

Endmatter

LITERATURE, RELIGION, AND SCIENCE: A PERSONAL AND PROFESSIONAL TRAJECTORY

by Robert Schaible

Abstract. By tracing the trajectory of his own personal and professional life, the author provides a perspective on how intellectual and religious or spiritual growth, while often seemingly at odds with each other, can nonetheless advance in a mutually enhancing manner. The historical conflict between literature and science is briefly outlined as a parallel to that between religion and science, and the importance of metaphor as a common element in all three fields is explored. Emphasis is placed on metaphor as a means of challenging absolutism, encouraging humility, and promoting a sense of wonder about the universe.

Keywords: IRAS; literature; metaphor; religious skepticism; science; traditional Christianity; wonder; *Zygon*.

How does a true-believing Southern Baptist from the heart of Dixie end up a dedicated member of the Institute on Religion in an Age of Science (IRAS) while living in New England among Unitarians, agnostics, unbelievers, and free-thinkers of many stripes? Through a blend of the personal and the academic, I'd like to tell how this was done. I'll offer a sketchy narration of my route toward IRAS that will make clear why this organization, and *Zygon*, are so important to people like me. I want also to address the often difficult but enriching connections between and among science, religion, and literature.

I first learned of IRAS and its Star Island conferences in the spring of 1992 when, as I removed the plastic wrapping from my new issue of

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Zygon, I found a loose flyer announcing the IRAS conference on ecology. My wife, Sally, and I could barely believe our good luck! World-class scholars in science, religion, and philosophy addressing an issue of great concern to us at a very reasonable price and practically in our own back yard!

When, a short time later, I spoke by phone with my parents in South Carolina and told them about this wonderful conference where we would study the ecological crisis from both scientific and religious points of view, my mother quietly but speedily replied: "Now, Bobby, you just tell them that the Lord has a plan; He'll take care of it all." Having learned long ago that theological discussions with my parents are unproductive, I sidestepped her reassurance by saying, "It's not the divine plan that worries us, Mom; it's the human plan." She repeated her reassurance, and I changed the subject.

This brief exchange is an opening into the background from which I came to *Zygon* and IRAS. My father is a retired Southern Baptist preacher. His father preached as well as taught theology at Coker College (in Hartsville, South Carolina). My other grandfather was also a Southern Baptist minister. He loved Buicks, expensive suits, cigars, and racy jokes; but he worshipped "the Lord Jesus" and gave me my first lesson in epistemology, Southern Baptist style. He informed me that the way I could know my Baptist faith was the true faith was by relying on the fact that my father and his father and his father before him, and even earlier fathers in the family line, had all been Baptists. And indeed on both sides of my family tree, Southern Baptist preachers and deacons are as common as collard greens and grits on Southern tables. For years my parents hoped I would continue the preacherly tradition, but I strayed into college teaching instead and eventually even moved to live among Yankees and Unitarians. My brother, on the other hand, is a deacon in the First Baptist Church of Macon, Georgia; and my sister, also a Georgian, is a Christian fundamentalist who abhors evolution and vigorously shields her four sons from the dangers of secular humanism.

As an adolescent, I took religion seriously; indeed, it was a guiding factor in my budding interest in girls. A brief anecdote will make clear my earlier piety and simultaneously reveal my first experience of religious skepticism. At sixteen, I was uncertainly in love with Jane Clark, a serious Lutheran who had, in several disturbing conversations, stubbornly insisted, among other things, that sprinkling was every bit as efficacious as immersion for purposes of achieving salvation. These doctrinal disputes, along with several less lofty concerns, increasingly made me think I should end the relationship. After agonizing for months over what then seemed the most important decision of my life, I heard a visiting revivalist declare that if God seemed not to answer our prayers,

the fault was our own. We “let loose of God too soon,” he crooned; the trick was to “refuse to let go” until we were certain that God had spoken.

