

SCIENCE AS A SOURCE FOR UNITARIAN UNIVERSALISM

Rev. Kit Ketcham and Dr. David Cauffman

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Let us begin our worship this afternoon with the words of Michael Heller, winner of the Templeton Prize and a Roman Catholic priest:

“I always wanted to do the most important things, and what can be more important than science and religion? Science gives us knowledge, and religion gives us meaning. Both are prerequisites of the decent existence.”

Rev. Kit Ketcham:

During the past church year, here at UUCWI, we’ve been exploring the several Sources of Unitarian Universalism. As a pluralistic, or multi-faith religious tradition, we have several Sources from which we draw wisdom. If you are new to UUism, you’ll find these Sources listed on the back of your O/S. The ones you see there are the official, in-the-bylaws Sources.

But, being the freethinkers that we are, we here on Whidbey Island have added a couple more that we think are foundational to UUism. We have agreed that the Creative Arts are certainly one of our Sources and we considered its importance a couple of weeks ago.

Today we will consider the importance of Science’s influence on UUism. Some might say that our Fifth Source, Humanism, takes care of that little matter, because it mentions Science in its wording.

But Dave and I think Science offers more than what the Fifth Source includes, that it is foundational to our thinking patterns, the very patterns that have led us to question supernaturalism and legends that are perhaps true, in a sense, but not factual, not reproducible.

We’re choosing today to offer our thoughts as if we are in a Science classroom, of sorts. Dave will be the Educator, presenting his thinking and experience as a skilled scientist; and I will be the Counselor, the one to whom the student might go as he or she sorts out why it’s important that we study Science and understand how the world works.

So, if you will, Dave, we’re listening!

Dr. David Cauffman:

Thank you, Kit. Good afternoon. This morning, as I often do, I read the New York Times online as I sipped my tea. To my delight I found there an excellent editorial by Brian Greene, author and professor of physics at Columbia, entitled “Put a Little Science in Your Life”. I’d like to share a bit of it with you: *“Science is a way of life. Science is a perspective. Science is the process that takes us from confusion to understanding in a manner that’s precise, predictive and reliable — a transformation, for those lucky enough to experience it, that is empowering and emotional. To be able to think through and grasp explanations — for everything from why the sky is blue to how life formed on earth — not because they are declared dogma but rather because they reveal patterns confirmed by experiment and observation, is one of the most precious of human experiences.”* Greene concludes: *“It’s the birthright of every child, it’s a necessity for every adult, to look out on the world... and see that the wonder of the cosmos transcends everything that divides us.”* Well said!

We are all born explorers. Even now, I revel in the “play” aspects of science and analysis. Just as an infant inspects an object and turns it over and tastes it and hits the floor with it, I like to look at questions or ideas from a variety of angles and knock them about a bit to see if I can learn something when I put try to put together everything I have observed.

Today the idea we shall knock about is “How science influences Unitarian Universalism.” To highlight these influences, we’ll compare and contrast three different cultural traditions, or “ways of knowing” that have matured since the Enlightenment. These three are: (1) science; (2) Unitarian Universalism; and (3) what I shall call “traditional religion [TR]” – an eclectic mix of Western Christian denominations that have moved with glacial speed to reconcile their beliefs with science, although even those glaciers are moving faster these days. While I don’t know enough to talk about Eastern and nontraditional religion, I will share with you an enlightened quote from the Dalai Lama: *“My confidence in venturing into science lies in my basic belief that as in science so in Buddhism, understanding the nature of reality is pursued by means of critical investigation: if scientific analysis were conclusively to demonstrate certain claims in*

Buddhism to be false, then we must accept the findings of science and abandon those claims.”

