## AN IDEA OF NATURE: A BIPOLAR PROPOSAL

# by Philip Hefner

This article argues that in order to understand nature, we depend on a basic idea or ideal type of nature, following R. G. Collingwood's work *The Idea of Nature*. Collingwood asserted that the prevailing idea of nature in Western thought evolved through three analogies for understanding nature: (1) living organism, (2) machine, and (3) historical process. His use of the concept of idea is comparable to the use of ideal type proposed by Max Weber and Ernst Troeltsch. This article is a bipolar proposal: the one pole suggests revising Collingwood by including three additional elements: (4) emergence, (5) mystery, and (6) full-bodied/God-intoxication. Each of these elements is elaborated. The second pole concludes that under the aegis of this sixfold idea of nature, the classical Christian dogma of the Incarnation, the Two Natures of Christ can be interpreted as a proposal for understanding nature. The two poles are not necessarily bound together, but for certain theological purposes they may indeed work in tandem.

Keywords: Chalcedon; R. G. Collingwood; dogma of the Two Natures; ecstatic naturalism; idea of nature; mystery; nature

### THE FIRST POLE—PROPOSING AN IDEA OF NATURE

Background of the argument. It is common today among both scientists and nonscientists to speak of nature as an epic historical narrative—from cosmic beginnings 13 billion years ago in the Big Bang to the emergence of planet Earth, its life forms and the emergence of humans and our culture. A focus on specific segments of the epic may lose sight of the grand epic narrative, which presents us with unimaginable diversity, from cosmic origins to the molecular structure of life, the amazing gamut of living creatures, primates, and human culture. Our basic assumption in this article is that this is one process, one natural history—nature's epic. This assumption requires a leap of thought, to be sure, but expressions of this line of thinking abound today (Wilson 1975, 2014; Swimme and Berry

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1992). I have spoken of this process as a drama in several acts—cosmos, biology, ontogeny, culture, and the future of the universe. Such thinking has given rise to what is called Big History, an approach that is now included in some high school and college curricula in the United States. (Rodrigue, Grinin, and Korotayev 2013; Wikipedia 2014). If one adopts a Christian theological perspective, one might view all of this as God's epic, as well. For Christians, nature's epic is one that God has fashioned and that becomes at the same time God's story—it may be but a portion of God's story, but it is the only story we know. We know of no other work of God that matches God's work of nature. A colossal work it is—13 billion years in time, unimaginably vast ranges of space, unbelievably intricate detail at the micro and nano levels. Since this writer is a theologian by occupation, some elaborations of the Christian perspective are included later in this article.

What idea of nature could possibly sustain this amazing epic, first of all in its scientific breadth, but also in its theological elaboration? This question looms as a fundamental building block in our efforts to construct meaning. We are far from any consensus on the fundamental issue of the purpose and meaning of nature.

The sciences are changing and expanding our view of nature in ways that defy imagination—something to which we often do not give enough attention. We cannot go into detail here, but we must keep in mind how recent our scientific knowledge is; we have increased our knowledge of nature more in the last fifty years than in all of previous human history. Our idea of nature today is not that of previous generations. Our view of nature is *expansive* when compared to what people thought before our time.

The last twenty years have brought a "turn to naturalism." This turn has occurred in the wake of the sciences giving us a picture of nature as incredibly varied and as a realm that gives birth to the new and unexpected; nature has the capability to be self-creating—technically called *autopoeisis* or self-generation (Clayton 2000, 2005; Morowitz 2002). Nature is boundlessly rich and constantly producing new things. As a result, today we look first and foremost for natural explanations of everything. Even those who deny that natural explanations can account for all that we experience recognize that we must search for answers within nature before we consider other kinds of answers. Naturalistic explanations are the default modes for understanding our world.

The idea of nature also surfaces when we reflect on the causes of our experience. For example, when certain combinations of genes are correlated with such traits as adventuresomeness, others with nurturing and kindness, it is frequently said that genes "cause" the one or the other type of behavior. The same kind of search for causes correlates the release of the hormone oxytocin to bonding between persons, sexual activity, trust,

generosity, and empathy, leading to the conclusion that oxytocin "causes" these inclinations; oxytocin has been called the "love hormone." Portions of the brain are associated with specific activities, such as language, or with specific moods, as anxiety or loneliness, with the same conclusions being drawn, that the brain causes the activities or moods.

