

# *Credo*

## WILDFLOWERS AND WONDER: A PASTOR'S WANDERINGS IN THE RELIGION-SCIENCE WILDERNESS

by *Linda Jarchow Jones*

*Abstract.* In this paper, I explore, as a Christian and a parish pastor, what drew me into the religion-science dialogue and what keeps me involved. Encounters with nature and readings of evolutionary theory answer some questions and raise others, especially questions about chance and the nature of God. I persist in my quest for understanding because creedal affirmations of God as Creator demand an examination of the relationship between God and the world, and because I want to proclaim the Christian message in a credible way to parishioners raised with a scientific worldview. Along the way I am reaping unexpected spiritual dividends.

*Keywords:* contemplative prayer; contingency; Creator; design; evolutionary theory; natural theology; purpose.

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It all began innocently enough with the wildflowers. The recent resurgence of my interest in the religion-science dialogue can all be traced back to what I like to call a “conversion experience” that occurred in the summer of 1989. In late July of that year, my family and I were camping in the Manistee National Forest along Lake Michigan, between Ludington and Manistee. Driving along the back roads, especially on early mornings, it seemed as if the rosy glow of sunrise had settled on the earth. Cotton-candy-colored clouds hovered in the fields like a fog.

At first I was content to absorb the loveliness, but eventually I began wondering—what was this delicate pink cloud? Closer examination resolved the haze of color into individual flowers, vaguely thistlelike, but much more dainty, definitely not thistles.

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What were these flowers? Clearly, a trip to the Read-Mor Bookstore in Manistee was in order. Two wildflower books later, we identified the rosy mist as spotted knapweed.

I have termed this a conversion experience because before that summer, it was as if I had been subject to a specific type of blindness. Not a literal blindness—I saw the flowers, but they were only part of an undifferentiated background. I did not pay much attention to them, and certainly, I had little desire to know more about them. After becoming acquainted with the knapweed, wildflowers seemed to leap out at me. I saw them everywhere. It became hazardous to drive with me. Furthermore, I felt compelled to learn more about them—their names, details of their structure, why they grew where they did.

We spent the rest of that trip meeting more flowers and then went home to haunt the local forest preserves. I found this new interest refreshing. When I was out in the fields and woods, I could feel my mental, spiritual, and emotional reserves, depleted by the professional demands of parish life, being replenished. Instead of reading vapid novels to give my thoughts a break from planning the next sermon or confirmation retreat, I picked up books on natural history—the Audubon Society's *Guide to Eastern Forests*, more wildflower guides, and then, fatefully, *Ever Since Darwin*, the first collection of Stephen Jay Gould's essays from *Natural History* magazine (1977). I began reading Gould, blithely thinking I was traveling on a path leading away from theological terrain. I was in for a surprise. Little did I know that this pleasant excursion would lead me through the intricacies of evolutionary theory, result in an explosion of the number and variety of religious questions cluttering my mind, propel me back into the classroom, and reorder my prayer life.

#### FROM WILDFLOWERS TO EVOLUTIONARY THEORY AND BEYOND

Stephen Jay Gould is a paleontologist, evolutionary biologist, and geologist who teaches at Harvard University. In the 1970s he and colleague Niles Eldredge developed what is known as the theory of punctuated equilibrium, a variation of evolutionary theory that stresses that evolutionary change sometimes occurs with great rapidity rather than excruciating slowness. The collection of his essays with which I began my natural history reading deals with evolutionary theories and their implications, as does much of his writing. Not stopping with this one collection, I quickly worked my way through *The Panda's Thumb* (1980), *Hen's Teeth and Horses' Toes*

(1983), *The Flamingo's Smile* (1985), and *An Urchin in the Storm* (1987b). Along the way I also tackled some of his book-length works: *The Mismeasure of Man* (1981), *Time's Arrow*, *Time's Cycle* (1987a), and, most intriguing of all, *Wonderful Life* (1989), the story of the fossil creatures discovered in Canada's Burgess Shale and the new understanding they offer of the development of diverse life forms.