To begin, I'd like to tell you a parable. There were three friends who liked to fish together. One was a physicist, one a Unitarian minister, and the third a minister in a traditional religious denomination – in honor of our hosts we'll make him a Lutheran. Luther, you recall, advocated that salvation was to be achieved by faith alone, and at the time that was a great improvement over salvation by buying indulgences. Well, one day the three went out fishing in a small boat on a shallow lake they hadn't fished before but where they could see the fish were biting. They weren't too far from shore when they realized why the fish were biting, as the three were surrounded by swarms of insects. The physicist jumped up and said “Just wait a minute – I'll get the insect repellent!” and he leaped out of the boat and raced to shore on the surface of the water and back with the repellent. The Lutheran minister was quite impressed, and glanced sideways at the Unitarian but the latter didn't seem at all surprised. After an hour of fishing they began to get hungry. The Unitarian minister bumped himself on the side of the head and said, “I forgot to put the lunch knapsack in the boat – but don't worry -- I'll get it now!” and he too stepped out of the boat, ran across the surface of the water, and returned with the lunch. The salt on their chips soon made them thirsty. The Lutheran was supposed to bring the beer but he had forgotten to put the cooler in the boat! [You may not want to go fishing with these three.] Not to be outdone by his water-walking friends he announced, “I'll go get the drinks!” and silently uttered a prayer: “Lord, I put my faith in You; teach me what I need to learn.” Then he, too, leaped out of the boat. With a large splash he immediately sank up to his waist. The Unitarian turned to the physicist and said, “You didn't tell him where the rocks were, did you?” *Today we will be on the lookout for the rocks of scientific truth underlying Unitarian Universalism.*

Scientific knowledge is dependable because it can be used to make accurate predictions. Science has a limited goal: to understand how the world works. In fact, the word “science” is from the Latin “scientia” meaning “knowledge.” ◇ Traditional religion's way of knowing is through divine revelation. Its goal is the salvation of souls and it values faith higher than any other virtue, including good works. ◇ How do UUs know

what they know? Kit wrote a great sermon on this topic two years ago; it's on the website. Of the various ways, I think the most powerful are our trust both in conscience and in rational thinking. Our goal is a just community of fully actualized human beings. We value results: good works matter more than faith in anything.

Let's shift our perspective and look at the *reality* each tradition concerns itself with and how it evaluates that reality. ◇ Science is interested in knowledge about a physical reality that is discoverable through objective experience by test and observation. ◇ At the other end of the spectrum, traditional religion sees the world in dualistic terms, part spiritual and part material. Material reality is considered inferior to spiritual reality. Spiritual reality, the realm of the soul, is investigated through subjective experience. ◇ UUs, by contrast, allow for a range of beliefs and so a range of realities, but the humanists among us see a unity of the material and spiritual: the body houses the mind which contains our sense of self. *We don't all* believe the soul to be separate from the body, although many of us do. Science has little to say about the soul because it can't be detected or measured. However, if science *were* able to explain all observable phenomena without invoking the hypothetical existence of a soul, then the concept of a soul would be superfluous. Superfluous isn't the same thing as false, but Ockham's razor advises that the simplest theories are the most likely to be correct.

A similar triage exists for *views of the supernatural*, such as the omniscient, omnipotent God and Life after death. ◇ Science can't study what there isn't evidence for, but it has been explaining a lot that used to be considered miraculous; it has forced our concepts of God to grow up. ◇ Traditional religion, however, still embraces and defends the supernatural as an essential part of its worldview. ◇ UUs are in the middle; we honor our doubts but allow for a variety of mystical beliefs. We credit objective experience, but we want emotionally satisfying philosophies so we look for meaning in subjective experience as well. Many of us are on a spiritual path that at one time included beliefs from the traditional denominations we were brought up in – Lutheran, in my case. We have noted that the lack of definitive evidence *against* there being a God is pretty well balanced by the lack of any evidence *for*. Over time, many of us have reached the point

on our paths where we conceive of the supernatural elements of religion as metaphors; useful, perhaps, but not objective reality.