In good faith, I took my agony to the Lord in prayer. At bedtime one fateful evening, I knelt beside my bed and prayed for guidance in my troubled love. I prayed; I listened. I prayed and waited. Nothing. After placing a pillow under aching knees, I prayed some more and hung on, refusing to let go, determined either to hear an unequivocal voice or to experience some sort of palpable feeling deep inside, of the sort my father presumably had in mind when he would say that the Lord “laid it on my heart” to do such and such. All I heard that irreverent evening were the sounds of backyard crickets mixed with my own confused internal voices. And nothing was laid on my heart, or anywhere else, except disappointment and sore knees. After what seemed an hour or so, I recall feeling somewhat foolish for my efforts and crawled into bed. I eventually did end the relationship (or did she end it?), but the seeds of religious skepticism had been sown.

During my student years in the early sixties at Furman University, my skepticism deepened. A wonderful course in Old Testament history raised many issues that innumerable Sunday School classes and sermons had somehow failed to address. I learned that the scriptures were as subject to interpretation as the short stories and poems we studied in literature class. From a U.S. history course I discovered that our revered forefathers were Deists instead of Christians, and in my dormitory I met my first Jew. Articulate and intelligent, he struck me as far more principled and caring than a host of Christians in the daily news. I watched as the Baptist Church led the way among Southern institutions in refusing to accept African-Americans. To a majority of Baptist churches, blacks were as dangerous as dancing. I suppose that both somehow threatened our purity and therefore our chances for salvation.

As an English major, I was as skeptical of science as I was of religion. Science seemed to me perhaps as dangerous as blacks and dancing seemed to the Baptists I knew. I viewed science as reductive and inimical to humane thought and beauty. Science meant power, arrogance, and technology, all contributing to an unsafe and polluted earth.

Today, my professional field is neither science nor religion. I am not a member of any church and have no denominational or religious affiliation. Why, then, am I so interested in entities like IRAS and *Zygon*? My interest can, I think, be accounted for by a combination of factors. First, I rejected my *own* traditional religious background but not the idea that religion is about something important. I recall a rather poignant conversation with my mother during the spring break of my junior year of college. I was really into existentialism at that time and had brought home a stack of writings by such glad-hearted fellows as Camus, Sartre,

and Gide. Worried that these writers were not very “inspirational,” Mom approached me one morning as I read. With anxious and caring eyes, her right hand lightly tapping over her heart, she asked, “Bobby, you do still accept the Lord Jesus Christ as your personal lord and savior, don’t you?” I didn’t want to hurt my mother, but I wanted to be truthful. “No, Mom,” I said, “that language just doesn’t have much meaning for me any more.” Tears rolled down her cheeks. “Bobby,” she asked, “how can I continue to teach my young people’s Sunday School class when I have failed so badly with my own son?”

This was a painful moment for both me and my mother. I remember trying to think of something—anything—to say that would make her feel better, but what I came up with turned out to be truer than I at that time knew. “Mom,” I began, “I may not believe the way you want me to. But I’m not antireligion, and because of the way you’ve brought me up, I think I’ll always be seeking some kind of religious truth.” That has indeed turned out to be the case. Over the following years I began reading people like Pierre Teilhard de Chardin and Thomas Merton; I also read a lot of Buddhist thought. One of my favorite books was (and still is) *Zen and the Birds of Appetite* (Merton 1968), in which Merton explores the compatibility of Zen and Christianity. I recall sending it to my parents in hopes of beginning a meaningful conversation about the new direction in which I was moving. To the best of my knowledge, they never read it; and the conversation I wanted was, ironically, not to be had with the very people who had implanted in me the need for it.

During a home visit toward the end of my graduate school education, I had a brief conversation one Saturday afternoon with my dad that began with his asking me how often I was going to church in Knoxville. (I was attending the University of Tennessee.) I told him I wasn’t going at all, and he asked why not. I remember answering him with a question of my own: “Daddy, would you like for me during Sunday School tomorrow to ask others if they really believe in the literal resurrection or the virgin birth and why these things are so important to them?” My father blanched: “Well, no . . . no, Bobby. I wouldn’t want that at all.” And I explained, “Well, Daddy, that’s why I’m not going to church anymore. Churches don’t like those kinds of questions, and they’re the ones that seem most interesting to me.” Conversations about these and other fascinating questions I was not truly to have until I found IRAS.