As I read Gould's intriguing and relentlessly logical expositions, I found myself back in theological territory, entangled in thickets of religious questions. Some questions, those assuming literal interpretations of biblical passages, were easily unsnarled. Others resisted easy resolution. Is nature moral, immoral, or amoral? What was the purpose of all the beauty in nature, especially the amazing colors, patterns, and structures in the wildflowers that are invisible to the naked eye? If there is a purpose at all, it has to go beyond providing aesthetic and intellectual stimulation to humans; after all, most flowers are never seen at all, let alone viewed through a magnifying lens. And if beauty raises questions, how much more does the ugliness of nature. What does one make of parasites that invade the bodies of caterpillars, paralyzing them, but not killing them, so that they can be eaten alive? Read Annie Dillard's *Pilgrim at Tinker Creek* sometime. Her chapter "Fecundity" explores the horror that lies behind the surface awesomeness of the proliferation of life (Dillard 1974, 162-84). What does one make of all the waste that is inherent in nature's workings? What do we learn about God? I kept stuffing questions like these into the back of my mind, hoping to give them further thought. As I continued reading, I learned more about evolutionary theory itself and also more about how to think. Gould exposed muddled thinking for what it was. Some questions, ones to which I thought I had answers, had those answers blown apart, leaving behind a debris of yet more questions. These, too, were stored with the others.

#### LOST AMONG THE QUESTIONS

Perhaps the most significant and troubling set of questions was raised by Gould's book *Wonderful Life* (1989). In this book Gould shows how the Burgess Shale fossils counter the prevalent image of the development of life as a ladder with simple life forms at the bottom and human beings at the top. This image has usually been seen to imply progress, continual improvement in the course of evolution. Life forms nearer the top are more "advanced," somehow better than earlier, simpler forms. Located at the pinnacle, human beings are the best, the "goal" of evolution.

The Burgess Shale fossils destroy this image of progress. Replacing it is a picture of life evolving by the proliferation of a multitude of different forms, most of which eventually die out, leaving only a few survivors. Furthermore, in many cases, forms that dominate their era are not necessarily the ancestors of the creatures of the present day. Often an obscure species proves most enduring. Again and again, Gould points out the role chance—contingency—plays in the development of the life forms we see today. Replay the tape, he insists, and the outcome will change. Replay the tape, and human beings, with their unique self-consciousness, never arise. The evolution of human beings is not a necessity.

What a change science has wrought in our understanding of the place of human beings in the universe! First, the astronomers tell us we are not at the center of either the solar system or the universe. Then Darwin comes along with his theory of evolution and tells us that we are not a unique species, specially created by God in a way different from other animals. Now our place at the pinnacle of the development of life on earth is called into question.

#### A DISTURBING LACK OF DIRECTION

As I pondered this new view of the place of the human being in the universe, I was not much bothered by being taken out of the center and mixed up with the animals, but I was bothered by the element of contingency and the seeming absence of any direction or purpose for evolution. Human beings might never have been. What does this say about our purpose in the overall scheme of things? What does this emphasis on the role of chance imply for any Christian beliefs about God-directed plans and purposes?

Gould was not the only scientist I read who raised these questions. Biologist Ernst Mayr, in his essay on the use of teleological, or goal-directed, language in biological science, also dismantles progressionist views of the development of life and reinforces the understanding that evolution is not goal-directed. Natural selection, Mayr says, “rewards current success but never sets up future goals” (Mayr 1988, 43). He goes on to dismiss even the goal of survival, one which I do not find particularly inspiring anyway, by saying: “It is misleading and quite inadmissible to designate such broadly generalized concepts as survival or reproductive success as definite and specified goals” (Mayr 1988, 43).

Given the prevalence of Christian talk about God’s design, God’s purposes, God’s plan—the book the congregation gave me when I was confirmed was titled *God’s Great Plan for You*—it is not surprising

that I began to be disturbed by this insistence that evolution is not goal-oriented. Ian Barbour notes that of the three challenges posed to traditional Christianity by Darwin's theories—challenges to biblical literalism, to human dignity, and to design arguments for the existence of God—the most enduring challenge has been the last, the challenge to design (Barbour 1990, 154–56). Of all the questions revolving in the back of my mind, this was and continues to be the most disturbing. How does the role that chance plays in nature fit into the Christian picture of God? Would a God with a purpose create a world without purpose? If there is a purpose as revealed by special revelation, should we not expect natural and special revelation to be consistent?