There is no denying the decisive involvement of genes. Our bodily nature—in this case, our neurobiology or genome—participates fully in our loving and our creating and in everything else that we are and do. My distinctiveness as a person is carried by my equally personal genetic make-up and neurological equipment. The correlations between my body's natural structures and functions are also suitable and fundamental for talking about what we call "mind" and "spirit." We might call this an "ecstatic naturalism"—that nature has the capacity to step outside itself, to transcend itself, all the while never losing its character as nature. The mid-twentieth-century theologian Paul Tillich used this term to describe his own position (1957, 5-10). He introduced the term for much the same reasons as we do here, namely, to reflect more adequately our actual experience of nature. Robert S. Corrington speaks of ecstatic naturalism as a perspective that "attempts to remain accountable to the insights of evolutionary sciences even as it probes ever deeper into those aspects of nature that elude strictly scientific inquiries" (Corrington 1992, 1994). Such a view acknowledges the fullness of nature, particularly as its possibilities are progressively unfolded through scientific research. We are also echoing the proposal of "nonreductive physicalism" that several scholars have offered (Murphy 2006).

This "ecstatic nature" defies exhaustive explanation, although we never cease to search for explanations and causes—nor should we. We are compelled to acknowledge the *mystery* of nature, which includes the profound mystery of who we are. For Christian theology, this may be an opening to talk about God, the belief that an adequate view of nature requires God—"in, with, and under" nature, to echo a distinctive Lutheran way of speaking.

An idea of nature. We have emerged within the processes of nature and live out our lives within those same processes. Our bodies are occurrences of nature—we are nature. How do we begin to think about nature? We deepen our understanding of ourselves by considering nature as the ambience in which our bodies emerge and take shape. R. G. Collingwood, a British philosopher and historian in the first half of the twentieth century, wrote a little book that was published posthumously in 1945 that has become a classic, The Idea of Nature. He emphasized that since nature is so rich and various that it is impossible to encompass it in our rational conceptions, we crystallize its multiplicity in our ideas of nature. Nature is a kaleidoscope of shapes, colors, sounds, movements, and creatures. A

rushing mountain stream is nature, and so are the water striders that we see walking on the calmer pools nearby and the peaks and forests that surround the scene. And of course, the observers of all this—we ourselves, for example—are nature, too. It is impossible to grasp the whole kaleidoscope in our minds at one time, so we bring it all together in a single idea. The idea is an image that helps us put all the natural forms together. It also forms our understanding and guides our investigations.

According to Collingwood, these ideas do more than focus our understanding of nature; they also determine how we view ourselves and how we relate to everything else. For example, our idea of nature influences whether we consider ourselves to be instances of nature and how we think of our mental and spiritual lives—as well as how we think God relates to nature.

Collingwood believed that our ideas of nature have changed over time. The ancient world held to the idea of nature as a living organism, while the Renaissance and Enlightenment viewed nature in analogy to the machine. The twentieth century, under the impact of Darwin's theory of evolution and the quantum revolution in physics, took to the idea of nature as historical process; nature is on a journey, as yet unfinished. Even though he was a historian, as well as a philosopher, in his study of nature Collingwood was more concerned with the logic that was inherent in these ideas, rather than in the history as such. Collingwood's "idea" is comparable to "ideal type" as used by Ernst Troeltsch (1912) and Max Weber (Weber 1946; Swedberg and Agevall 2005). Neither idea nor type is amenable to rigorous empirical validation; rather, they are heuristic devices that get us into the material and stimulate interpretation (Allan 2005, 149.) In the nearly seventy years since Collingwood wrote, our ideas of nature have continued to develop. We propose to look at this development in more detail.

All of these ideas—organism, machine, historical process—are linked, Collingwood suggested, to experience. (1) *Living intelligent organism*. The ancients experienced nature as permeated by mind; nature is an intelligent living animal and as such it orders itself. The animals inhabiting the Earth participate in the world's soul and mind just as they participate in its body. Nature was seen as analogous to the individual human being. (2) Machine and maker. Given that the Renaissance was preoccupied with new and marvelous machines—think of Leonardo Da Vinci—it is not surprising that they viewed nature through this lens. In contrast with ancient views, they considered nature to be devoid of life and intelligence. Nature's order is imposed by outside forces. The analogy at work here is a machine and its maker—nature is God's created machine. This view continued to dominate through the eighteenth century. (3) Historical process. The sense that reality is historical process or journey is basic to modern experience—it has been said that the nineteenth century "invented" the worldview or metaphysics of history. Historical studies that placed process,

change, and development at the center became the prevailing analogy for an idea of nature. In mid-century, Darwin's evolutionary theories depicted life itself as a developing historical process, and the human species itself had a *natural* history. By the end of the century, Collingwood held, physicists were speaking of the "quantum world," too small to be seen with the naked eye, in which material things are made up of atoms, which in turn are composed of particles, all of which make their own historical journeys. Philosophers began to speak of reality as *process*, creativity, and the like (Fechner 1877; Lotze 1889; Bergson [1911] 1983).

