

Progressive Religion ... Is Not An Oxymoron

By David E. Roy

Science and Religion: Mortal Enemies or Synergistic Allies?

Adherents to the domains of science and religion have long had an uneasy and frequently acrimonious relationship. While Copernicus' 16th century theories that suggested the earth was not the center of the universe did not initially provoke any objections from the Roman Catholic hierarchy, by the next century when Galileo was peering into the heavens with his telescope, the church had risen up in opposition. The idea that the earth was not the center of the universe had become a serious challenge to the truth of scripture in the minds of those in power in the church (as well as an enormous blow to human narcissism).

Charles Darwin's 19th century theory of the origin of species, commonly known as the theory of evolution, has been treated as a weapon of mass destruction almost from the beginning by Christians and the Christian church.

Some scientists and more than a few followers of science have responded in kind by dogmatically asserting that science eliminates any possibility of the existence of a transcendent source of creation – i.e., of the existence of a Creator God.

In the extreme, religious believers assign evil to those who oppose their views and scientific adherents assign ignorant superstition to their religious counterparts. While the occasional dramatic clashes between these two extremes make for exciting news stories and talk shows, there are many others in the two camps who find value in both positions.

Are there, after all, any middle grounds, any places of meeting – and even more intriguing, are there any third ways that can bring these two domains together in a way that retains the essential truths and findings of each while yielding a more integrated understanding of the universe?

This article will look at two examples, one a recent conference (a place of meeting of these two cultures), and the second a philosophical cosmology that has demonstrated the ability to bring the ideas and facts from these two realms into a single, harmonized perspective.

Neurosciences and Spiritual Practices Conference: A Report

Last October, there was an historic and groundbreaking conference in Claremont, CA, that brought together neuroscientists, religious practitioners from Buddhism, Judaism, Christianity and Islam, as well as theologians, philosophers, and mental health professionals for three days of presentations and serious conversations.

The conference was co-sponsored by the Fetzer Institute, the Center for Process Studies, and the Claremont School of Theology. It was organized by Andrew Drietcer,

Ph.D., associate professor of spiritual formation at CST. The conference website is <http://neurospirituality.blogspot.com/>. (Eventually, the conference organizers will make papers and videos available, probably after the first of the year.)

Common Aim: To Increase Compassion

While some of the dialogue was highly abstract and esoteric, the conference leaders voiced a common concern to work together across disciplines for new understandings and approaches in order to foster an increase in compassion within human beings for each other and for all life on this planet. One of the primary vehicles for this effort is mindfulness meditation (discussed in more detail below).

The ability for these professionals to enter into serious and respectful exchanges with each other was, in my experience, unique. As previously stated, science and religion frequently have a highly antagonistic relationship with each other (the Dalai Lama notwithstanding).

Part of what made this conference work, besides an attitude of interest and respect, is that the focus of study by many of the neuroscientists is on the impact of meditation on the brain and central nervous system.

Another contributing factor was the progressive quality exemplified by the religious practitioners and theologians. The effect of this was nicely summed up in the closing session by a research psychologist who had grown up in an atheist home. The religion he was hearing in this conference, he said, was quite different from what he had learned to expect. The implication was that there was an openness and a genuine interest in hard, rigorous science, something that was not the case with the religious individuals he had encountered previously.

Mindfulness Meditation: A Central Topic

A topic central to many of the presentations was the meditative state called *mindfulness*, a topic with which I have become familiar in my work as a psychotherapist. Over the past 10 or 15 years, mindfulness has taken center stage in the field of psychotherapy, including here in the Central Valley. I personally was introduced to this Buddhist practice a decade ago through the writings of the venerable Vietnamese Buddhist monk Thich Nhat Hahn (his book *Peace is Every Step* is one I recommend frequently to my clients). I found a receptive audience in 2002 when I led a workshop for therapists on integrating mindfulness with their work. Last fall, I attended a massive conference at UCLA on Mindfulness and Psychotherapy that featured Thich Nhat Hahn, Dan Siegel, and Jack Kornfield, among others. (A summary of the conference can be found here: http://sa.sjsu.edu/download/sa/2007_Mindfulness_Conference_at_UCLAx_Ellen_Lin.pdf) This conference, with several thousand registrants, confirmed the now-mainstream appeal of the value of mindfulness for psychotherapy as a method of healing and growth. This status was confirmed in the Claremont conference which included a large number of mental health professionals as both leaders and participants.

