

Science and Religion: A Right Relationship?

A Sermon by Fritz Hudson
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REFLECTION: Science and Religion Revisited

Last summer, you might remember, in our Living Questions survey, the suggestion which was most supported for consideration among us was "The Marriage of Sense & Soul: Integrating Science and Religion." On the Sunday last November when I first attempted to address this topic, I revealed what had heretofore been unknown to almost everyone at that service (and presumably therefore to those who had voted that we address the topic), that The Marriage of Sense and Soul was actually the title of a specific book, written by Ken Wilber, in which the submitter of our topic was expressing particular interest. So my sermon, last November, was an attempt to lay out and explore that book's argument.

What I knew even before that sermon, and was made even more fully to appreciate in the very minutes, and months, following was that this topic touches us both widely and deeply - that its range is far more wide than Ken Wilber even hopes to touch, and that his, perhaps anyone's, attempt to address it arouses strong feelings among us. I knew I would have to come back to this topic. The strength of the feelings and the number and breadth of the suggestions I've received since that Sunday convinced me I should return to it sooner rather than later, indeed to address it again even before I was perhaps fully prepared to do so, just to be sure to keep the conversation out on the table among us. So here we are.

So why are we so interested in and emotional about this topic? I can see two reasons.

First, of course, our interest and feelings are strongly engaged here because of current events in our larger culture, events which are disturbing, even threatening, to anyone who covenants to affirm and promote a "free and responsible search for truth," and who draws upon "the guidance of reason and the results of science" to ground that search. On the one hand, we see our neighboring state Kansas altering its standards for elementary and secondary science education to dilute the teaching of evolution and permit the teaching of so-called "creation science" - and we see our own state board of education actively debate, again, whether to pursue a similar path. On the other hand, we see our state legislature locked in a close battle over whether to ban use of aborted fetal tissue in our University Medical Center's research program, and we see our governor on record as willing to sign the ban if it reaches his desk. Religious groups and religious principles are behind these movements, we know, primarily biblical literalists among Protestant Christians in the first case, and primarily anti-abortionists among Roman Catholics in the second. (I'm cautious about assuming how much these groups overlap one with the other, but I suspect some overlap). Most of us see our religious principles supporting the full exploration of mainstream science in our public schools and supporting aggressive research to find medical cures so long as the research causes no personal injury. Yet our side is definitely on the defense in these public debates; our interest is high and we feel threatened.

But there's a second cause, I suspect, for the strong engagement of our interest and feelings in this topic. Beyond or beneath these external, political and perhaps (we might hope) passing events, lie some internal, spiritual and probably intractable realities, which fuel our fear and fire. Our covenant with one another is to freely and

responsibly pursue here, together, both truth and meaning - both fact and faith. Our very conception as a religious movement was as a twin with modern science. The minister who first introduced our faith to this soil, in the 18th century, is known throughout our culture for his work, not as a minister, but as a scientist: Joseph Priestley. Yet the overall history of science's progress toward truth has also been the history of human life's erosion in apparent meaning, or at least in apparent significance. First Copernicus and Galileo discovered that our earth was not, in fact, at the center of universe but almost lost on a distant edge. Then Darwin revealed that we were not specially created but rather evolved, by apparent accident, from other life forms. Then Freud revealed that our very seemingly free decisions were in fact strongly influenced if not fully formed by dark forces lurking beneath our conscious awareness. Finally quantum physics has revealed that the most fundamental workings of existence are only understandable to us in terms of uncertain probabilities and that the accuracy of our apprehension is intractably compromised by the very processes of our investigation.

In an early book, Steven Weinberg, the Nobel prize-winning physicist, reached this conclusion: "The more the universe seems comprehensible, the more it also seems to be pointless," (The First Three Minutes, p.144). Begged within that question, in a silent but still deafening shout its corollary: "Doesn't that pretty much make human life pointless as well?"

"I won't have it!" cried the Cardinal in Berthold Brecht's play Galileo: "I won't be a nobody on an inconsequential star briefly twirling hither and thither." Aren't his feelings the very same as those at the core of our engagement in this topic? Well-prepared or not, our answer to this question cannot long lie unaddressed in our midst; its just too crucial to our reason for being here. So, as they say "once more into the breach" Is there a "right relationship" between religion and science?