Collingwood's three-stage interpretation of the idea of nature is useful, but we cannot stop where he did, in mid-twentieth century. We still speak of nature as a living organism (think of the Gaia idea [Lovelock 1979]) and as a machine (we talk about our heart as a pump and also about our internal "plumbing" or "pipes"), even though these ideas are really obsolete and misleading. Nature is made up of many organisms; it is not a single super organism; and there are such things as rocks and volcanoes that are hardly classified as "organic." Viewing our bodies as a machine or an engine may have limited validity, but we soon discover that our gears and pumps and pipes are living things that do not react like the insides of a watch or an automobile engine. It is still valid to look upon nature as historical process—on a journey as described by cosmological, biological, and cultural evolution—but the idea of history is not sufficient unless we include that it is a dimension in which surprising new things emerge.

I suggest three additional elaborations of our idea of nature. (4) Emergence. Closely related to the idea of historical process is that of emergence new and unexpected events seem to come forth from what we see before us without any extraordinary or outside causes that we can detect. They come out of the bottle like the genie, so to speak, and they cannot be put back in as they were before. This experience of the new and unexpected is so basic to our everyday life that we can very well conclude that it is inherent in nature—little wonder that it is also now a significant scientific research item (Morowitz 2002). "Complexity science" is the name that is frequently applied to this research, since novelty seems to emerge in systems composed of interconnected parts that work together in ways that are not predictable if we focus only on the parts individually. The Santa Fe Institute, established in 1984, is an example of a scientific effort that devotes itself entirely to complexity/emergence research. The Institute brings together "ideas and principles of many fields—from physics, mathematics, and biology to the social sciences and the humanities—in pursuit of creative insights that improve our world." Their studies include quantum physics, molecular biology, weather, music, and urban traffic patterns—all of them complex systems in which novelty emerges (Wikipedia 2014).

(5) Mystery. To these ideas we add yet a fifth that is also deeply rooted in our experience: the idea of mystery. Nature is a realm of knowledge,

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control, and mystery. (i) Our knowledge about nature, chiefly through our scientific research, is mind-boggling. In the last half-century, we have added millions of pieces of information from dozens of specific sciences to our body of knowledge. Scientific exploration has unfolded a picture of nature—human nature and the larger world—that is mind-bending and inexhaustibly rich. (ii) This knowledge has led to our control of nature in ways that we scarcely dreamed of just a century ago. Knowledge has spawned technology that is unimaginably complex and successful in bending nature to our will from the levels of atoms and molecules to that of computers and also earth-moving and space exploration. (iii) At the very same time, our knowledge reveals to us how much more there is to know, and our control reveals how successfully nature can defy our attempts to tame it. This is not a question of "gaps" in our knowledge or a breakdown in our control functions. Rather, it is precisely the success of our quest for knowledge and control that makes clear that nature is more than we can comprehend and more than we can ever bring under our control. This awareness brings us to the reality of mystery. Mystery is not a matter of ignorance, not a matter of not knowing enough. Mystery is a matter of richness and texture. Paul Crowley speaks of mystery as "the endlessly knowable" (Crowley 2011, 9). Our knowledge about nature continues to grow exponentially, but the more we know about nature, the greater the richness and the deeper the mystery become. This is especially true of our human nature. Theologian Paul Tillich was right when he said that each human being is marked by a mystery, depth, and greatness—and it is enhanced by science (Tillich 1948, 159). Mystery is a clue to the meaning of our experience of nature.