#### BACK TO THE CLASSROOM

As these questions took their places in the group waiting for answers, I recognized that, instead of fading away as do many enthusiasms, my interest in the religion-science discussion was intensifying. Adding to the importance of these questions was my sense that among my parishioners there were many who were troubled by similar questions, even if their unease did not spark an active search for enlightenment. I felt the need to learn more so that perhaps I could promote more discussion of these matters in the parish. At least some of the challenges posed by evolution had responses, especially the challenge posed by biblical literalism. I wanted to discuss these matters with other interested individuals, but no one of my acquaintance was really pursuing them, not even my chemist husband, who got his fill of science at work. While I was wondering what to do next, a brochure from the Chicago Center for Religion and Science announcing the Spring 1992 Advanced Seminar arrived in the mail. By some miracle, it was scheduled for Monday nights, one of the only nights I usually had free. I decided to attend.

The Advanced Seminar was exciting, frustrating, and confusing. It was exciting because here at last were people who were talking about these issues that I had read so much about. Ian Barbour, whose work I found most easy to understand, was one of the presenters. Other important contributors to the religion-science discussion were brought to my attention. Furthermore, it was evident that the matters under discussion were more than abstract philosophical issues, but topics which had a bearing on concrete concerns such as environmental ethics, genetic engineering, and abortion.

The seminar was frustrating because much of the conversation was over my head. It was not so much the complexity of the scientific

concepts being discussed that threw me as a deficiency in my background in philosophy. However, knowing that new areas usually seem incomprehensible at first, I hung on, figuring that eventually some sense would emerge.

The confusion, which instead of decreasing only increased as the seminar proceeded, had its roots in two sources. First, relying heavily on Barbour's books, especially *Religion in An Age of Science*, I had a picture of the field as encompassing questions raised by the sciences of physics, chemistry, and biology. The seminar expanded the horizon of the dialogue to include sociology and anthropology. In addition, the need for more grounding in philosophy, linguistics, and history was further highlighted—a formidable task, one with no clear starting place.

The second source of confusion was my own lack of method. I roamed about in my reading, now picking up one of Gould's essays, next reading one of Polkinghorne's short books (Polkinghorne 1991), meandering from there to a historical account of Darwin's life and times (Irvine 1955), and back again to biology with a dip into Ernst Mayr. I did not take notes, rarely even jotted down my questions, but just tossed them into my mental storage closet where they became more jumbled together and confused. No wonder I felt lost in the wilderness of discussion.

#### SEEKING ESCAPE

That I did not spend time taking notes or otherwise pursuing this interest methodically is no surprise. Parish work absorbed most of my time, and what was left was largely given over to cooking, laundry, bill paying, and the other demands of family life. Indeed, given the pressures on my time, I began to ask myself why I continued to be drawn to the religion-science dialogue, with its unsettling questions. Why not just dismiss it, using some of the arguments that Barbour outlines in his discussions of the various ways of relating science and religion (Barbour 1990, 3-30)? Why not just accept that the two fields are independent, that science deals with "how" questions and objective data, while religion deals with "why" questions and inner, subjective experience? Or, alternatively, one can divorce the two fields using the theological contention of Karl Barth and others that the transcendent God is knowable only through God's self-disclosure in Christ; that is, knowable only through a process of revelation, not through the human reason on which science relies (Barbour 1990, 11).

Such arguments would allow me to dismiss the dialogue as

unnecessary and thus provide a way out of my confusion. However, I found myself unable to do this for a simple theological reason. If as Christians we confess in our creeds that God is the "Creator of heaven and earth," the "maker . . . of all that is, seen and unseen," we cannot simply write off the natural world, part of the heaven and earth, seen and unseen, as if it contains no trace of its Creator. Natural theology, the knowledge of God to be obtained from nature, may be incomplete. Ambiguities may need to be illumined by revelation. Nevertheless, I do not see how as Christians we can believe in God as Creator without expecting nature to contain something to be learned about that Creator. As Karl Schmitz-Moormann puts it: "If the Christian faith holds our world to be the result of God's doing, then it would be a very strange theological attitude to consider this work of God as irrelevant for the theologian" (Schmitz-Moormann 1992, 135).

