

“Where No Man Has Gone Before”

Worship Service
Channing Memorial Church
Newport, Rhode Island

Thomas R. Beall

July 26th, 2009

Call to Worship

On the Beach at Night Alone
Walt Whitman

On the beach at night alone,
As the old mother sways her to and fro singing her husky song,
As I watch the bright stars shining, I think a thought of the clef
of the universes and of the future.
A vast similitude interlocks all,
All spheres, grown, ungrown, small, large, suns, moons, planets,
All distances of place however wide,
All distances of time, all inanimate forms,
All souls, all living bodies though they be ever so different, or in
different worlds,
All gaseous, watery, vegetable, mineral processes, the fishes, the brutes,
All nations, colors, barbarisms, civilizations, languages,
All identities that have existed or may exist on this globe, or any globe,
All lives and deaths, all of the past, present, future,
This vast similitude spans them, and always has spann'd,
And shall forever span them and compactly hold and enclose them.

Chalice Lighting

Life is a gift for which we are grateful. We gather in community to celebrate the glories and the mysteries of this great gift.

Where No Man Has Gone Before

Thomas R. Beall

During one of the first sessions in the Coming of Age program this past year my co-leader, Sheri Lussier, and I led a discussion with the participating youth on the theories of evolution and creationism. We asked each young person, in which of the two do you believe? Each one stated unequivocally a belief in the theory of evolution. Good UU answer! Not content to leave it at that, however, we asked the young people why. In each case the answer came down to a statement that evolution is what each learned in school as set forth in his / her science texts. “How do you know it is true?” we asked. “Because that is what we learned in school!” they answered. “Why does what you learned from your teachers have any more merit than what someone learns to be the ‘truth of creationism’ from a minister of a church?” we asked. “Because it is science,” they answered.

This discussion got me thinking about how we as Unitarian Universalists view religion and science. Among the dictionary definitions of religion is this one, “a cause, principle, or system of beliefs held to with ardor and faith.”¹ Certainly no one doubts that those who embrace creationism do so with ardor and faith as well as with very little scientific reason. Can the same be said of those, like our Coming of Age class, who are not scientists but embrace the theory of evolution? I think so.

That statement, I’m sure, is raising the hackles on some of you out there. “Surely he is not about to tell us that the theory of evolution is no more than an article of faith in the religion of science – a religion no different from, dare I say it, fundamentalist Christianity!” Rest easy, I am not about to argue that point. Personally, I agree with Richard Dawkins, Fellow of the British Royal Society and onetime Professor at Oxford University, who has said:

...science is not religion and it doesn't just come down to faith. Although it has many of religion's virtues, it has none of its vices. Science is based upon verifiable evidence... Science is actually one of the most moral, one of the most honest disciplines around — because science would completely collapse if it weren't for a scrupulous adherence to honesty in the reporting of evidence...Science does have some of religion's virtues. Religion may aspire to provide its followers with various benefits — among them explanation, consolation, and uplift. Science, too, has something to offer in these areas.ⁱⁱ

What troubles me is not that we embrace theories founded on science versus those founded on religious faith. Rather I am troubled by the layman's tendency to put an unquestioning faith in the findings of modern science without really understanding the philosophy of science, the extent to which it has furthered our understanding of the universe, and, most importantly, how incomplete that understanding may be. This unquestioning faith is the basis for the critique that science is merely another religion.

Now, I am not a scientist or philosopher. Like many people, I have read just enough on the history of science and the history of philosophy to qualify me as a journeyman cocktail party pedant. Still, I know enough about the philosophy of science to understand that, like any philosophy (which in this context might be defined as a theory underlying or regarding a sphere of activity or thought), it is as yet incomplete. Therefore, our understanding of the universe, which is founded on this philosophy, is, of necessity, incomplete as well. We do not understand the universe as well as we think we do.

Arguably, modern science was born in the Renaissance debate over whether the universe is geocentric, with the Earth at the center, or something else. Copernicus was the first of a new breed of natural philosophers (the term "scientist" came into use much later) to suggest, on the basis of empirical evidence, that the Earth and other planets revolved around the Sun. Of course this notion challenged a long-held cosmology in which the Earth, and consequently Man, was the center of creation. This cosmology was not just the religious superstition of the "fundamentalist

Christians” of the day. Natural philosophers since ancient times, most notably Aristotle, embraced this theory and constructed a model of the universe, based on detailed observation, which was geocentric. Aristotle himself was what we might call a deist, believing that there was a divine power that was the first cause of everything but that this power was not necessarily manifest in a humanoid form and did not necessarily concern itself with the every-day workings of the universe. Learned people embraced Aristotle’s cosmology not so much out of religious conviction but because it adequately explained the universe to a degree that was useful in everyday life.

