



Scientific Practice as a Spiritual Experience

A response by Robert John Russell



SEVERAL YEARS AGO, AS PART OF THE Center for Theology and the Natural Sciences' renowned "Science and the Spiritual Quest" program, we sought out a wide range of internationally recognized scientists in diverse fields who were also practitioners of one of the world's great religions. We asked each of them one central question: In your experience as an accomplished scientist and participant in a global spirituality, how is the doing of science a spiritual experience?

The responses from these scientists were profound. They included the following:

- science gives us knowledge about God's purposes in creating the universe and humanity's place, purpose, and destiny;
- nature is a form of divine revelation; we're reading the book of nature, God's second book;
- science discloses the mind of God through the laws of physics;
- science tells us the story of the cosmos as the history of God's activity in the world;
- science leads us to God, the ulti-

mate reality and source of the universe, and this God is present and immanent throughout the universe.

The discoveries from CTNS's "Science and the Spiritual Quest" harmonize wonderfully with Beth Liebert's central claim that "academic life, and scholarship in particular, *is itself* a spiritual practice." Drawing on Rebecca Chopp, Beth notes that practice is a "socially shared form of behavior . . . a pattern of meaning and action that is both culturally constructed and individually instantiated." How perfectly this describes the spiritual practice of science as a community project of international and intercultural dimensions, with shared history and normative paradigms that infuse the lives of individuals who, through rigorous methodologies, seek to discover for themselves science's truths about nature.

Beth also drew on the writings of our dear GTU colleague and mentor Sandra Schneiders, who defined *spirituality* as involving "conscious involvement, the project of life integration through self-transcendence . . .

pointed toward the ultimate value one perceives." To me, this fits nicely with science as a spiritual practice requiring one's total conscious involvement in its theories and experiments, demanding that one integrate personally all one learns objectively by giving oneself wholly to the rigors of scientific research, and finally reaching the ultimate value offered by science to its practitioner: discovering the all-encompassing reality of nature of which we are a part, its staggering intelligibility, and its endless-expanse and exquisite beauty, the natural context of our material existence, a universe whose very matter at last is seen as truly mattering.

Finally, Beth turned to the distinguished philosopher Simone Weil who points to "attention" as that which "consists of suspending our thought, leaving it detached, empty, and ready to be penetrated by the object . . . ready to receive in its naked truth the object which is to penetrate it." What an apt description of the attention called for in both theoretical and experimental science.



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During my PhD work at UC Santa Cruz, I remember staring at a blackboard on which was written a single equation with only two Greek letters and an “equals zero” ($\delta\delta=0$). This equation encapsulates all of the details of the 256 coupled equations at the core of Einstein’s General Theory of Relativity. I learned to dwell in and with these four characters and, through complex and demanding mathematical reasoning, to open up their secret contents, and to discover a representation of the physical universe contained within them.

In these situations I was engulfed by attention to the phenomena in nature, phenomena that lie way beyond ordinary human experience and hint at nature in her secret modes of being, and to the pure mathematics that embraces all we know empirically about the Big Bang universe. Truly, these were spiritual moments for me—moments in my long spiritual quest for reality, truth, goodness, and beauty expressed in the hidden folds of nature and by the contemplation of its most serene mathematical regularities. They were prized moments of *lectio divina* where the sacred text is the mathematics we write down and the endless universe this math reveals, a universe in which we “live and move and have our being,” a universe that science discovers through its direct, personal, and corporate experience as a “spiritual practice.” ♦

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- ❖ a strategic, visionary, and optimistic individual
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We will greatly value those who are candid about their strengths and vulnerabilities, who have an articulated spiritual practice, and who possess a curious, creative, and service-oriented perspective.

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