

RELIGION AND THE EXPANDING UNIVERSE
And
MESONS, MOTES AND MIRACLES

Comments By
The Rev. Susan Manker-Seale and Jeff Chamberlain

I: “Religion and the Expanding Universe,” by Rev. Susan Manker-Seale:

Jacob Trapp, who wrote the words to the hymn “Wonders Still the World Shall Witness,” is one of my favorite Unitarian Universalist mystics and colleagues. He wrote about the natural world in his poetry, and as we see in this hymn, he could express for us a religious outlook that held hope in the future and recognized that we cannot foresee what that new world will be.

It has been our experience this past century to behold wonders on a regular basis as humanity continues to reach out and explore the universe both beyond and within this planet Earth. Lately, it seems as if every single day uncovers a new wonder, and I’m sure I remember just in this past year reading about scientific discoveries that were the most important discoveries of the millennium. I don’t remember what they were—maybe the planets around distant stars, or dark matter, or a link between an illness and a gene. Changes in our understanding of existence are happening so rapidly that I have begun to feel as if serious religious renegotiation and reconstruction needs to take place in the world if we’re going to survive.

I’m not alone in this growing conviction. I discovered over the last few days that I have an ally in the religious realm, namely the Dalai Lama. I just finished reading his latest book, *The Universe in a Single Atom: The Convergence of Science and Spirituality* (2005). I learned a lot, pondered a lot, grappled a lot with some of his explanations especially around karma, and felt wondrously affirmed in his conclusions that we have to work together, as religious people, to find common values to work within as we face the incredible challenges scientific discoveries are bringing us, discoveries which have resulted this past century in the atomic bomb, genetic manipulations and cloning, not to mention the fact that our planet is facing global warming as well as global epidemics. Science may be exploring and discovering huge amounts of information in many areas, but religion needs to keep up with applying moral questions and requiring ethical behavior of those engaged in these new creations.

I get easily discouraged in this Christianity-saturated society of the United States of America. Politicians seem frightened to speak out for religious freedom and everyone wants to jump on the bandwagon of “I’m religious” as they close every speech with “God Bless You!” It’s not surprising that someone was inspired to make a movie about the McCarthy era—we need to be reminded of those horrific days, days that saw the persecution not only of communists, but of atheists and gays.

It is within this same society that a school board can come to censor knowledge that is not consistent with theological teachings that are thousands of years old and of another social reality entirely. It is not surprising then that the National Council of Churches felt the need to create a policy at their General Assembly this year that would

encourage their many congregations to discuss the implications of science in today's world. First, though, they had to catch their members' attention by posing the challenging question, "Is biological science the enemy of faith or a tool for understanding God's intelligent design?" (www.nccusa.org/pdfs/BioTechPolicy.pdf)

Now, maybe I'm mistaken, but I thought the National Council of Churches was a liberal organization, or do they sense that many of their folk aren't on board regarding the role of science in understanding our world. Perhaps I'm confusing the NCC with the UCC, or the United Church of Christ, which is definitely liberal and otherwise called, tongue-in-cheek, Unitarians Considering Christ. In any case, I think the fact that the NCC has come up with such a policy points out how clearly they are grappling with the tension between science and religion. The policy was created as a "moral roadmap" for congregations which expresses their ethical and theological concerns regarding the place of biological science, especially the new biotechnologies, in human life.

Unlike mainstream Christianity, and very like Unitarian Universalism, Buddhism teaches that "scriptural authority cannot outweigh an understanding based on reason and experience," (p. 24) and that is why the Dalai Lama has spent his life exploring science and trying to integrate new knowledge with ancient ways – not to ignore it, but to understand it and to change when change is demanded or invited, even to discard long-held positions if the truth is different. He writes beautifully about relativity and quantum mechanics and interweaves ancient Buddhist explorations of the meaning of our universe. It was so refreshing and uplifting to read his affirmations of science and encouragement to reason in this American climate of subtle and not-so-subtle oppression.