When Copernicus and, subsequently, Kepler and Galileo challenged the Aristotelian cosmology, it was hard at first for learned people to embrace the new ideas because they didn’t explain things as well as Aristotle did. For example, Copernicus did not challenge the accepted hypothesis that the stars are fairly close to the Earth. Therefore most other astronomers challenged Copernicus’ ideas because, if the Earth in fact moves, then the stars should be seen at different angles throughout the year. Since the angles of stars were observed as unchanging, the Earth must be unmoving and at the center of the universe. In fact, they don’t appear to move because they are so far away – something that Galileo suggested years later but was not really proved until the nineteenth century.ⁱⁱⁱ Copernicus’ failure to address the distance of stars from the Earth resulted in an inconsistency in his own hypothesis that led many to reject it initially, preserving, for a very logical reason, the long held and cherished notion that the universe is geocentric.

I wonder how a hypothetical “Coming of Age” class in the sixteenth century would have answered the question, “In which do you believe, that the Earth goes around the Sun or the Sun goes around the Earth?” Initially, I suspect that the sixteenth century youth would have said the

Sun goes around the Earth. Why, “Because it is science!” Learned laymen of the sixteenth century embraced subsequently discredited theories of how the universe works with reason and fervor not unlike how we embrace widely accepted scientific theories of today. That their certainty was unfounded should lead us to question our own certainty, and, perhaps, our own arrogance about how the universe works.

Interestingly, many scientists do not embrace such certainty. In seeking to expand our understanding of the universe, in seeking to take us where no man has gone before, they recognize that science does not provide all the answers – at least not yet. Some have even speculated that science alone will never provide all of our answers and that a single-minded embrace of science will lead us to a dead end. This was one of Sir Arthur C. Clarke’s messages in one of his greatest novels, Childhood’s End. Clarke, who as a scientist pioneered the application of radar and satellite communication to civil and military purposes, wrote of a race of creatures of supreme reason and intellect who come to Earth just as mankind has embarked on the nuclear age. The aliens, called the Overlords by humanity, conquer the Earth, eliminate war, and place mankind on a path of peace and reason that brings about a true utopia. The Overlords’ reasons for doing this are unclear until the second half of the novel. A human child begins to have dreams in which he perceives places in the universe where no man has gone before. As time goes on, more and more children have similar experiences. As growing fear grips humanity, Karellen, the leader of the Overlords, reveals their true purpose to the people of Earth:

Linda reads:

“My work here is nearly ended,” said Karellen’s voice from a million radios. “At last, after a hundred years, I can tell you what it was.

“...The supreme secret we kept from you was our purpose in coming to Earth – that purpose about which you have speculated so endlessly. We could not tell you until now because the secret was not ours to reveal.

“A century ago we came to your world and saved you from self-destruction. I do not believe that anyone would deny that fact – but what that self-destruction was, you never guessed.

“Because we banned nuclear weapons and all the other deadly toys you were accumulating in your armories, the danger of physical annihilation was removed. You thought that was the only danger. We wanted you to believe that but it was never true. The greatest danger that confronted you was of a different character altogether – and it did not concern your race alone.

“Many worlds have come to the crossroads of nuclear power, have avoided disaster, and have gone on to build peaceful, happy civilizations – and then have been utterly destroyed by forces of which they knew nothing. In the twentieth century, you first began to tamper seriously with those forces. That is why it became necessary to act.

...“In the centuries before our coming, your scientists uncovered the secrets of the physical world and led you from the energy of steam to the energy of the atom. You had put superstition behind you: Science was the only real religion of mankind...it destroyed all other faiths...Science, it was felt, could explain everything: there were no forces which did not come within its scope, no events for which it could not ultimately account. The origin of the universe might be forever unknown, but all that had happened since obeyed the laws of physics.

“Yet your mystics...had seen part of the truth. There are powers of the mind, and powers beyond the mind, which your science could never have brought within its framework without shattering it entirely...During the first half of the twentieth century, a few of your scientists began to investigate these matters. They did not know it but they were tampering with the lock of Pandora’s Box. The forces they might have unleashed transcended any perils that the atom might have brought. For the physicists could only have ruined the Earth: the parapsychicists could have spread havoc to the stars.

