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The Science and Religion Dialogue

WHY IT MATTERS

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ONCE STARTED a science and religion class with the claim that these are the two most important things in the world. A student promptly objected: "No, Professor, you are wrong: that's sex and money." I convinced him otherwise by the time the semester was over. But I am still trying to convince most of the world. Science is the first fact of modern life, and religion is the perennial carrier of meaning. Seen in depth and in terms of their long-range personal and cultural impacts, science and religion are the two most important forces in today's world.

Here are six reasons why the dialogue is vital:

1. *Science cannot teach us what we need most to know about nature—that is, how to value it.* That claim might seem too bold, but I do make it in a box essay, "What Is Our Duty to Nature?," that I was invited to write by concerned biologists, authors of a widely used general biology textbook. So the claim is now confronting tens of thousands of biology students across the nation.¹ Science does teach us natural history. Science gives us great powers for the improvement of human life through technology. But science limps when it comes to values. What to make of nature, looking to the evolutionary past? What to make of nature, given our technological prowess? Whether we wish a managed nature, and who will be the managers and how they ought to manage—none of these are questions answered by science.

2. *Science cannot teach us what we most need to know about culture—that is, how to value it.* That is the other side of the question we were just addressing. Science has a hard back but a soft underbelly. We modern humans, increasingly competent about making our way through the natural world, have been decreasingly confident about its values, its meanings.

The correlation is not accidental. One of the proverbs of my country rearing was, "The faster a blind horse runs, the sooner it will perish." It is hard to discover meaning in a world where value appears only at the human touch, hard to locate meaning when engulfed with sheer instrumentality, whether of artifacts or natural resources.

The doctrine of original sin is said to be the only empirically verifiable teaching in my Presbyterian heritage. Since 9/11 and Enron, we hardly need convinced that, globally and domestically, we confront value questions as sharp and as painful as ever. Consummate capitalism, though it may raise the living standards of many, seems also to make the rich richer and the poor poorer. One of our national goals seems to be ever-escalating consumption, funded by ever-smarter science. But my Shenandoah Valley ancestors thought of consumption as a disease. Power corrupts, and absolute power corrupts absolutely. Lord Acton was absolutely right.

3. *Science increasingly opens up religious questions.* This is quite contrary to the more frequent claim that science eliminates religion. If one looks closely, there are religious dimensions in the thought of otherwise secular thinkers. I have time only for two; I could cite twenty. I will use two well-placed Boston scientists.

Stephen Jay Gould finds Earth the scene of "wonderful life," even if this is just "chance riches."² Indeed, in the last words he wrote, he was moved to use the word "holy": "Something almost unspeakably holy—I don't know how else to say this—underlies our discovery and confirmation of the actual details that made our world and also, in realms of contingency, assured the minutiae of its construction in the manner we know, and not in any one of a trillion other ways, nearly all of which would not have included the evolution of a scribe to record the beauty, the fascination, and the mystery."³ E. O. Wilson, a secular humanist, ever insistent that he can find no divinity in, with, or under nature, still exclaims, with emphasis: "The flower in the crannied wall—it *is* a miracle."⁴ "The biospheric membrane that covers Earth, and you and me,... is the miracle we have been given."⁵ Maybe these code words "miracle," "sacred," and "holy" are just rhetoric; maybe they are provocative. But I suspect even these secularists are tugged by a deeper undertow than they realize in their encounters with the archaic orders.

The secular—this present empirical epoch, this phenomenal world,

studied by science—does not eliminate the sacred after all; to the contrary, the secular evolves into the sacred.

4. *The future of religion depends on the dialogue.* Many of my professors taught me that science and religion were independent areas of life, rather like law and poetry, each with their own integrity, but that to relate the two was to try to integrate incommensurables. They were half right, but that half-truth taken for the whole is quite wrong. The religion that is married to science today will be a widow tomorrow, so they said. The sciences in their multiple theories and forms come and go. Physics today is very different from the physics I was taught half a century ago. Biology in the year 2050 may be as different from the biology of today as the religion of today is from the religion of 1850.

But the religion that is divorced from science today will leave no offspring tomorrow. From here onward, no religion can reproduce itself in succeeding generations unless it has faced the operations of nature and the claims about human nature with which science confronts us.

The problem is somewhat like the one that confronts a living biological species fitting itself into its niche in the changing environment. There must be a good fit for survival, and yet overspecialization is an almost certain route to extinction. Religion that has too thoroughly accommodated to any science will soon be obsolete. It needs to keep its autonomous integrity and resilience. Yet religion cannot live without fitting into the intellectual world that is its environment. Here, too, the fittest survive.