Before going on I'd like to address a question that may be in your minds: "Is Science a religion?" My answer is, emphatically, NO. As our opening reading pointed out, science is concerned with knowledge; religion is concerned with meaning. Those few scientists who mix into their work meanings, which invariably come from sources other than science, do science no favors, because the results are inevitably unverifiable. Many people use the findings of science as metaphors, or quote statements by great scientists on matters of morality, to justify their own religious beliefs. In fact, I do that myself. *But be clear in your minds and to your audience when you do: science is not proving your contention; it is merely providing a metaphor. If you aren't clear about this, it's called pseudoscience, and it is a dangerous abomination because it dulls critical thinking skills.*

A related question, that many people have, concerns so-called scientific evidence of the Creator. Many of us, like Professor Greene, respond to the awe and wonder of the universe revealed through science: for example, the beauty, order, scale, and intricacy revealed by Hubble Space Telescope photos. We have an emotional response to these, and humility in the face of the revealed certainty that the world is far more complex and interesting than anything we have imagined. Some have cited this complexity as evidence for a Creator; the master watchmaker, if you will. This is called the Intelligent Design hypothesis. There are two *assumptions* basic to the argument: First, in our experience, complexity, such as a watch, requires a *more* complex creator, such as a human. Second, if you believe the biblical chronology, there wasn't time for any other way than magic. Science has shown both assumptions to be false. Darwin's genius was in realizing that a simple rule set – the survival of the fittest – could account for the evolution of complexity *from simplicity* over vast timescales. And radiocarbon dating and astronomical observations have confirmed beyond any reasonable doubt that the bible's creation myth timetables should not be taken literally. *So don't let anybody waste your children's classroom time on intelligent design.* You're welcome to believe in a creator if you wish, but it is a religious belief; science offers no evidence for it.

Science, and physics in particular, is famous for its high standards for *rules of evidence* and *standards of truth*. Its ideal is repeatability. A consequence is that science “knows what it doesn’t know”, at least to a specific probability. Science welcomes challenge as necessary to develop confidence in its theories. It is inherently and unapologetically skeptical. That is its salvation, because there are many ways that science can go wrong, most of them clustered around human error. Like democracy, constant vigilance is required, and doesn’t always happen. Nevertheless, if you take the time to listen to the caveats and label the extrapolations as such, you’ll find generally accepted scientific knowledge to be true. ◇ Traditional religion, by comparison, is credulous and uncritical; in place of rules of evidence it tests for conformance with orthodoxy. Traditional religion suppresses alternatives as heretical. It has no systematic way of eliminating untruth. The Reformation and the splintering of denominations resulted from this weakness; people voted with their feet. ◇ UUs again take a position in the middle, informed by the strengths and weaknesses of both of the other traditions. We look to science for knowledge but look to the subjective experience of the spiritual for meaning. As you recited in the responsive reading, we tend to trust doubt as an indicator that there’s more truth to be sought.

None of the three cultural traditions is static. What are the *current trends*? ◇ Science is increasing its penetration of biological, social, and psychological realms. ◇ Traditional religion is retreating to realms unaddressed by science, such as the will of their supernatural God for us to live moral lives, his concern for the salvation of our souls, and the promise of a rewarding afterlife. The need for authoritative moral voices, the conservative need for anchor points in a rapidly changing world, and the ancient but still-strong fear of death provide continued longevity for a variety of traditional religious viewpoints. ◇ Unitarian Universalism has been evolving from its traditional Christian roots by building on its strengths: a strong foundation of scientific truth, a trust in the power of human conscience, a group commitment to social justice and a caring society, and a realistic recognition that we must each make our own journey of discovery. The free and responsible search for truth and meaning, a key UU principle, has been an

effective antidote for atrophy and irrelevance. We are true children of the Enlightenment, which Emmanuel Kant described simply as the freedom to use one's own intelligence.