“That could not be allowed. I cannot explain the full nature of the threat you represented. It would not have been a threat to us, and therefore we do not comprehend it. Let us say that you might have become a telepathic cancer, a malignant mentality which in its inevitable dissolution would have poisoned other and greater minds.

“And so we came – we were sent – to Earth. We interrupted your development on every cultural level, but in particular we checked all serious work on paranormal phenomena...

“Now I must tell you something which you may find very surprising, perhaps almost incredible. All these potentialities, all these latent powers – we do not possess them, nor do we understand them. Our intellects are far more powerful than yours, but there is something

in your minds that has always eluded us. Ever since we came to Earth, we have been studying you; we have learned a great deal, and will learn more, yet I doubt if we shall discover all the truth.

“Our races have much in common...but in other respects, we represent the ends of two different evolutions. Our minds have reached the end of their development. So, in their present form, have yours. Yet you can make the jump to the next stage, and therein lies the difference between us. Our potentialities are exhausted, but yours are untapped. They are linked, in ways we do not understand, with the powers I have mentioned – powers that are now awakening on your world...We held the clock back, we made you mark time while those powers developed, until they could come flooding out into the channels that were being prepared for them...(In this) we are your guardians, no more. Often you must have wondered what position my race held in the hierarchy of the universe. As we are above you, so there is something above us, using us for its own purposes...You have called us the Overlords, not knowing the irony of that title. Let us say that above us is the Overmind using us as the potter uses his wheel.

“And your race is the clay that is being shaped on that wheel.”^{iv}

Tom reads:

Karellen goes on to explain to mankind that the transformation that is about to take place is the joining of the collective mentality of humanity with the Overmind. The children of the present generation will be the ones to join with the Overmind and it is now Karellen’s task to take the children away and protect them until they are ready for the joining. This of course spells the end of the human race in its current form. Karellen goes on to say to the adults, who will be left behind to die as a race,

Linda reads:

“And then – what am I to do with you, the survivors, when your purpose has been fulfilled? It would be simplest, and perhaps most merciful, to destroy you – as you yourselves would destroy a mortally wounded pet you loved. But this I cannot do. Your future will be your own to choose in the years that are left to you. It is my hope that humanity will go to its rest in peace, knowing that it has not lived in vain.

“For what you will have brought into the world may be utterly alien, it may share none of your desires and hopes, it may look upon your greatest achievements as childish toys – yet it is something wonderful, and you will have created it.

“When our race is forgotten, part of yours will still exist. Do not, therefore, condemn us for what we were compelled to do. And remember this – we shall always envy you.”

Tom reads:

Clarke, the scientist, the man of reason writes of a race that embodies all of the characteristics that we might call noble. And yet, this race is not to be admired but to be pitied. The great tragedy of Childhood’s End is not that humanity ceases to exist but that the Overlords are doomed because reason and science alone will not allow them to escape from a cul-de-sac in which they will wither and die as a race, while for some unfathomable reason; part of humanity will become something greater.

The other message of Childhood’s End is that there is something out there that we don’t understand but that still inspires feelings of awe in all of us, an awe that can be the basis of religious fervor. Scientists recognize this but, rather than dismiss it, seek to understand it. As Carl Sagan has written:

Linda reads:

The word “religion” comes from the Latin for “binding together,” to connect that which has been sundered apart. It’s a very interesting concept. And in this sense of seeking the deepest interrelations among things that superficially appear to be sundered, the objectives of religion and science, I believe, are identical or very nearly so. But the question has to do with the reliability of the truths claimed by the two fields and the methods of approach.

By far the best way I know to engage the religious sensibility, the sense of awe, is to look up on a clear night. I believe that it is very difficult to know who we are until we understand why we are. I think everyone in every culture has felt a sense of awe and wonder looking at the sky. This is reflected throughout the world in both science and religion. Thomas Carlyle said that wonder is the basis of worship. And Albert Einstein said, “I maintain that the cosmic religious feeling is the strongest and noblest motive for scientific research.” So if both Carlyle and Einstein could agree on something, it has a modest possibility of even being right.^v

Tom reads: Sagan goes on to argue two things. First, by looking up into the universe and seeing it in all its vastness and complexity, one finds that conventional religions “are too small”

in that they do not explain why a God of such a vast universe would even care what happens to humans on this tiny speck known as Earth. In their quest to understand the universe, scientists have called into question conventional faith systems. Second, Sagan argues that undermining traditional faiths is not done out of arrogance but out of humility when confronted with the vastness of space.