To expand on this theme, we can also ask: What kind of God would create a world that reflected nothing of God's own character, or worse, left an erroneous impression of that character? I used to think that those who wanted to defend a young earth theory in the face of fossil evidence to the contrary might resort to the possibility that God had created the earth in 4004 B.C.E. complete with fossil evidence suggesting a longer history. Stephen Jay Gould demolishes this argument in one of his essays, pointing out that this dubious approach gives us a trickster for a God. Those who promote a Creator who leaves no traces, or only misleading traces, give God a similarly reprehensible character.

#### PRESSING ON

Creedal affirmations keep me involved in the dialogue. Another equally compelling reason keeps me wrestling with religion-science issues, a reason that Karl Schmitz-Moormann articulates as his second argument against separating science and theology in the article quoted above. This argument is concerned with the need to proclaim the Christian message in a credible way to those who have been raised with a worldview informed by modern scientific knowledge. Schmitz-Moormann notes that "theology has so far not developed a language proclaiming God the Creator and salvation in Christ in a way that is reaching out to the people in today's world" (Schmitz-Moormann 1992, 141). He believes

that a growing number, especially of young people, are feeling the unrelatedness of the "proclaimed" Christian message to their concrete experience of reality in this world. . . . The still rapidly spreading waves of new religions are an

indicator of the unsuccessfulness of the proclamation of the Christian faith. The relation to the known world necessary for credibility of the Christian faith has been lost, and young people are seldom satisfied with dreams that have been recognized as such by their parents. (Schmitz-Moormann 1992, 141-42)

Schmitz-Moormann goes on to insist that, given this state of affairs, "Christian theology cannot help but be concerned with the real world, and to give up speaking about this real world in adequate theological terms means finally to give up one's faith: one cannot transport the always new Christian message in the old wineskin of classical theologies" (Schmitz-Moormann 1992, 142). To him, developing "adequate theological terms" requires drawing on scientific understandings, especially the evolutionary view of the world which has replaced more static worldviews:

If the important point of the Christian religion is to transmit the message, and if it is correct to say that the language of a time expresses the knowledge of the time, then Christian theology is certainly concerned with transposing the content of the ancient revelations into the language of the present. And to do this, theologians must be able to speak the language of their time, which at least to a very important extent is created through the sciences of the day. (Schmitz-Moormann 1992, 136)

When I was first asked why I was attending the Spring 1992 seminar, I could only mumble somewhat obscurely that I wanted to be able to relate some of my learnings back to those in the parish who wondered about or were troubled by the implications of modern scientific findings for the Christian faith. I am indebted to Schmitz-Moormann for articulating this concern much more clearly. Many people in my parish do find Christian teachings, at least as they are presently expressed, increasingly irrelevant to their daily lives. Doctrines like Original Sin and the Fall make no sense to them. They require new explanations, and I find myself turning more and more to scientific understandings for new approaches. For example, psychological and linguistic theories of human development, as well as biological understandings of the historical information encoded in DNA, shed light on the doctrine of Original Sin for those who see it merely as a teaching which gruesomely and ridiculously insists that newborn babies are bad. Schmitz-Moormann argues that we must reinterpret Christian doctrines of the Fall and of Atonement in light of the evolutionary view of the world. If the world and human beings have evolved, there never existed the original state of innocence and purity that the story of the Fall describes. Such rethinking of classic doctrinal formulations can only help all of us Christians in our task of proclaiming the gospel in our skeptical, antiauthoritarian, pluralistic times.



## EXPLORING THE RELIGION-SCIENCE TERRAIN AS PRAYER

Unable to dismiss the religion-science dialogue as irrelevant and unimportant to either my tasks as pastor or to my personal faith, I continue to wrestle with the issues it raises. The struggle has paid unexpected spiritual dividends. I have come to see my involvement in this area as the growing edge in my spiritual life. A colleague recently told the members of a group of which I was a part that he was feeling spiritually stagnant. He asked what we were reading to energize and refresh ourselves. Most members of the group shared the titles of various devotional books. I recommended a different course. I suggested reading religion-science writers or process theologians. Though I, too, read devotional literature and find it meaningful spiritually, my colleague's question led me to the realization that it was not that genre, but the religion-science literature that was stirring up the spiritual waters and keeping my faith life vibrant.