Consider two examples. For one, the facts of climate change. Our vast knowledge, even in its present imperfect state, enables us to know that climate change is in fact happening and what some of its physical causes are. At the same time, our knowledge tells us that we can understand and control only a small segment of this change—that in large part we must adapt to it where we cannot hope to control it or roll it back. Recall the quite unexpected onslaughts on the East Coast of the United States within a six-month period in 2011—record snowfall, earthquake, and hurricane. Attempts to adapt in turn raise questions of human nature and destiny. To what extent can we adapt or not as a human species? How do we make the decisions as to where and for whom adaptive strategies will be devised? What are our ethical obligations to those regions and people that will not be able to adapt successfully? What is the human future to be? Is it to be survival for the wealthiest and for those who live in "safer" places, away from coastlines and drought areas, and extinction for the rest? Our knowledge and control leave the human and planetary future beyond our capacities to determine; they bestow on our decisions the gravity of a wager—leaps of faith into the unfathomable and unmanageable as we try to make our way.

Or consider the knowledge and control we gain through cognitive neuroscience, through which we trace in detail the brain processes that correlate to such basics as our thinking about specific things, our emotions, and our interactions with other people. The detail and complexity of our brain's activity is awesome. This research forms the surface of the even more complex work of our brains that science does not explain—how these brain processes bring forth a Beethoven symphony or a Bach chorale, a Shakespearean play or a poem by Emily Dickinson, Darwin's theory of evolution or Einstein's theory of relativity, the proposal of Jeffersonian democracy or the Gandhi/King practice of nonviolence. In other words, the scientific charting of our brain's activities overlaps the richness and mystery of the human spirit. Brain scans do not translate into Beethoven's Ninth or into a Marine's act of heroism in falling on an exploding grenade, thus saving the lives of his comrades, even though the achievements of human spirit are fully embedded in our biology—science intensifies our sense of this embeddedness. The more we know about it, the more we realize that we do not comprehend it—it is mystery.

We should be clear about how we are using the word *mystery*. It is not the same as a puzzle. A puzzle can be solved—the more we learn about it and think about it, the closer we come to its solution. Richness and texture characterize mystery. As we dig into it ever more deeply, we come upon ever richer and profounder dimensions of meaning. This endless depth of meaning is not something to be "solved"; it is inexhaustible. So in the example of climate change, we find that over and beyond our increase of knowledge and devising changes in behavior we are engaged with the world of nature in an ongoing quest for understanding our relationship with nature, which in turn brings us face to face with questions of human destiny—(1) just what should we be about in our relations with the natural world? (2) What is the purpose of human behaviors toward nature? (3) What are our obligations to the natural world and how are we responsible for enabling other humans and other creatures in their relationship to nature? These questions are appropriate to mystery, in this case the mystery of the natural world—despite our enormous amount of knowledge about it, it remains a challenge we will never exhaust, provoking us to reflect hard and long about the meaning of human life in this world.

The example from cognitive science proceeds similarly. The more we learn about our brains and how their processes correlate to our mental lives, the deeper the mystery of how our neurobiology can enable the unbelievably rich possibilities that our minds explore every moment, whether it is creative art, problem solving, devising strategies for living, or deepening our relationships with other people. In these activities, our minds—in their thoroughly natural biological working—do in fact continuously transcend our physical situations. In this mental activity, nature is transcending itself. Nature is a continuously self-transcending realm. When we ponder the

meaning of human life in the natural world and when we experience the creativity of a Shakespeare or a Ray Kurzweil, we experience nature itself seeking to go beyond itself. Our encounter with mystery is a signal that we are in the presence of transcendence that challenges us to explore its depths.

We think of Teilhard's aphorism: "Humans are evolution aware of itself." In our very own intellectual and spiritual life, we witness nature going beyond itself, and we embody this witness in our experience; it is ours—the witness is us. At the same time, while we possess this self-transcending action, since it is our own experience, at the same time we are aware that we are not fully in control of its cascading rush; we sense that we are riding a torrent that is larger than we are—we are subject and object at the same time. Rather than possessing this experience, it is more accurate to say that we are possessed by it. Here we are confronted with the basic question: What is the significance of these acts of transcendence? What do they reveal to us about our fundamental human nature and our reason for being? Again we encounter, not a lack of knowledge, not a puzzle to be resolved, but the mystery of our very bodily nature—this is Tillich's point: our nature possesses a mystery, a depth, and a greatness that are fully natural.