A second factor drawing me to *Zygon* and IRAS has to do with my changed attitude toward science. As I said earlier, I once saw science as a virtually evil enterprise. But then, some twenty years ago in the Foxfire Bar and Grill, my favorite watering hole in Bristol, Virginia, I sat drinking beer with fiction writer Barry Targan following a reading he had given at the college where I taught. From Barry I heard for the first time

in my life about quarks, those odd elementary particles that make up the protons and neutrons of an atom's nucleus. Strange little constituents of matter they certainly are, whose name physicist Murray Gell-Mann playfully took from a line ("Three Quarks for Muster Mark") in James Joyce's almost equally strange book *Finnegan's Wake* (Garvin 1976, 241). This was the beginning of my interest in the almost unbelievably strange world of quantum physics. Soon I was reading every book I could get my hands on that explained subatomic physics for bozos, people like me whose math skills are barely good enough to balance a checkbook. Discovering that science could indeed be exciting and more psychedelic than reductive, I also began reading Loren Eiseley, Stephen J. Gould, Richard Dawkins, Lewis Thomas, and others who write in quite wonderful prose about the complexities and wonders of the Darwinian natural world. And I became increasingly curious about how what I was reading in science related to the religious works I had begun to explore.

The third factor explaining my interest in *Zygon* and IRAS is caught up in the single word *metaphor*. Increasingly, metaphor seemed to be an element common to my professional field, literature, and to both science and religion. So let me say a few words about the relations between and among these three areas.

The interface of (or gulf between) science and literature has historically been almost as illustrious, or notorious, as that of science and religion. A little over one hundred years ago, in a lecture entitled "Literature and Science" delivered during his tour of the United States, Matthew Arnold provided the classic defense of the humanities against the assault of science. According to Arnold, science serves well our intellect and knowledge yet fails to speak to us in such important areas as beauty and conduct. If forced to choose between the two fields, the majority of people, he argued, would do well to choose literature, since it "will call out their being at more points, will make them live more" (Arnold [1885] 1974, 70). In "The Study of Poetry," Arnold ([1880] 1973) argued that the supreme power of poetry lies in its ability to offer "consolation and stay." He further claimed for poetry the power to discover absolute and permanent beauty and truth, thereby predicting that poetry would eventually replace religion and philosophy (Arnold [1880] 1973, 161–63). By the time Robert Frost spoke on behalf of poetry in the next, more cynical century, the claims were more modest. Although for Frost, the poem "begins in delight and ends in wisdom," its wisdom is "a clarification of life—not necessarily a great clarification, such as sects and cults are founded on, but . . . a momentary stay against confusion" (Frost [1939] 1972, 394).

Just over thirty years ago, in another important work on the relationship of literature and science, the novelist Aldous Huxley (1963)

considered the impact of scientific knowledge on what have traditionally been regarded as the romantic subjects of poetry—for example, the nightingale. Huxley wrote, “And, what makes him sing at night? A passion for the moon, a Baudelairean love of darkness? Not at all. If he sings at intervals during the night it is because, like all the other members of his species, he has the kind of digestive system that makes him want to feed every four or five hours throughout the twenty-four” (Huxley 1963, 116). Now there, I submit, is a potentially reductionist thrust from science. Huxley, however, refused to see science as the enemy of poetry: “To the twentieth-century [poet],” he continued, “this new information about a tradition-hallowed piece of poetic raw material is itself a piece of potentially poetic raw material. To ignore it is an act of literary cowardice. The new facts about nightingales are a challenge from which it would be pusillanimous to shrink” (Huxley 1963, 117). And many poets, including Ted Hughes, Robert Frost, and A. R. Ammons, have risen to this challenge and used the raw materials of science as both inspiration and subject matter. Fiction writers like Thomas Pynchon, Kurt Vonnegut, and Italo Calvino have likewise been invigorated rather than intimidated by science. Nonetheless, we still have the “two cultures” about which British physicist and novelist C. P. Snow spoke. Snow described scientists and literary intellectuals as being poles apart. “Between the two,” he wrote, “[lies] a gulf of mutual incomprehension—sometimes . . . hostility and dislike, but most of all lack of understanding. They have a curious distorted image of each other” (Snow 1959, 4).