SERMON: Cold Feet? Second Thought on Marrying Sense & Soul

"The relation of science and religion in the modern world - that is in the last three or four centuries - has changed very little since their introduction to each other in the trial of Galileo, where the scientist agreed to shut his mouth and the church agreed not to burn him." (Ken Wilber. The Marriage of Sense and Soul. p.ix.)

This general image of contest and conflict, Ken Wilber's image I shared as we began this conversation last fall, is surely the most widely publicized picture of the relationship between religion and science in our culture. Public media gives exaggerated attention to the conflictual dimensions of all relationships - conflict attracts spectators. But to what extent is this an accurate, comprehensive picture of the relationship, both historically and currently? And to what extent is this a necessary aspect of the relationship? These are the questions upon which I want first to focus this time around. Then, at the end, I will revisit the question of whether science and religion can or should, ala Ken Wilber, be rushed to the altar.

First of all, let's remind ourselves what we're talking about at essence. The word religion, *religio* in the Latin, has as its root *ligare* to bind together. With the prefix *re*, the root becomes to re-bind, to bind back together. In Latin it clearly spoke of the standardized, ritual acts through which the human relationship to the powers transcending us was cemented and re-cemented. (Wilfred Cantwell Smith. The Meaning and End of Religion p.20-21) Religion, then primarily, is a mode of expression. The term science, *scientia* in

Latin, has as its root *scire*, to know. It has always described a human approach to investigation, to gaining knowledge. Science, then primarily, is a mode of discernment.

The human ways of expressing our relationship with powers which transcend our own and the human ways of discerning the character of the reality in which we live have developed in different ways in different cultures. What we know as modern science, the pursuit of knowledge through experimental observation, first developed in the western world because of and in partnership with some of the distinctive aspects of western, judeo-christian, religion.

In his book Religion and Science, which must be regarded as the current standard text in the field, Professor Ian Barbour points out that "Both Greek and biblical thought asserted that the world is orderly and intelligible. But the Greeks held that this order is necessary and that therefore one can deduce its structure from first principles. Only biblical thought held that the world's order is contingent rather than necessary. If God created both form and matter, the world did not have to be as it is, and one has to observe it to discover the details of its order. Moreover, (in biblical religion) while nature is real and good, it is not in itself divine, as many ancient cultures held. Humans are therefore permitted to experiment on nature. The desacralization of nature encouraged scientific study." ... along with environmental exploitation, it must be added. (p.90)

In the 17th century, when modern science really took off in England, Christian Calvinism was the dominant religious context. It actively encouraged this-worldly enterprise. At the same time Puritanism's anti-establishment attitudes may have encouraged greater openness to new ideas. (Barbour. p.25-26). By contrast in the Muslim and Chinese cultures of this and earlier times, though they were equally well-developed in intellectual and technological sophistication, deference to religious tradition severely circumscribed higher learning and prevented any independent development of anything like modern science. (Barbour. p.27)

The relationship between religion and science, therefore, is not necessarily conflictual, though there are surely tendencies, in each I will say, which lead them into conflict.

We are well aware of these tendencies in religion. Arising as it does as an expression of our relationship to the non-human powers which transcend us, religion has a tendency to project authority rather than to internalize it. This leads religion to project authority onto supposed human spokespersons for or representatives of transcendent non-human power as well - people like prophets, priests or popes. In addition, sensing the human-transcendent relationship as best bound together by standardized, ritual acts, religion has a tendency to resist change in its forms or understandings of expression. Insofar as religion takes the form of dogmatic authoritarianism or scriptural literalism and invests itself in a once-and-for-all understanding of our natural reality, it can't help but come into conflict with science, whose picture of natural reality is ever-developing. What I will want to suggest in a moment, however, is that these tendencies in religion do not define its essence, that religion has within itself the option of pursuing its mission without giving into dogmatism or literalism.