(6) Full-bodied/God-intoxicated. These reflections lead to a sixth idea of nature: Full-bodied/God-intoxicated. We call this idea—that nature is the inexhaustible source from which new things continually emerge a full-bodied idea of nature. As such nature continually confronts us with and wraps us in mystery. Mystery involves us, as we have said, in transcendence, and when religious people encounter transcendence and mystery, they understand that they are in the presence of God. We must be clear—this engagement with transcendence comes to us, not through some supernatural intervention and not by introducing some unnatural element. Rather we are through earthiness bathed in transcendence. Hence, the Christian theological possibility to call this a full-bodied and God-intoxicated idea of nature.

These ideas of nature, particularly nature as a process of emergence and as full-bodied, bring with them a deep sense of humility. We are very much aware of ourselves as being borne upon processes of which we are not the authors or the drivers. We know ourselves to be in possession of freedom, in that we are always faced with decisions that need to be made. Even more, we feel that we are part of something larger than ourselves, and this is the seed of humility in the face of nature—both within us and outside of us. This sense of humility in the face of depth has been called "creature-feeling" (Otto 1923, 10–11); we engage mystery at this point. Mystery surrounds us at every point—when we seek knowledge of nature, when we try to control it, when we ponder its bottomless depth within us—each of these is an avenue that leads us sooner or later to mystery, which in turn may be an opening to transcendence. The poet A. R. Ammons spoke of

how "things spiral out from a center" and take shape as they come forth (Ammons 1986, 61). The processes of nature on which we are borne are always spiraling out from mystery and taking shape right before us—and within us.

Summary. This concludes the first pole of this proposed thought proposal, summarized thus: for us, in light of our present experience, nature is best understood as historical processes of emergence that continually bring us face-to-face with mystery and that are full-bodied and, for some, God-intoxicated. Further these analogies allow us to see ourselves as fully natural and to conceptualize God's presence as fully capable of expressing itself within nature.

The second pole of the proposal suggests new ways to understand how nature presents itself in a classic Christian dogma, the Incarnation of God in Jesus of Nazareth. This second pole does not necessarily follow from the first. Secular thinking which eschews any belief in God may settle for the first pole alone, in which case a fuller idea of nature is gained. Thinkers for whom the presence of God is real may well move to the second pole of the proposal, in which case they gain a sense in which the dogma describes a naturalistic event.

THE SECOND POLE—CHRISTIAN DOGMA AS INTERPRETATION OF NATURE.

A turn to Christian theology. Let me recap some features of the idea of nature as I have utilized it as heuristic for understanding nature.

- (1) It is not a scientific idea of nature, but rather a philosophical/ theological interpretation of nature taking into account both scientific knowledge and our common experience. It is consistent with science, since it does not contradict scientific findings. It goes beyond science, but not against science. Science does not in itself affirm God, but as it unfolds nature for us it brings us to the point where God may appear to be a viable interpretation of our experience of nature.
- (2) We emphasize how science has so totally expanded our view of nature, compelling us to work within the parameters of the "turn to nature" that I described at the outset and at the same time revealing that nature is both the all-encompassing ambience for our lives, and also the self-transcending energy that points us to mystery and transcendence.
- (3) This idea of nature does not engage in "God of the gaps" strategies. I am not seizing upon any inadequacy of science in order to make a theological point. I bring mystery into the discussion, with science

- actually an agent of that mystery. It is when we take with utter seriousness the advances in scientific knowledge that we are brought up against mystery—as I try to show in my examples from climate change and cognitive neuroscience. There is no point in hoping to find God in some supposed gaps or inadequacies in scientific knowledge.
- (4) It is not necessary in light of this idea of nature to bring God into the discussion, but intelligent people can agree that God is certainly a possibility. One point should be reiterated: that we acknowledge that science itself brings us into situations where questions arise, choices must be made, choices that cannot be resolved by scientific reasoning. Science itself brings us to the point where we must go beyond science in some way in order to deal with our scientific knowledge.

Collingwood believed that our idea of nature conditions what we believe about everything else. It is like a basketball backboard off which we bounce our ideas about other things. What does the full-bodied idea of nature suggest about how we view ourselves as human beings? (1) That our lives, including their mental and spiritual dimensions run their course as processes of nature, even though they defy naturalistic reductionism. Our minds and spirits are not unnatural add-ons, nor are they outside nature. (2) We are nature, as much as anything in this world, and as such everything we say about nature transpires within us and our lives—whether as described by physics, biology, chemistry, neuroscience, or any other science—including the social and historical sciences. (3) Nature that is us is as fully described by knowledge, control, and mystery as any other natural phenomena—indeed even more so.