I belong to another professional organization designed, like IRAS, to bridge the gap between two fields, one of which is science. The Society for Literature and Science (SLS), however, is quite different from IRAS in its tone and approach with regard to science. Whereas IRASians love science for its own sake as well as for what it can offer to an understanding of religious truth, the majority of SLS members (primarily literary types) appear to be in an ongoing game of one-upmanship with science. They find little satisfaction in the distinction made in 1926 by one of their own, I. A. Richards, when he tried to carve out separate, nonconflicting realms for the two fields. He declared that science uses language to give us a “*statement* . . . [which] is justified by its truth, that is, its correspondence, in a highly technical sense, with the fact to which it points.” Poetry, on the other hand, uses language to create a “*pseudo-statement* . . . [which] is justified *entirely* by its effect in releasing or organizing our impulses and attitudes” (Richards 1926, 70–71; *emphases mine*). Smarting from distinctions of this sort and from the power science has enjoyed relative to literature ever since Newton, an advantage made all too apparent by the enormous difference between NSF and NEH annual budgets, SLS folks are at great pains to show that scientific

knowledge is constructed within a matrix of cultural beliefs and values, that skilled rhetoric as much as empirical investigation establishes and sustains this knowledge. (Incidentally, I suspect that each organization has something to teach the other. SLS would, in my view, benefit from a less competitive approach to science, and IRAS needs to give more attention to those ways in which science is indeed a constructed and contingent form of knowledge.)

Both literature and religion, then, have been challenged by science; and both, despite lingering rearguard movements among their ranks against the “enemy,” have greatly enriched themselves through their response to the challenge. The existence of IRAS and *Zygon* is an ongoing documentation of and contribution to the growing sophistication of religion in the presence of science.

We are now, in my view, at a point where any sense of competition among the three arenas should be discarded. All three bring us useful knowledge; all three can enhance our sense of beauty; all three are capable of inspiring us, of giving us a sense of wonder, of calling out our being (if I might echo Matthew Arnold) and making us live more. Finally, these three ways of seeing, knowing, and organizing the world harmonize for me through their common reliance upon metaphor to construct and tell the truths they *keep on finding* to tell. This final point is of particular significance. I can think of no more useful mission than helping people to see the all-important, the *essential*, presence of metaphor in literature, religion, *and* science. To do so is to help them see that metaphor is at the very core of the conceptual system with which we get a grasp on the world (see Lakoff and Johnson 1980). We need to undermine the absolutisms of thought that seem to be springing up like mushrooms all over the American landscape these days. Such absolutism arises quite naturally from what Kenneth Burke calls “a naive verbal realism,” a belief that language is transparent, that it functions like a window through which we can see the real, the true, the absolute (Burke 1966, 5). To see language as a clear window, we should tell ideologues of all stripes, is to confuse metaphor with reality, and that, as someone on Star Island said (I can’t remember who), is a form of idolatry.

To realize that the window is not transparent after all but is opaque instead, or, to use another metaphor, that it is actually a mirror in which, like the Apostle Paul, we can only see darkly—this realization can be for many people quite disturbing. As Burke puts it, “To meditate on this fact until one sees its full implications is much like peering over the edge of things into an ultimate abyss” (Burke 1966, 5). It is an abyss, perhaps, of the sort into which Søren Kierkegaard believed one must make a leap of faith again and again. Few people want to make that sort of leap; hence the periodic flights into religious fundamentalism.