But first I want to ask about tendencies in science which lead it into conflict with religion. Science is a mode of discernment, a means of gaining knowledge about reality as it becomes accessible to observation and experimental study. But that is all it is. If we ask "Are there aspects of reality which are not accessible to observation and experimental study?" science, itself, has no answer to that question. If we ask "Are there other modes of discernment which result in coherent, comprehensive, and fruitful apprehensions of some aspects of reality?" science, as science, cannot say whether there are or there aren't. In his

UNL lecture last month exposing the geologic fallacies undergirding creation science, I believe I heard Professor Wise openly acknowledge such limits. There are those who make these claims however - who claim that matter (or matter and energy) is the fundamental reality in the universe, who claim that the scientific method is the only reliable path to knowledge - and who make those claims in science's name, even though they can't be verified or falsified scientifically. In so doing they set themselves up for conflict with any form of religion which, in its reach toward powers beyond ourselves, wants to remain open to possibilities of other planes, or at least dimensions, of reality, or with any form of religion which wants to remain open to possibilities of other paths to knowledge, or at least to wisdom.

Scientific materialists, is usually what those making these claims call themselves. Their propositions, rather than scientific statements, Ian Barbour points out, are actually statements of metaphysics (statements about the character of reality) and statements of epistemology (statements about the character of inquiry). "Scientific materialists are at the opposite end of the theological spectrum from biblical literalists," he writes, "but they share several characteristics: both seek knowledge with a sure foundation ... They both claim that science and theology make rival literal statements about the same domain, the history of the nature, so that one must choose between them." ... "I ... suggest," he goes on, "that scientific materialism and biblical literalism both represent a misuse of science. The scientific materialist starts from science but ends by making broad philosophical claims. The biblical literalist moves from theology to make claims about scientific matters." (Barbour. p.78)

There is, however, another well-established image for the relationship between religion and science - an image not of head-to-head conflict, but rather of a kind of benign independence the one from the other. Immanuel Kant, the 18th century philosopher, first captured this image. Science, he said, is sovereign in the pursuit of fact; religion is sovereign in the pursuit of value. Science is the means to discovering what is true; religion is the means to discovering and living out what is good. They work in different realms; they come into conflict only when one or the other steps outside the area amenable to its methods.

In the twentieth century, philosophical linguistic analysis has lent support to this image. Seeing that differing types of language serve differing functions not reducible to each other, it has noted that scientific language is used primarily for prediction and control. ... It asks carefully delimited questions about natural phenomena, and cannot be expected to do jobs for which it was not intended, such as providing an overall world view, a philosophy of life, or a set of ethical norms. Religious language, on the other hand, functions to recommend a way of life, to elicit a set of attitudes, and to encourage allegiance to particular moral principles. Metaphor is its stock in trade, it cannot be expected to accurately describe physical reality. (Barbour. p.87)

At the same time the two major twentieth century movements in western theological thought, Neo-orthodoxy and Existentialism, though quite different in their focus and activity, both assumed Kant's complete independence between religion and science. Neo-orthodoxy, on the one hand, while finding meaning in renewed relationships with the historical people and events which spawned the Christian faith, urges us to take the Bible seriously but not literally. Scripture is not itself revelation, it says; it is a fallible human record witnessing to revelatory events. Existentialism, on the other hand, finds life's meaning in the individual creation of a unique self through free decisions, commitments and actions, made with or without relation to deity. The scientist's spectator search for abstract general concepts and universal laws is far removed from this intensely personal creation of self. Some years ago, when existentialist theologian Langdon Gilkey testified to prevent Arkansas from mandating creation science instruction in its public schools, he argued that science seeks to explain objective, public, repeatable data, while religion asks

about the experiences of our inner life (such as guilt, anxiety, and meaninglessness, on the one hand, and forgiveness, trust, and wholeness on the other). Science asks objective how questions. Religion asks personal why questions about meaning and purpose. (Barbour. p.85-86)

Now we have two images of the relationship between religion and science before us - an image of dog-eat-dog conflict, and an image of benign independence. The former accurately describes some aspects of the relationship between dogmatic authoritarian religion or scriptural literalist religion and scientific research. It also accurately describes some aspects of the relationship between scientific materialist philosophy and religious exploration. The latter image accurately describes most aspects of the relationship in post-18th century religious and scientific development. Indeed our media-cast conflict between religion and science, could just as well be understood as a conflict within religion, a conflict between pre-enlightenment religion and post-enlightenment religion.