What does the idea of nature that I have presented suggest about God? (1) That nature is a domain in which the question of the reality of God plausibly occurs. (2) God may be interpreted as living in, with, and under natural processes and phenomena. In the next section, we bring Christian theological materials into the discussion of this divine presence in nature. The materials are deeply ensconced in the tradition—in the affirmations of the Incarnation, the Two Natures of Christ, the traditions of the communication of attributes (*communicatio idiomatum*) between the divine and the human in Christ, and in our sacramental traditions.

We are now in a position to explore some primary elements of the Christian tradition and seek to relate them to nature. We begin with the classic symbol of the Incarnation. Incarnation is the specifically Christian way of referring to God's dwelling in the world in Jesus of Nazareth. It is symbolic and dogmatic shorthand for the saying in Revelation 21:3: "See, the home of God is among mortals. He will dwell with them as their God." The Gospel of John puts this more abstractly in the first chapter: "In the

beginning was the Word, and the Word was with God, and the Word was God. ... all things were made through him, and without him was not anything made that was made. ... And the Word became flesh and dwelt among us."

What we have here grows out of the intuitive responses of early Christians to the impact that this man Jesus made upon them. Very soon, however, the intuitions became subjects of reflection that continues to the present time. How is it possible for God to dwell among us, to become material flesh? Affirming Incarnation is to affirm something about the possibilities of nature as a whole and our own human nature. As the Franciscan theologian Zachary Hayes has said, to assert Incarnation brings God into play with physics, biology, and all the rest of what we know about nature (Hayes 1997).

The process of reflection on what the basic Christian assertion means for nature began very early and its shape is imprinted in a number of historical markers. We will focus on several of these: the Council of Chalcedon's (451 CE) formulation of the so-called "two natures" of Christ and Leo's Tome, that preceded the Council; the medieval maxim that "grace does not destroy nature, but presupposes and undergirds it"; and the sixteenth and seventeenth century argumentation about the "communication of attributes" between Christ's human and divine natures. There is no intention of offering a detailed and comprehensive discussion of Christian tradition. Rather, I dip into the tradition to retrieve certain key episodes to form our picture of a self-transcending nature—and eventually our idea of ourselves as creatures of God within that nature.

Chalcedon and Leo—Jesus's body on the cusp of transcendence. read the original documents of faith that were formed in the middle of the fifth century, we appreciate the passion and the freshness with which they wrestle with the human nature they knew in Jesus. Even though we speak of the idea of nature I proposed in the first part—a process of emergence and as full-bodied/God-intoxicated—as a chronologically later idea, eras earlier than ours experienced nature in a similar way, but strained to give expression to their experience. Their Christian sensibility could not be contained in the prevailing philosophy and language of their time. The Hellenistic culture in which Christianity was born had neither the dictionary of words nor the glossary of philosophical concepts to interpret adequately the experience they sought to express. Scientific knowledge today may in fact liberate that experience from the limitations of their thought world. Perhaps for the first time, Christian belief in the Incarnation finds itself set in a worldview that enables fuller expression of this belief and its implications—and it is science that has enabled this new situation, with a new dictionary and a new glossary of concepts. We are witnessing the excitement of discovery that an ancient traditional formulation can actually give expression to a

contemporary breakthrough in our understanding of nature. Words are never imprisoned in the expressions of a single author or a single age—they break out with explosive force—they reveal possibilities of meaning that cannot be suppressed or be strait-jacketed by any single interpretation. Words and images can in fact mean whatever they are capable of meaning.

We focus on some passages from Leo (448 CE) and from the Council of Chalcedon's formulation (451 CE) to make this point. The subject of discussion, we recall, is the nature of Jesus—that he is both divine and human.

While the distinctness of both natures and substances is preserved, and both meet in one Person, lowliness is assumed by majesty, weakness by power, mortality by eternity..., the man Christ Jesus might from one element be capable of dying and from the other be incapable. Therefore in the entire and perfect nature of very Man was born very God, whole in what was his, whole in what was ours. It is equally dangerous to believe the Lord Jesus Christ to be merely God and not man or merely man and not God (Hardy 1954, 363–64).