Nine years ago in a course entitled *Metaphor in Science and Literature*, which I team-taught with a biochemist, students were working their way toward an understanding of the delayed-choice experiment in quantum physics. This is one of the best experiments I know of to help students see just how weird the quantum world is and how limited is the knowledge of physicists when it comes to the fundamentals of matter. It makes clear that, at the most basic levels, the physicist is talking about the very strange and unknown *in terms of* the familiar and known; in other words, he or she is relying upon metaphor. One student who finally grasped the implications of the experiment raised his hand and said, "Has it occurred to you that this course might be dangerous?" When asked to explain, he said that he, and probably many of his classmates, had learned to live without the absolutes of religion but that science had become a replacement with its own absolute knowledge about the world. Now he was beginning to see that not even science had a firm grip on reality, and he found that disorienting and even frightening. I understood his point, but I am convinced that this awareness of our limitations can be liberating in a way that is personally and socially beneficial. It seems to me that to face the limits of our knowing is to prepare ourselves for true humility and tolerance. It is to understand that we must hold all our absolutes *provisionally* and that we can never deliver the final word—never, that is, be free of the burden (and the pleasure) of debate.

As one who used to more or less seriously write some poetry and has continued to read and study it, I became comfortable some while ago with the notion of metaphor as a way of pointing to or creating realities that are every bit as meaningful as those other realities we sometimes think of as the "really real" (whatever *that* means!). By studying as seriously as my nonmathematical mind can the mysteries of quantum physics and by writing a paper about the use of language in poetry and physics, I have come to appreciate why Neils Bohr, when asked if the mathematical equation known as the "wave function" mirrors some deeper quantum reality, replied: "There is no quantum world. There is only an abstract quantum physical description" (Petersen 1963, 12). Or why John Bell (of Bell's Theorem fame) said in an interview: "I am entitled to assume that you're out there; but I am not entitled to assume that you are made up of electrons that are out there" (Bell 1988, 86). Or why the Nobel laureate chemists Roald Hoffmann and Pierre Laszlo have written that thinking of atoms "as if they were normal objects [is] a little naive, unavoidable and endearing—not unlike a belief in angels in past centuries" (Hoffman and Laszlo 1989, 35). I have also come to agree with Charles Darwin, who, in the final sentence of the *Origin of Species*, declares, "There is grandeur in this view of life," according to

which we understand that “from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved” (Darwin [1859] 1958, 450).

I have begun to suspect that it is easier for an atheist to view the world as wonder-full than it is for a theist. I say so because once you make the leap to a belief in a God, then the miracles are quite ordinary; they are simply the kind of things one would expect from omnipotence. But if you seriously entertain the atheist’s position, then you have no ordinary way of accounting for all the mystery and wonder that surround us. Suddenly, concepts like chance, accident, and mistake take on new meanings; they shed their negative connotations. Read Lewis Thomas, for example. This biology observer, medical researcher, and superb prose stylist explains in one of his essays how DNA moves the world along by making lots of mistakes; he then reminds us that the word *error* comes from a root that means “to wander around in search of something” (Thomas [1974] 1980, 24). One of my favorite scriptures comes from the *Gospel of Thomas*, which is part of *The Nag Hammadi Library*, the recently available scriptures of the early gnostic Christians. In the verse I like so much, Jesus says the following: “If the flesh came into being because of spirit, it is a wonder. But if spirit came into being because of the body, it is a wonder of wonders” (Meyer 1992, 37). (This is materialism, you see; the material present first and consciousness arising out of it.) I think these words, attributed to Jesus, say something very similar to what I mean about the atheist (the one who thinks the body came first) being better able than the theist to appreciate the world as a wonder of wonders.