An article on contemplative prayer in the journal *Weavings* increased my awareness and appreciation of the importance of the religion-science dialogue to the growth of my faith and the replenishment of my spiritual energy. Author Wendy M. Wright defines this type of prayer, not as a retreat into fantasy, as it is often described, not a "haven in a world gone mad," but as engagement with the world (Wright 1992, 17). The "contemplative life is about facts . . . about things as they are, not about things as they might be. Contemplative prayer brings us directly into contact with what is, and thus directly into one another's hearts and the heart of the world" (Wright 1992, 17-18). Such prayer transforms those who practice it.

The contemplative life . . . is a process of letting go of the familiar ways we have known and experienced God . . . that radical and risky opening of self to be changed by and, in some way, *into* God's own self. It is a *formative* life; it changes us and our perceptions. It causes us to see beyond our present seeing. Thus it is a life of continual dying, of being stripped over and over again of the comfortable and familiar, a life of letting go and allowing a reality beyond our own to shape us. From another perspective, it is a life of emerging spaciousness, of being made wide and broad and empty enough to hold the vast and magnificent and excruciating paradoxes of created life in a crucible of love." (Wright 1992, 22)

Sometimes I had felt that I had been neglecting my prayer life. As I read these words about contemplative prayer, it slowly dawned on me that the effects of contemplative prayer were the same as the effects I was experiencing as I read about and pondered the issues of the religion-science dialogue. I have definitely had to let go of familiar ways of understanding God. My perceptions have been changed, and therefore, I have been changed. I have been drawn into

the world of facts, of things as they are; my seeing has been expanded. To use the terminology of the article, God has pried me open so that my seeing and loving have become clearer and wider (Wright 1992, 27). Not only am I alert to wildflowers, I am alert to all manner of facts and experiences: the world of the brain being described by the neurosciences, the workings of DNA, studies of the Good Samaritan story and its social impact. If Wright is accurately describing contemplative prayer, then my morning reading of Barbour and Gould, Polkinghorne (1991) and Dennett (1991), Rolston (1987), or Mayr (1988), *is* prayer. I have not neglected my prayer life. The form may be different; the effects are the same. For me, to engage in the religion-science dialogue is to pray.

#### THE WANDERING CONTINUES

This nontraditional contemplative life of mine is indeed a “life of emerging spaciousness.” Such a life is often exciting, but as I have noted, it can also be frustrating and confusing, encompassing as it does “vast and magnificent and excruciating paradoxes.” As Wright warns:

We can become contemplatives in the sense that we become sensitized to the unspeakable grandeur of a mountain sunrise or the microcosmic miracle of the fluttering of moths. But beware. We may also come suddenly upon the unimaginable desecration of God’s creation in the face of war. And we may find that we are really there. We may become initiates into a more total perception that links us with the destinies of all of God’s children, so that others’ pain is recognized as our own. And perhaps we may experience that pain as also being God’s (Wright 1992, 27).

This type of contemplative life entails, at the very least, the pain of carrying around unanswered questions. Many certainties, of which there were precious few to begin with, have given way to uncertainties. I often feel lost in this wilderness of science and philosophy and theology, without even a vision of what the Promised Land might be—although there is one thing I am sure the Promised Land is not. It is not a land of certainty, a place where all questions are answered.

Though it would be easier to ignore the questions and the uncertainties and confusion that come with them, I cannot seem to leave them alone. Of maybe it is just that they will not leave me alone. For now they seem to be God’s way of opening me up so that God can reshape my life. And though I may be nowhere near the Promised Land, these wanderings are not without their consolations—the beauty of the wildflowers, the wonder of the workings of this world, and the joy that comes with growth. My twin hopes for the

future of these spiritual wanderings are that they will turn out to have purpose and that they will lead to conversion experiences for others.

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