The critical point here is that in the Incarnation human nature and divinity each retains its integrity, distinct and uncompromised, while at the same time they are indissolubly united in one whole human person. There is no talk of "half human/half divine" or some mixture; Jesus is no Minotaur nor is the divinity dissolved in the humanity like sugar in a cup of tea. This is what the dogma means to say: oneness in unity, humanity and divinity—both uncompromised. The terminology by which historians and theologians identify the dogma—"Two Natures in One Person"—is itself inadequate for us today, since its intent is to affirm a oneness in the face of twoness and not a dualism between the human and the divine. The astounding proposal here is that nature in this human Jesus possesses the possibility of divinity.

The Chalcedonian Formulation makes the same affirmation, if anything, more emphatically, in both simple and technical language. Simply put, "truly God and truly man"—"like unto God in his divinity, like unto us in his humanity." There follow the famous four "withouts": "without confusion, without change, without division, without separation" (in the original Greek, the celebrated four "alpha privatives"); Hardy, 373). The first two rule out intermingling and watering down—we're dealing with real humanity and real divinity. The second pair preserves the unity—Jesus was not a split personality, not a split person.

These two foundational documents—the heart of the dogma of the so-called Two Natures—take some thinking about; they are not easy to digest. They are difficult, because they obviously do not make sense; they are counterintuitive; they demand that we think new thoughts—that we open ourselves to a new worldview, in Collingwood's jargon, a new idea of nature.

Christian faith and theology carried the thread of this classic idea of nature forward into the Middle Ages in a powerful way. It never abandoned the belief that nature is the earthen vessel of God's presence and grace. Theologians elaborated this in the much-quoted axiom: "grace *presupposes* nature; it does not destroy it, but rather conserves and perfects it"; the original Latin can also be translated as: "grace *undergirds* nature; it does not destroy it, but rather conserves and perfects it" (see Stoeckle 1962).

Christian faith is frequently depicted as being unfriendly to nature. As a matter of historical fact, this strand of ideas stemming from Chalcedon and continuing through the Middle Ages has never dropped out of the faith tradition. This fact takes on all the more importance when we consider how difficult it is to hold this interpretation of nature in the face of the naturalistic and materialistic views that assume nature is a one-dimensional realm. Protestant theologians in the sixteenth and seventeenth centuries present some of the clearest examples of how belief in the God-intoxicated idea of nature can appear both dogged and tortured when it focuses on how the "attributes" of humanity and divinity could coexist within the human body of Jesus (Schmid [1889] 2008, 293–337). Even though their work may appear to us today as enormous scholastic baggage, it stands as testimony to the seriousness with which these thinkers took the vision of the Incarnation.

How God relates to the created, material world is a mystery. After all, God does not exist in the same way that things exist in this world; God is infinite, in contrast to the finitude that we live in. From this angle, God and the world of nature appear to be quite separate—even "other."

The nineteenth-century thinker Søren Kierkegaard spoke of the infinite qualitative difference between God and the world—a coinage that affirms the fourth-century formulation we mentioned earlier, *apophatic* tradition (Louth 2012, 137–46). The apophatic tradition of theology emphasizes that the majesty and mystery of God so far transcend our human minds that in our attempts to know God we are speechless, bereft of words and concepts that can grasp the Infinite. Without weakening our awareness of this infinite qualitative difference, Christian faith nevertheless holds that God's presence is one of grace and that it undergirds the natural world and our natural bodies and works to conserve and perfect them. Kierkegaard called this a "paradox." Nature and our bodies do not appear to be undergirded by grace and transcendence, but in Christian perspective they are (Kierkegaard 1936, 1941).

So what? Why is this important? Because it provides a point of contact with our contemporary view of ourselves as creatures of nature, and because it allows us to accept and understand our experience and knowledge of nature as opening out to mystery. Further, it points us to the Christian theological interpretation of this view of mystery—it is the face of ultimacy, the very ground of the natural world—in other words, nature opens us to

God. We come face to face with a two-sided reality: (1) Once and for all we must recognize that nature is not a one-dimensional domain upon which we can perform a reductionism of any sort, or which we can fully know or control. In this, the dogmas disclose to us a deep truth about our science and our technology. They entail a paradox: they float on the surface of reality that is much deeper and more mysterious than they know, even as at the same time, in their quest for knowledge and control, they in fact open up that depth and mystery. (2) At the same time, we are compelled to see that what we consider to be ultimate or transcendent or divinehowever we think of God or the most really real—is in, with, and under what we experience as nature. God is not out there, but rather in there, deeper and more constitutive than we can imagine. God doesn't need to be "out there." Nature never ceases to be earthy, fully natural, fully big bang stardust, fully embedded in the thermodynamic processes of evolution, fully biochemical, fully neurobiological—it is not changed. Nature is fully itself, distinct and uncompromised, as the ancient formulation insists. But God, transcendent depth, is indissolubly united with this nature, equally distinct and uncompromised.