Mindfulness Defined

Mindfulness is a Buddhist practice that involves learning to focus attention on one's immediate experience. The way this was being framed at the Claremont conference, mindfulness requires learning to be intentional about how and where one focuses one's consciousness – including awareness of being aware. Quite frequently, mindfulness practice leads to learning to attend to one's deeper and fuller experience without being taken away by any one particular thought stream or emotional surge.

The fruits of mindfulness include a greater sense of inner peace and joy, remarkably similar to the stated goals of many forms of spiritual practice as well as of psychotherapy. It is not surprising, therefore, that this practice would be compatible with a variety of spiritual disciplines as well as to the mental health field; nor is it surprising that research scientists would want to examine this using empirical methodology, both to objectively evaluate the subjective claims but also to correlate the practice with neurological activity.

Dr. Daniel Siegel and Mindfulness, Attunement, and Interpersonal Neuroscience

One of the leading researchers and practitioners in the field of mindfulness is Daniel Siegel, M.D. Siegel is a child psychiatrist on the faculty of UCLA, the author of a several books on mindfulness and related topics, and the founder of a new multidisciplinary field called Interpersonal Neuroscience. He was one of the keynote speakers at the Claremont conference (as well as last year's at UCLA gathering). Among other things, Siegel is an advocate for teaching mindfulness to children as a part of basic education. He calls this, "No mind left behind."

Touching on neuroplasticity, one of the neuroscience themes at the conference, Siegel cited a research project that demonstrated that meditation training resulted in measurable neural growth in a portion of an area of the brain called the prefrontal cortex. This area of the brain is associated with organization of the personality as well as advanced human skills such as planning, impulse control (emotional regulation), the sense of self (identity), and even insight and empathy, among other things. (See <http://www.drdansiegel.com> for a place to start.)

Drawing from his work in attachment theory (which preceded his movement into mindfulness), Siegel brings the idea of *attunement* to describe one of the ways in which mindfulness can be healing intrapsychically as well as interpersonally. Traditionally, attunement has been understood as the idea attitude for healthy parenting. Simply put, attunement means being emotionally and cognitively responsive to a child's needs and emotions in a manner that is affirming, non-judgmental and noninvasive. This harmonic helps develop a positive sense of self. (This is not the same as being ultra-permissive. Limits can and must be set; attunement has more to do with how limits are set, for example.)

Siegel is extending the application of attunement to one's own self as well as to others. The vehicle for this is mindfulness. Christians and Jews, for example, would understand this as loving another as one loves oneself. Obviously, people with a negative

self-image do not love themselves – and often this extends to others with whom they relate in an unloving manner.

The Shamatha Project

Another neuroscientist who was on a panel I helped moderate was Clifford Saron, Ph.D., an assistant researcher at the Center for Mind and Brain at U.C. Davis. Saron is deeply involved in the Shamatha Project which is an incredibly complex study of the neurological responses and changes correlated with extensive meditation training. (If I had stayed in experimental psychology, I would want to be on this study's team.) While the bulk of the findings are due to be released sometime next year, one of the intriguing discoveries shared was that when trained meditators were presented with painful images of violence, they were able to shift from a desire for revenge toward compassion more quickly, in comparison to non-meditators.

Saron spoke strongly about the reality and importance of neuroplasticity, the idea that the brain can and does change in response to how it is stimulated. This is good news at every age, from the very young to the very old.

Another intriguing idea that he shared was that, under powerful magnification, one can see a nerve cell's dendrites dance. (A typical neuron is composed of dendrites that receive the synaptic stimulation from another cell, a cell body, and an axon that extends out from the cell body to the dendrites of the next cells to be stimulated.) The idea of a totally fixed, hardwired brain has given way to something much more responsive to the mind and the rest of the body as well as to the larger, external environment.