Linda reads:

I believe it is true that humility is the only just response in a confrontation with the universe, but not a humility that prevents us from seeking the nature of the universe we are admiring. If we seek that nature, then love can be informed by truth instead of being based on ignorance or self-deception. If a Creator God exists, would He or She or It or whatever the appropriate pronoun is, prefer a kind of sodden blockhead who worships while understanding nothing? Or would He prefer His votaries to admire the real universe in all its intricacy? I would suggest that science is, at least in part, informed worship. My deeply held belief is that if a god or anything like the traditional sort exists, then our curiosity and intelligence are provided by such a god.^{vi}

Tom reads:

I am not sure that Sagan believed in God – reading his words it seems to me that he did not; at least he did not appear to believe in God as described in the conventional religions. He did, however, recognize that religion and science are intertwined in some way. Both meet the needs of people, both inspire us to seek “the deepest interrelations among things that superficially appear to be sundered,” and both inspire us to look at the universe with awe and reverence even as both also inspire us to seek understanding of our place in it.

I have always found it interesting that it is often the men of science and reason who have come face to face with the complexity and majesty of the universe who are among those who continue to embrace religion. This was true of some of the Apollo astronauts who voyaged from the Earth to the Moon. The Apollo 8 astronauts chose the opening of the Book of Genesis as their way to reflect on the Earthrise over the Moon that men were seeing for the first time.

Colonel Buzz Aldrin carried a prayer with him to the Moon that spoke of God's intimate presence. Many of the astronauts felt the presence of God close to them in the depths of space – where no man had gone before.

This doesn't surprise me. In my own experience as a sea captain, I often felt how big the ocean was and how little I am. Looking up at starry vistas at sea I felt that awe of which Sagan speaks and came the closest in my life to experiencing religious fervor. Thinking of this, I am reminded of another sea captain who strongly embraced religion even as he became one of the foremost scientists of the nineteenth century. Captain Robert Fitzroy charted coastlines for the British Admiralty Hydrographic Office, pioneered the science of oceanography, and developed practical means of forecasting weather at sea. He also happened to be the captain who invited a young naturalist named Charles Darwin to accompany him on a voyage in HMS *Beagle* that led to Darwin's formulation of the theory of natural selection. Ironically, when Darwin published his findings some years later, Fitzroy expressed regret that he ever took Darwin along. Fitzroy completely rejected Darwin's conclusions and continued to embrace the creationism taught him by the Church of England. Why did this man of reason, this skilled mariner and practitioner of modern science continue to hold to his religious beliefs in the face of strong evidence that supported Darwin's theory? I don't know. I can only speculate that as one who had, as I have, come face to face with the power of nature and the magnificence of the universe at sea, he was not prepared to accept that God did not play an integral part in creating it.

So why do men of science like Arthur C. Clarke speculate that there exists a truth to the universe that transcends science? Why did Carl Sagan spend time considering the proper place of religion in the contemporary world? Why do men like Borman, Lovell, Anders, Aldrin, and Fitzroy, men devoted to scientific discovery and exploration, embrace religion, making it an

important component of their lives? I believe it is because they all recognize, if only intuitively, that religion is an important component in man's search for understanding and meaning in the cosmos, perhaps just as important as science.

People of religion and people of science have more in common than some of them may think. Both seek to understand the universe and mankind's place in it. Both seek not some personal, subjective truth but THE TRUTH (in capital letters). Unfortunately they do not always seek it together. I believe, however, that the human adventure (as Gene Roddenberry, the creator of *Star Trek*, called it) to reach out to the stars to understand the universe and our place in it, can only be accomplished if religion and science walk hand-in-hand for it is religion that inspires us to look deeper and it is science that brings what we find into focus.

So what will we find out there where no man has gone before? No one knows but let's conclude with the speculations of another science fiction writer. Robert J. Sawyer, in his novel The Terminal Experiment, tells the story of a scientist who invents a device that can detect a soul leaving a human body at the time of death – proving conclusively the existence of an afterlife. At the close of the novel, the inventor, Peter Hobson, dies; beginning his own journey:

Linda reads:

Peter knew his heart was seizing up. He felt panic welling within him, but it, too, was suddenly pushed aside, disowned, as if it belonged to some other part of him.