Gerard Manley Hopkins attempted with some success to express this radical view of nature in his 1877 poem "God's Grandeur," when he wrote that "The world is charged with the grandeur of God. . . . nature is never spent; there lives the dearest freshness deep down things" (Hopkins [1877] 1967, 66). Fully natural yet somehow *charged* with genuine transcendence—deep down things, deeper than we can ever go.

Here we come upon another facet of our experience of nature—our intuitive sense of the freshness deep down things. This intuition is embodied in another traditional Christian expression—sacramental life. When Christians share the Holy Communion or Eucharist or Mass, they enter a world rich with symbols and myths that speak of the nature of nature that we have been reflecting on. They hold bread, common ordinary bread, in their hands and they drink ordinary wine. They hear the words, "This bread is my body broken for you, this wine is my blood poured out for you." We are reminded that in the original Aramaic that Jesus spoke, the word "is" did not occur—the first participants heard only "bread/body, wine/blood." We consume the bread/body and wine/blood, and they undergo one of the earthiest, most natural processes imaginable—digestion and metabolism. Bread and wine become bone of our bone and flesh of our flesh. Christians call this union with God. This is "sacrament," referred to in earliest times as mystery (musterion). How could natural things share in this highly symbolic transaction? An expansive idea of nature is required even to imagine it.

The larger symbolic meaning here is that each of us is a sacrament, in an earthy human body living on the cusp of transcendence. Further, that the entire world is sacramental mystery. Teilhard de Chardin's "The Mass on

the World" was conceived when he was on the arduous Yellow Expedition across China's Gobi desert in 1923 (Teilhard 1963, 13–15). The *Mass* portrays exactly this—that the planet is Christ's body and that by living in this world one participates in sacramental reality. Citing Gregory of Nyssa (fourth century), he writes, "The bread of the Eucharist is stronger than our flesh; that is why it is the bread that assimilates us, and not we the bread, when we receive it" (1965, 76). The bread, which is the body of Christ, consumes us. Teilhard was a mystic, and he writes in that vein in elaborating this view: "Since Christ is above all omega, that is, the universal 'form' of the world, he can attain his organic balance and plenitude only by mystically assimilating all" (1967, 65).

The worshippers sharing in this ritual are far from possessing a full-blown intellectual comprehension of what they are doing and praying. Nevertheless, within the ambience of the images and the ritual actions, they intuit deeper possibilities for nature—the natural bread and wine, their own bodily lives, the world, and the universe—transcendent possibilities. The Lutheran tradition of which I am part affirms that precise philosophical language cannot take the measure of this sacramental experience, hence their nontechnical language, that the transcendence is "in, with, and under" the natural forms. The intuition here is one of deeper meaning, but it is also an intuition of *hope*—hope for what this experience can disclose, hope for what nature is and can become. Hope for what the persons and their world can become.

It is a simple matter to classify what I have described here as ancient tradition, as particularistic ritual, as a premodern worldview, an example of what Ricoeur termed the "first naiveté" (1967, 300-48). As such, our task is to overcome it—that is the Enlightenment project. I am suggesting, however, that this tradition is also an interpretation of nature. Furthermore, that it is an interpretation of nature as contemporary science enables us to understand it. Even more, I am arguing that nothing less than this or some comparable explanation can take the measure of what we know about nature through science and how we experience it.

#### CONCLUDING

We have offered as a thought project a bipolar idea of nature. The first pole proposes that nature can be conceived as historical processes of emergence that continually bring us face to face with mystery—full-bodied and, for some, God-intoxicated. This idea allows us to see ourselves as fully natural and to conceptualize God's presence as fully capable of expressing itself within nature.

The second pole of the proposal suggests new ways to understand how nature presents itself in a classic Christian dogma, the Incarnation of God in Jesus of Nazareth. This second pole does not necessarily follow from the first. Secular thinking which eschews any belief in God may settle for the first pole alone, in which case a fuller idea of nature is gained. Thinkers for whom the presence of God is important may well move to the second pole of the proposal, in which case they gain a sense in which classical dogma describes a naturalistic event.

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