To conclude: *Science provides us with a rigorous standard of truth.* It would be foolish to ignore it. Among all possible UU sources of knowing truth, *you should give science priority*, if science has something to say. But science by itself is *not* a religion and it does not provide us the moral compass needed to be fully human, for example, to be compassionate. You can pick and choose from the other sources of wisdom what your conscience finds right, or your culture has conditioned you to believe, or you find useful in coping with the world. *But know where the rocks are.*

Rev. Kit Ketcham:

Thank you, Dave, for your thoughtful presentation. I appreciate the way you've contrasted these three approaches to the real world---science, traditional religion, and UUism. I almost felt as though I were back in the classrooms of my youth, excited by what I was learning about how the world works. Let me take it from here.

My experience has been more with the soft sciences of psychology and sociology. The physical sciences didn't appeal to me at that time in such a way as to turn me into a physical scientist, but it did teach me the value and the thrill of curiosity, as well as a logical method for exploring what I saw around me.

It gave me an appreciation for the natural world and I extrapolated my learnings far beyond earthworm dissection and chemistry. I began to examine what I heard against the standard of "is it natural?"

This helped me sort out some of what society was telling me I needed ---cute clothes, perfumes, lotions, makeup, fancy food. It didn't necessarily mean that I lived so simply---I was a teenage girl, after all, and I still am not quite so simple in my living. But if an early human being didn't naturally need something, probably I didn't either.

That was my version of scientific reasoning, at the time. And though now I am somewhat more sophisticated in the ways I view the world, I still make many value judgments based on my "is it natural" standard.

Of course, some of my thinking had to be tempered by my inner moral plumbline, that core value system by which I measured good and bad. Though my moral plumbline had been largely shaped by Christianity, there were ways that Christian ethics didn't quite compute.

How could a supernatural event be a reliable indicator for a reasonable human response?

I liked Jesus' approach to ethics----love your God, your neighbor, and yourself. In other words, love the created world, be kind to others, and remember that you are part of the creation and therefore a good being, not a mistake.

Measuring myself by these two standards---the logic of Science and the moral code I found within myself--I came to understand that as a human being, I was innately worthy and able to sort out for myself the conflicting values of human culture.

If it was natural, surely it was part of creation and good. For example, homosexuality, I reasoned, because it is natural and is increasingly demonstrated to be natural by Science, is part of creation and therefore good. There must be something useful to the universe about a different sexual orientation if it naturally occurred on the earth.

And my moral code, that understanding within me of what is right and what is wrong, decreed that hurting beings was not good. So I developed a conscience that did not allow me to hurt others deliberately and urged me to make amends when I hurt another accidentally.

So my current day Unitarian Universalism has been shaped by my understandings of and my respect for Science, not only for what it has discovered about the natural universe but for its honesty and its resistance to the unverifiable, for its need to know, not just believe, for its reliance on proofs, and also for its admitted inability to explain everything---at least yet.

For much of my life, particularly after I had gained some education and some wider horizons than my home life as a young Christian offered, I have been wary of others telling me what to think and what to believe.

The automatic questions that would come to mind were "who told you that was true? And how do they know that it's true?" I wanted authoritative, credible sources for

what I believed. And the most credible, most reliable sources I found were those of my teachers who did research, who did experiments, who were curious enough to pursue understanding through reading about the discoveries of science.

In seminary, I learned a lot about Biblical exegesis, the process of scholarly criticism and interpretation of scripture. Exegesis of a scripture includes the analysis of significant words in the text, translating them accurately, examining the historical and cultural context of the passage, if possible knowing something about the writer of the text and his or her place in history as well as any hidden agenda in writing the passage.

Studying the Bible in this more scholarly and scientific way, attempting to gain understanding based on what had been discovered by archaeologists, linguists, carbon dating specialists and the like, was deeply satisfying and led me to understand the Bible in entirely different ways than I had been taught in the past.