Still, speaking as a radical, comprehensive agnostic, I find that the God notion cannot, or need not, be entirely done away with. Considering the notion that a creator called the world forth and then turned away from it, the poet, naturalist, and novelist Annie Dillard writes:

It could be that God has not absconded but spread, as our vision and understanding of the universe have spread, to a fabric of spirit and sense so grand and subtle, so powerful in a new way, that we can only feel blindly of its hem. In making the thick darkness a swaddling band for the sea, God “set bars and doors” and said, “Hitherto shalt thou come, but no further.” But have we come even that far? Have we rowed out to the thick darkness, or are we all playing pinochle in the bottom of the boat? (Dillard 1975, 7–8)

Today, so it seems to me, religion, literature, *and* science are all means of getting beyond playing pinochle in the bottom of the boat. All three are vehicles for rowing us out to the thick darkness, each exploring its own particular kind of darkness, each providing its own kind of metaphors and its own kind of *provisional* clarity. Each is a field of exploration useful for cutting through particular kinds of ignorance so that we

can then confront the mystery that inevitably lies just on the other side of our forever opaque language. Each helps us come to that wisdom expressed by a biochemist colleague of mine when he said: "One must learn that we simply cannot eff the ineffable."

I come to the dialogue as one who once prayed to a literal God for a literal answer to a question about adolescent love, who regarded Lutherans as a cut or two below Southern Baptists, who looked through his particular window and saw in science nothing but damage to the environment and the human spirit. I was, in other words, playing poor forms of pinochle in the bottom of a tiny boat. And the thick darkness was largely in my head.

Now, I am rowing into the darkness, fishing for metaphors, using whatever bait is available, standing ready to toss back any particular fish as soon as I catch another that is larger, more nourishing, or perhaps just more beautiful.

As I read the pages of various science, health, and news magazines, I can perhaps be forgiven for wondering if we're once again on the verge of believing that science will meet all our needs, provide all our important answers. After all, we now have psychotropic drugs like Prozac and Paxil that free us from depression and anxiety. And recently, according to *Science News*, researchers have been working with the hormone melatonin, which is found in a great variety of living organisms from algae to monkeys to ourselves. This marvelous hormone shows real promise of slowing the aging process. (In experiments, mice are already living a third longer. Think of it: If you're slated now for 90 years, you could hit 120!) It induces perfectly natural sleep (in mice) and prevents such frightening diseases as brain tumors and breast, lung, and liver cancer ("Drug," 1995, 300–1).

Other studies bring some of the best news imaginable: Researchers have discovered a protein (cleverly called leptin from the Greek work for "thin") that may one day allow us to eat as much mashed potatoes as we like, *with* gravy, without gaining a single pound ("Mouse Obesity" 1995, 68). Imagine a world in which we sleep soundly, wake rested, proceed through our day of work (or marriage or child rearing) without depression or anxiety, and live long lives with an old age free of debilitating diseases, and all along the way we eat all the cheesecake and key lime pie we desire. A truly relaxed and thin brave new world! Will we need religion and literature in such a world? I think yes. Why? Because we will still want to understand the world, everything from quarks to love, or, unfortunately, hatred. And we'll still be confronted with the opaqueness of language. We will need religion and literature to point into the darkness. We'll still not understand even ourselves. In "Poem of Unrest," John Ashbery writes, "I don't understand myself, only segments/ of my-

self that misunderstand each other” (Ashbery 1995, 187). (Is this not literature rowing us into that darkness of self and providing a quantum of clarity about at least the nature of our problem?) We will still be the introspective animal; there will continue to be rain in our psyches, and we will need the stories of literature and religion—we will need fantasy, or, as Loyal Rue would say, we’ll still need the grace of guile (Rue 1994).

I deliberately worked in the words *rain* and *fantasy* just now because I wanted a lead-in to a William Stafford poem with which I’d like to conclude. The poem comes from his book *A Glass Face in the Rain* and is entitled “Why We Need Fantasy” (Stafford 1982, 26).

It’s a sensational story
as it slowly falls, the rain,
or the used-up sunlight all day
onto the dim of the land,
where rivers have to believe.

Followed by that rain
we hunt a cave to hide in,
or we try to be brave, or we find—
by moving fast—the wind
that lurks in the air we breathe.
Some animals find a way
to keep from being found—
that brave, who needs a dream?
But there aren’t enough caves, you know—

For animals that have our need.¹

NOTE

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