And all at once, everything was different.

He could not see.

He could not hear.

Indeed, he could sense nothing in any normal, human way – no touch, no smell, no taste, not even the ineffable sense of having a body, of knowing how one's limbs were deployed.

No senses at all, except...

Except a...a tropism, an attraction to something...something distant, something vast. He was still Peter Hobson, still an engineer, a business person, a...well surely other things too.

Yes, he was still...Hobson, that was it. Peter G. The G stood for...well, it didn't matter. He remembered...

Nothing. Nothing at all. It has all slipped away now.

Of course. Memory was biochemical, encoded in neural nets. He'd been severed from the storage medium.

He – wrong pronoun. It was more appropriate. Genderless. An intellect...

An intellect without memories, without hormonal mood swings, without fatigue poisons or endorphins or...or a thousand other chemicals whose names it could no longer recall. Shorn from chemistry, divorced from biology, separated from material reality.

The tropism continued, drawing it forward, moving it toward...something.

What was left of a person once all that was of the body and all that was physical brain were removed?

Only one thing – the only thing that could survive.

Just the essence. The spark. The nub.

The soul.

Genderless, identityless, memoryless, emotionless.

And yet –

Drawing nearer now.

Something large. Something vibrant.

Correction: somethings. Plural. Dozens – no, thousands. No – more than that. Orders of magnitude more. Billions. Billions, all gathered together, all functioning as one.

The soul knew what it was now, understood at last, all its questions answered. It was a splinter, a shaving, an iota, the tiniest part, the fundamental indivisible block.

An atom of God.

Finally, the soul rejoined the parent body, rejoined the vastness, mingled with it, touching all that had ever been human, and all that would ever be human.

It wasn't heaven. Nor was it hell.

It was home.^{vii}

Tom reads:

Our human adventure, founded on a blending of religion and science, is just beginning. Perhaps it will set us on a path one day to understanding and mastery of the universe or perhaps it will just lead us home. Wherever it ultimately leads us, as members of a community of people of reason, science, and religion, let us continue to experience the adventure together.

Prayer

High Flight

Pilot Officer Gillespie Magee, RAF

Oh! I have slipped the surly bonds of earth
And danced the skies on laughter-silvered wings;
Sunward I've climbed, and joined the tumbling mirth
Of sun-split clouds - and done a hundred things
You have not dreamed of - wheeled and soared and swung
High in the sunlit silence. Hov'ring there
I've chased the shouting wind along, and flung
My eager craft through footless halls of air.
Up, up the long delirious, burning blue,
I've topped the windswept heights with easy grace
Where never lark, or even eagle flew -
And, while with silent lifting mind I've trod
The high untresspassed sanctity of space,
Put out my hand and touched the face of God.

Benediction

This prayer was carried to the Moon by Apollo Astronaut Colonel Buzz Aldrin.

The Light of God surrounds me.

The Love of God enfolds me.

The Power of God protects me.

The Presence of God watches over me.

The Mind of God guides me.

The Life of God flows through me.

The Laws of God direct me.

The Power of God abides within me.

The Joy of God uplifts me.

The Strength of God renews me.

The Beauty of God inspires me.

Wherever I am, God is!

ⁱ Merriam-Webster Online Dictionary, <http://www.merriam-webster.com/dictionary/religion>.

ⁱⁱ Dawkins, Richard (1997). "Is science a religion?" *The Humanist*, January-February, 1997. Found online at: <http://www.thehumanist.org/humanist/articles/dawkins.html>.

ⁱⁱⁱ Philosophy of science. (2009). In Encyclopædia Britannica. Retrieved July 21, 2009, from Encyclopædia Britannica Online: <http://www.britannica.com/EBchecked/topic/528804/philosophy-of-science>.

^{iv} Clarke, Arthur C. (1953). *Childhood's end*. Norwalk, CT, The Easton Press, pp. 177 – 182.

^v Sagan, Carl (2006). *The varieties of scientific experience: A personal view of the search for God*. New York: The Penguin Press, pp. 1 – 2.

^{vi} Ibid, p. 31.

^{vii} Sawyer, Robert J. (1995). *The terminal experiment*. Norwalk, CT: The Easton Press, pp. 331 – 333.