Scholarly interpretation of problematic texts, such as those dealing with homosexuality, for example, reveals that these ancient writings had nothing to do with gay relationships as we know them today.

Examination of the creation and miracle stories in the Bible through a scholarly and scientific lens reveals that these stories, accepted as fact by many traditional faiths, are adaptations of far more ancient stories describing the emergence of humans on the earth, the great floods of ancient times, and even the birth, death, and resurrection of Jesus.

As you might expect, my more traditional classmates were very uncomfortable with this new knowledge. Some of them questioned whether or not they could ever share this information with their future congregations. Some were distressed enough that they left seminary and chose other careers. Some argued with professors and fellow students, accusing them of heresy.

In Unitarian Universalism there has been little if any distress about the contributions of science and the scientific method to religious faith, except the recognition that Science has also made possible such dubious inventions as weapons of mass destruction and environmentally damaging pesticides. At the same time, we recognize that it is not the fault of Science that damage has been done; it is the

responsibility of humans to use Science to further life and not destroy it. Science can be both our Savior and our Satan, and must be used wisely.

So what is the mission of a religious faith for which Science is a foundational Source? What does it mean that we want our beliefs and understandings backed up, as much as possible, by empirical evidence? What does it mean to this congregation and to each of us as individuals?

How can we use the importance of Science to reach out in a meaningful way to the larger community? What has our reverence for Science done to prepare us to meet modern day challenges to morality and to culture?

A few years ago, as a group this congregation developed a mission statement to be used in the several applications for grants we made to the UUA and District. As mission statements go, it's pretty general, but here it is: *The Unitarian Universalist Congregation of Whidbey Island: "Sharing a spiritual journey of service toward a loving and interconnected world."*

How might Science figure into such a mission? Using our science-based knowledge of the earth and its systems, how can we share our understanding that Science and Spirituality are not mutually exclusive? Can we serve the larger community in ways that are based on logic and scholarship? Can we bring about a more loving and interconnected world through our use of technology and new discoveries in the fields of health, environment, and human relationships?

I can think of a few obvious ways and perhaps you have more. But if there were a move in our local school district to begin teaching creationism, I hope we would be there at the school board meeting to support science.

If there were an effort to start a Gay-friendly club at South Whidbey High School, I hope we would be there to help. And I hope we would be there always for equal civil rights for all and as supporters of our BGLT neighbors and friends, based not only on our interest in justice but also on the science that reveals sexual orientation to be innate.

When there are challenges to the purity of our water supply or the waters of Puget Sound, I hope we would be there, sharing what we know about the scientific research that reveals the dangers of damaging our Watershed, and expressing this in a religious context.

When the critics poohpooh the idea of climate change and global warming, I hope we are there to support the science behind the idea.

When others say that Science and Religion are incompatible, I hope we would challenge that assertion and speak of our own experience as UUs who respect and use the revelations of Science in our spiritual quest.

I know you can think of other ways to express our reliance on Science, in addition to the other Sources we've discussed over the past several months. And I hope you will offer your ideas as we envision our mission as a congregation with a home of our own.

Each of our Sources gives us a springboard from which we can offer Spirituality and Service to our larger community. Each of us here probably has our own favorite Source, the one most important in our own religious life. For some it is Science; for others, it's the Creative Arts or Christianity or Buddhism.

For us as a community, our Sources serve as several wide-open doorways, welcoming to all who want a spiritual community that is based on reason and acceptance of others. We are building it; they will come; how will we serve them best?

Let's pause for a time of silent reflection and prayer.

BENEDICTION: Our worship service, our time of shaping worth together, is ended but our service to the world begins again as we leave this place. Let us go in peace, remembering that we are a community of many sources and many paths. May we respect and revere the wisdom of each Source, flourishing them like a bright rainbow whose colors represent multiple angles and beams of light. And may we always remember that our deepest roots lie in the warm soil of human love and compassion. Amen, Shalom, Salaam, and Blessed Be.