Other Spiritual Practices Leaders

There were several other leaders from various spiritual disciplines who presented on contemplative practices, including Alan Wallace, Ph.D., (an energetic expert on Buddhism and the meditation teacher for the Shamatha Project), Fr. Thomas Keating (a long-time expert on Christian contemplative prayer), and Nahid Angha, Ph.D. (founder of the International Sufi Women Organization). The conference website (<http://neurospirituality.blogspot.com/>) carries links to most of the presenters if more information is desired.

A Process Perspective on Science and Religion

One of the conference co-sponsors was the Center for Process Studies at the Claremont School of Theology. (See <http://www.ctr4process.org>.) If I were to offer a suggestion for future conferences of this nature, it would be to include more input from the process studies contingent. This is because the process metaphysics has demonstrated its capacity to clearly, rigorously, and systematically bring together ideas from science and religion.

Process philosophy stems from the writing of Alfred North Whitehead, a 20th century mathematician, physicist and philosopher. His work has led to an understanding that process (the subjective state of becoming) is more fundamental than substance (the objective state of being or "thingness"); and that the basic unit of reality is something like

a drop of experience that includes the physical, the mental, and the spiritual as integrated components of a single entity.

Because of this, Whitehead's metaphysics can embrace both science and religion in a way that validates the truth of both ways of understanding the universe – as well as providing a critique of the limitations of both perspectives.

Evolution: A Third Way (*Without a Supernatural Deity*)

One of the most inflamed battlegrounds in this unnecessary war is over evolution. On the scientific side, the amount of evidence gathered in support of the development of life forms from simple to complex is overwhelming. On the religious side, for a large number of Christians, particularly those who lean toward what is called biblical literalism, these solid findings from science are rejected because God nearly always is removed as an agent in creation and only materiality is considered real.

The recent exception to this elimination of the Divine from evolution is Intelligent Design. However, the way this is understood by most of its adherents is that God magically created the world a few thousand years ago totally complete. It only appears that life forms evolved over billions of years, according to this view. This, of course, is an anti-scientific point of view.

Process thought provides a third way to understand the role of the Divine in the world – not as a force that pops in from time to time, overruling the laws of nature, but as the most intimate part of every aspect of the world, as an essential and vital dynamic *in* nature. The idea of a supernatural God is rejected.

In process thought, creativity is understood as one of the ultimates and God is the chief agent of creativity in the universe. This means that the Divine aim is always toward change and development and for greater complexity in particular. This principle, then, underlies all evolution.

Was the Evolution of the Brain Purposive?

In the paper I presented at the Claremont conference, for example, I suggested the possibility that the development of the vertebrate brain, the primate in particular, follows this model. That is, it is possible that the increasing complexity of the primate brain evolved in response to the latent potential of the mentality that is a component of these basic units of reality and not simply random changes that accidentally led to a higher degree of survival. This requires a purposive quality (which science rejects) that could be under the influence of a sacred aim.

Even a leading neuroscientist suggests that there are multiple causes of evolution, not simply natural selection based upon random genetic changes. (See Georg F. Striedter, a neurobiologist at University of California at Irvine, in his recently published a book on the *Principles of Brain Evolution*.) In *Beyond Darwin*, edited by John B. Cobb Jr., one can find serious, scholarly arguments that suggest a purposive quality to evolution rooted in the application of the principle of creativity by a God that is an intimate part of nature.

Conclusion ... or, a Beginning

I am aware that a relatively brief essay on this topic will likely leave more questions than provide substantial answers; and that this column merely flows into an enormous stream of serious and sometimes heated discussions on this topic. But it is a topic well worth our attention. If the problem on the side of religion is bad theology, which I believe is often the case, then a serious conversation could help change that. If the problem on the side of science is a cosmology that limits itself to visually defined materialism, this too can be modified and expanded through this exchange.

And, finally, if there are what might be called sacred aims that promote the common good and the well-being of all, it would be extraordinarily helpful to learn how to be attuned to them both personally and collectively. Our world increasingly appears to be at a tipping point that could go either way and we need all the tender, caring, and sensitive wisdom we can find.