When I envision the future and the "wonders the world shall witness," I don't see us getting there alone and neither does the Dalai Lama. Interfaith cooperation will be essential. Even now we are facing the reality of that interconnected web of existence of which we are a part not only when we go on the internet and communicate with people on the other side of the world, but also when we recognize the economic impact of war and famine on the entire world, and hear the warnings of ozone layer depletion even as we drive our cars to work each day. I saw it just yesterday on the airport television monitor, the question, "Are the huge number of horribly destructive hurricanes the result of global warming?" As Chief Seattle is said to have said, "Whatever we do to the web, we do to ourselves."

The Dalai Lama says that "we need a moral compass we can use collectively without getting bogged down in doctrinal differences. One key factor that we need," he continues, "is a holistic and integrated outlook at the level of human society that recognizes the fundamentally interconnected nature of all living beings and their environment." (p. 198-9) He goes on to list some fundamental and universal ethical principles which resonate with Unitarian Universalism, of course, since they are universal. First is the recognition of the preciousness of life. Second is an understanding of the need for balance in nature and to employ balance as a direction in thought and action. Third is to ensure we hold compassion as the key motivation for all our endeavors and combine that compassion with a clear awareness of the wider perspective, including long-term consequences of our actions. And fourth is a spirit of oneness of the entire human species, that "because of the profoundly interconnected reality of today's world, we need to relate to the challenges we face as a single human family rather than as

members of specific nationalities, ethnicities, or religions.” The Dalai Lama concludes that these ethical principles are at the heart of all major spiritual traditions. (p. 199)

I wonder what the world could be if we all shared such principles and a common care for the earth and the life which is so amazing all around us and within us? We look out at the stars and wish to connect with some life out there to know we are not alone, and yet, looking around, I know we are not alone. Our expanding universe is not only at the end of the telescope or even the microscope, but it is also in this very capacity to wonder and to witness to what life can be if we work and care together.

II: “Mesons, Motes, and Miracles,” by Jeff Chamberlain:

Traditions abound. We live in an amazing age where the words, sights and sounds of virtually every religious and cultural tradition is available to us through the Internet. And if one of them strikes us as sufficiently interesting, we can go – hop a plane and, in a matter of hours – see it for ourselves. Or, with a little patience – it'll arrive at a local theater or in our mailbox through Netflix. This access to the world is unparalleled in the history of humanity. Particularly words, both ancient and from moments ago, are ours with the press of a few buttons. As Unitarian Universalists, this remarkable access provides a plethora of sources to feed us in our desire for words and teachings from humanity's history.

More recently, this tool, this Internet, which allows scientific researchers to share data and ideas, can bring these ideas to us. The extent of the known universe has now grown to 12 billion light years – and it's still growing. The equations that describe the zoo of subatomic particles, only barely imaginable to the physicists who create them, are available to us, whether we comprehend them or not.

But does this affect our spiritual or religious lives? 2,000 years ago, Jesus said: “Consider the lilies of the field. They neither toil nor spin. Yet even Solomon in all his glory was not arrayed like one of these.” With our knowledge of atomic particles, we can add to this something like “Consider the electrons of the atom. They are neither here nor there. Yet without them, none of the matter that we see and touch, including ourselves, would be able to exist.” You see, we have an advantage: we can still marvel at the lilies but, now, we can also marvel at the electron. No matter that we better “understand” where the lilies' color comes from and how it has evolved over billions of years to arrive at what it now is. The fact that the color comes from the spin of the elusive electron does not diminish one iota the beauty that is Picacho Peak in the spring. And two thousand years from now, humans will have even more to marvel at as we peel back layer upon layer of our knowledge.

But the basic sense remains unchanged. The ancients thought the oceans were of an unfathomable size; they were dwarfed, and awed, by the mountains under which they grew their crops, raised their families, buried their dead, and pondered their existence. Now, we fly over those same mountains and have submarines that can explore the fascinating depths of the oceans, but now we are dwarfed by a universe that is massive beyond comprehension and still expanding. Think of it: look up at the night sky and, in a dark part of the sky, make a circle with your thumb and forefinger. Look through what

you see and realize that, while you see only darkness, telescopes can see millions of galaxies in that field of vision.