Yet there are some, Ken Wilber only one among them, who believe that the relationship can and should become closer, more integrated, like even unto a marriage. Can we understand them? Should we follow them?

Wilber, you might remember, is most concerned that science recognize the parallels between its disciplined pursuit of truth and religious meditation's disciplined pursuit of deepened consciousness. Having mastered only the barest beginnings of this latter discipline myself, I cannot fully evaluate those parallels. I can however, as more than one of you urged in response to my sermon last fall, see as inaccurate Wilber's charge that contemporary science does not acknowledge and appreciate its own interiorities and non-empirical realities. Wilber's work seems to rise in the line fathered two decades ago by Fritjof Capra in *The Tao of Physics*, which described parallels between the discoveries of modern physics and eastern meditation, hinting at a shared, sort of "bi-valved" access to ultimate reality. Philosophical linguistic analysis, I find however, reveals the same disconnect between uses of similar words in these different contexts as it finds in uses of other words in scientific and western religious contexts. (Barbour. p.189)

Ian Barbour, recently retired professor of both physics and religion at Carleton College, and winner this year of the prestigious Templeton prize for Progress in Religion, is a spokesman for a more mainline movement to marry science and religion. Called process theology, it is heir to Alfred Whitehead's philosophical legacy. Barbour's critique of existentialism is telling for me "Existentialism rightly puts personal commitment at the center of religious faith," he says, "but it ends by privatizing and interiorizing religion to the neglect of its communal aspects." Then, however, Barbour takes another step. "To be sure, religion is concerned with the meaning of personal life," he says, "but this cannot be divorced from belief in a meaningful cosmos." (Barbour. p.86) Process theology incorporates God-symbolism into a metaphysics which sees our cosmic context as imbued with an intention (a Godliness) which is not omnipotent. Rather it participates in continuing creation in an open-ended partnership with an unfolding physical, chemical and biological heritage and human free-decision making. (Barbour. p.89.) For me, this is an impressive and alluring intellectual construction, but I find little in my experience to suggest it's reality.

As perhaps you can tell by now, my personal view of the appropriate and most constructive relationship between religion and science, is still strongly grounded in existentialism. I am inclined to see the two disciplines working best in fairly separate realms - free reign for science to fulfill our faith's covenant to responsibly search for truth (which I'm most comfortable defining as facts scientifically discovered), and free reign for religion to fulfill our covenant to responsibly search for meaning. And I see meaning as very much the product of our power to create ourselves (and I would add) small parts of the world

around us, in our experience of free decision-making. About the only thought moving me to consider the necessity of some integration between the work of religion and science is Barbour's insight that "Existentialism exaggerates the contrast between an impersonal objective stance in science and the personal involvement essential to religion. Personal judgment does enter the work of the scientist, and rational reflection is an important part of religious inquiry." (Barbour. p.89) I'll continue to think on the ramifications of that truth.

Meanwhile, among my free meaning-making decisions is the decision to proclaim that religion, uncontrolled by authoritarian dogma and unshackled from scientifically-incompatible scripture, affirms and promotes the teaching of science on its own terms, unconstrained by any religion. Another of my free meaning-making decisions is to proclaim that religion, so uncontrolled and unshackled, demands that, so long as it plays no role in influencing an individual's very difficult meaning-making decision to tragically terminate an opportunity for full human life, scientific research should be left free to use any resulting lifeless human tissue to further overall human health.

"The more the universe seems comprehensible, the more it also seems to be pointless." Steven Weinberg has found it necessary to re-examine that statement in his most recent book. "When I said that," he writes with appropriate humility, "I did not mean that science teaches us that the universe is pointless, but only that the universe itself suggests no point." (The Dreams of a Final Theory p.255). And that's OK with me. Religion, I find, speaks quite well in its place.