5. *Dialogue offers new opportunities for understanding and confronting suffering and evil.* Something stirs in the cold, mathematical beauty of physics, in the heated energies supplied by matter; there is life, and still later suffering subjects. Energy turns into pain. The capacity to suffer evolves as a complement to the capacity to survive. Across the whole of evolutionary history, renewed life comes by blasting the old. Environmental pressures shape life. Life is pressed by the storms, but it is pressed on by the storms, and environmental necessity is the mother of invention in life. Life is gathered up in the midst of its throes. Darwinians see this truth: there is a struggle for survival. But so far from making the world absurd, suffering is a key to the whole—not intrinsically, not as an end in itself, but as a transformative principle, transvalued into its opposite. Darwinians see dark clouds; Christians see the silver lining.

We begin to see the sacred character of life in its struggling beauty. Experiences of the power of survival, of new life rising out of the old, of the transformative character of suffering, of good resurrected out of evil, are quite forcefully those for which the theory of God has come to provide the most plausible hypothesis. I call this "cruciform creation." The perennial regeneration of life in the biological sciences is a precursor of the redemption of life offered in the religions. In both nature and culture there is something divine about the power to suffer through to something higher.

Earth is a kind of providing ground, where the life epic is lived on in the midst of its perpetual perishing. Life persists because it is provided for in the evolutionary and ecological Earth systems. Life is lived in grace through the besetting storm, green pastures, and the valley of the shadow of death. Today we say, life is generated "at the edge of chaos." Yesterday, John said, "The light shines in the darkness, and the darkness has not overcome it" (John 1:5).

6. *The dialogue between science and religion matters because the future of Earth depends on it.* I've been lucky that my own personal agenda, figuring nature out, has during my lifetime turned out to be the world agenda, figuring out the human place on the planet. Living locally led me to think globally. In that sense my autobiography has been writ large in the Earth agenda. I did not want to live a denatured life; it turns out that humans neither can nor ought to denature their planet. But my sense of wonder turned to horror when I encountered the oncoming environmental crisis. No sooner did I discover that nature is grace than I found we were treating it disgracefully.

In the new millennium, the four principal, interrelated challenges are war and peace, population, development, and environment. Science alone cannot teach us what we most need to know about any of the four. Maybe religion does not have all the answers or even any easy answers, but it does offer a comprehensive worldview within which we might work out some answers. If anything at all on Earth is sacred, it must be this enthralling generativity that characterizes our home planet. If there is any holy ground, any land of promise, this promising Earth is it.

The biblical faith originated with a land ethic. Within the covenant, keeping the commandments, the Hebrew people entered a promised land. Justice is to run down like waters, and the land flows with milk and honey.

That blessing can be received only if the land is inhabited justly and charitably. No people can live in harmony with their landscape, in a sustainable relationship with their natural resources, unless there is social justice. The Land of Promise is now the Planet of Promise.

Our planetary crisis is one of spiritual information: not so much how to sustain development, much less how to escalate consumption, but to use the Earth with justice and charity. Science cannot take us there; religion perhaps can. It is not simply what a society does to its slaves, women, blacks, minorities, handicapped, children, or future generations, but what it does to its fauna, flora, species, ecosystems, and landscapes that reveals the character of that society.

The astronaut Edgar Mitchell saw Earth from space as "a sparkling blue and white jewel... rising gradually like a small pearl in a thick sea of black mystery," Mitchell continued, "My view of our planet was a glimpse of divinity."⁶ The secular autonomy that once seemed to banish any Presence turns out to veil a kind of haunting incompleteness. We need science talking to religion and religion talking to science to figure out who we are, where we are, and what we ought to do.

NOTES

1. "What Is Our Duty to Nature?" in William K. Purves, David Sandava, Gordon H. Orians, and H. Craig Heller, *Life: The Science of Biology*, 7th ed. (Sunderland, Mass: Sinauer Associates, W. A. Freeman, 2004), 681.
2. Stephen Jay Gould, *Wonderful Life: The Burgess Shale and the Nature of History* (New York: Norton, 1989); Gould, "Chance Riches," *Natural History* 89, no. 11(1980): 36-44.
3. Stephen Jay Gould, *The Structure of Evolutionary Theory* (Cambridge, Mass: Harvard University Press, 2002), 1342.
4. Edward O. Wilson, *The Diversity of Life* (Cambridge, Mass: Harvard University Press, 1992), 345.
5. Edward O. Wilson, *The Future of Life* (New York: Alfred A. Knopf, 2002), 21.
6. Edgar Mitchell, quoted in Kevin W. Kelley, ed., *The Home Planet* (Reading, Mass: Addison-Wesley, 1988), at photographs 42-45, 52.