We are dwarfed. The ancients may have believed that they were a mote in the eyes of their gods, but, like a mote, they were still visible. Our gods, if they are there at all, could no more sense our presence in this vast universe than we are aware of the bacteria digesting the breakfast we ate this morning.

Over 100 years ago, Nietzsche stated that “God is dead”. Forget the past; there is no God guiding our future. The existential philosophers at the end of the 1800's struggled with this notion and came up with horrifying conclusions: there is no reason for existence. There are no rules. There is no “ultimate punishment” of hell. To that point, there seemed to be some hope that science and technology would save the human race by providing a predictable future, but even that hope was short-lived as the first half of the 1900's brought “The Great War” dragging on day after day to reach a bloody conclusion. But that respite, too, was short-lived since it led to yet another massive war that showed that this science and technology was capable of destroying all of humanity.

And through all of this, there was the refrain “Eat, drink and be merry for tomorrow you die”

But tomorrow came, and we did not die. And tomorrow, and tomorrow and tomorrow – and here we are – and there's a good chance that tomorrow, too, will come.

What will we do with that tomorrow? As a religion, a spirituality, a set of shared beliefs: what will we do with tomorrow?

See, there's one more problem. If there are no gods guiding our footsteps into tomorrow, where will we go? We are slowly letting go of the anchor that comes from that heritage of a force guiding us, but there are still a lot of people who believe that “science will save us”, but that is the “one more problem”. While there is still an infinity of questions for science to ask, one thing is becoming clearer: understanding does not necessarily lead to predictability. In the realms of chaos theory, mathematicians are putting the final touches on the proofs that will show that, while we may have all of the equations to understand a system, there may never be sufficient computing power in the universe to use that information to predict the outcome. The earth's weather system is one of those areas. Most probably still believe that, given sufficient computing power and sufficiently accurate measurement equipment, we will one day be able to predict, for example, where a hurricane will make landfall. There certainly may be some unknown breakthrough in this area, but scientists have a pretty good understanding of how hurricane systems work and, given what we now know, the mathematicians may soon provide proof that the predictability of such systems is... impossible.

Now, I will admit that, at first glance, this may seem a little arcane but in a nutshell, this means that we may finally have *proof* that tomorrow is totally unpredictable. I believe that we *feel* this is true – it's one reason so many people are seeking solace in the wisdom of the past – whether they're fundamentalist Christians or, as in my case, seeking truth in Buddhism or Wicca. The world is a very scary place as it is and we may be about to prove that we have always been and always will be living our lives at the whim of a totally unpredictable universe. This undermines one of the major underpinnings of our belief systems whether they be religious, spiritual, humanist or scientific.

“Vanity of vanities, everything is vanity – there is nothing new under the sun.” Except for this: tomorrow is going to be a brand new day. The universe is expanding, and we can watch it. There is not a single instant that we experience that is not a miracle. What will we do with *tomorrow*? What will we do with the next instant?

Sense the light from the sun outside the window. A controlled thermonuclear reaction occurs billions of times each second that generates that light, just six or seven minutes ago it left the sun's surface and, here it is – lighting your day, lighting your way now and... in the next instant.

Look at your hands, flex your fingers – the path of the neurons firing in your brain from listening to my words translating it through an incredible network of chemicals that generate miniature sparks in your brain that send a message to the muscles that control your fingers and you move them in the next instant.

Feel your breath. Know what occurs as your body takes in the oxygen, converts it to usable energy, expels carbon dioxide that plants will use to convert to usable energy to expel oxygen for us to use...in the next instant.

What more of a miracle do you want? Multicolored lights coming out of my head? A burning bush? The name of Allah formed in ice? We exist because we exist. The universe would have it no other way. My tomorrow is your tomorrow is this world's tomorrow is the universe's tomorrow and we have no way of knowing what will happen in it. Carpe diem? Sieze the day? Carpe ariculus – sieze the moment. It's yours and it belongs to all of us – use it wisely.