonviolent resistance to halt aggression against the vulnerable, be it ever so humble a species or ever so vast a system as the ozone layer. One stringent criterion must now measure the morality of our actions whether or not these contribute to a sustainable life community on Earth.

Grounding this praxis is a stunning principle first articulated by Pope John Paul II in 1990: "respect for life and for the dignity of the human person extends also to the rest of creation." Pragmatically, humans shall survive together with other creatures on this planet or not at all. The issue is more than practical, however, for respect for life cannot be divided. Not only human life but the whole living Earth is God's beloved creation, deserving of care.

This in turn requires us to shift ethical attention away from human per-
sons alone and to recenter vigorous moral consideration on the whole community of life. In an ecological ethic, Jesus’ great command to love your neighbor as yourself extends to include all members of the life community. “Who is my neighbor?” asks Brian Patrick, “the Samaritan? The outcast? The enemy? Yes, yes, of course. But it is also the whale, the dolphin, and the rain forest. Our neighbor is the entire community of life, the entire universe. We must love it all as our very self.” If nature is the new poor, as Sally McFague argues, then our passion to establish justice for the poor and oppressed now extends to include the natural world, life systems, and other species under threat. “Save the rain forest” becomes a concrete moral application of the commandment “Thou shalt not kill.” The moral goal becomes ensuring vibrant life in community for all.

In our day we discover that the great, incomprehensible mystery of God, utterly transcendent and beyond the world, is also the dynamic power at the heart of the natural world and its evolution. Grooming with the world, delighting in its advance, keeping faith with its failures, energizing it graciously from within, the Creator Spirit is with all creatures in their finitude and death, holding them in redemptive love and drawing them into an unforeseeable future in the divine life of communion. Rather than simply being stages on the way to Homo sapiens, the whole rich tapestry of the created order has its own intrinsic value, being the place where God creatively dwells. Augustine imagined this vividly:

I see before the sight of my spirit the whole creation, whatsoever we can see therein (as sea, earth, air, stars, trees, mortal creatures); yea and whatsoever in it we do not see…. And Thee, O Lord, I imagine on every part environing and pervading it, though in every way infinite: as if there were a sea, everywhere and on every side, through unmeasured space, one only boundless sea, and it contained within it some sponge, huge, but bounded; that sponge must needs, in all its parts, be filled with that unmeasurable sea; so conceived I Thy creation, itself finite, yet full of Thee, the infinite; and I said, behold God and behold what God hath created. (Confessions 7.7)

And behold how we are encompassed! As Paul preached at Athens, “we live and move and have our being” in the Creator Spirit envisioned just this way (Acts 17:28).

FOR FURTHER READING


The Web site of the National Religious Partnership for the Environment (nrpe.org) carries official Catholic, Protestant, and Evangelical, as well as Jewish teachings as well as practical programs.


Ecological ethics are explored in excellent discussions by James Nash, Loving Nature: Ecological Integrity and Christian Responsibility (Nashville: Abingdon, 1991), written with a view to public policy; and Larry Rasmussen, Earth Community, Earth Ethics (Orbis, 1997), which taps into