

## **UNITY AND SCIENCE: CELEBRATING DISCOVERY**

In 1889, Unity co-founder Charles Fillmore wrote that scientific research had created a need to reinterpret scripture and that bridging science and religion would be a central purpose of the movement that was to become Unity. Charles and his wife Myrtle spent much of their lives studying biblical scripture which they believed helped them better understand divine purpose. They also delighted in reading about science. The Fillmores saw new scientific discoveries as sources of new insights.

A core belief of Unity is that we have a Creator, that we have the ability to experience divine presence, and that we are empowered by expressing that presence as love. We are rooted in early Christian beliefs that encouraged each individual to seek their own personal relationship with God. We are non-creedal, meaning that we do not ask anyone to declare any particular set of beliefs. Unity was founded as a movement to help persons of all faiths to develop a fuller relationship with our Creator and to enjoy the discovery of new insights in their own spiritual journeys.

Unity embraces critical thinking which calls for careful evaluation of evidence and reflection on the underlying meaning of observations and experience. In this we continue the tradition of Socrates (469–399 BCE), a founder of philosophy, whose own religious contemplations caused him to conclude that the essence of that which is divine is inherently good. Critical reasoning, Socrates argued, is a way of seeking insight and pursuing that which is good. Critical reasoning is the basis for modern science and also of sound scriptural interpretation.

St. Augustine (354-430), one of the most influential early founders of Christianity, wrote a treatise on the interpretation of Genesis in which he advised Christians to interpret scripture in ways that are compatible with empirical observations. To do otherwise, he cautioned, would make the scriptures seem “foolish” and weaken our understanding of their underlying meaning. Several of the founders of modern science believed that using critical reasoning to systematically study nature would yield insights of religious importance.

Sir Francis Bacon (1561-1626) is considered the inventor of the modern scientific method. He promoted the use of logic to develop testable propositions and empirical observation to eliminate those that proved false. He devoutly believed that the systematic exploration of causation in nature would ultimately point to the existence of our Creator. Accordingly he encouraged the study of scripture, which he called the “book of God’s word,” and of nature which he called “the book of God’s works.” Another founder of modern science and philosophy, Rene Descartes (1596-1650) shared Bacon’s belief that studying nature would ultimately enhance human understanding of that which is divine. Descartes argued that God is perfect, and therefore is not a deceiver, so there is nothing to fear from studying the laws of nature. Both Bacon and Descartes believed in the essential benevolence and goodness of the Creator as did Sir Isaac Newton (1642-1727), a founder of modern

physics, whose own extensive studies of religion led him to conclude that the essence of God is “love.”

It is unfortunate that some people mistakenly think that no form of religion can fully embrace and celebrate scientific discovery. In Unity we encourage and celebrate scientific discovery. The founders of Unity were in accord with Sir Francis Bacon. In Unity, we see new scientific discoveries as new insights into God’s creation. We especially marvel at how science has dramatically expanded our human perception of the scope of creation.

In ancient times, it was believed that a very young earth was at the center of a rather small universe. The stars were thought to be only a few hundred miles distant. But in 1609, when a religiously devout scientist named Galileo Galilei became the first human to study the sky through a telescope, he saw something that was vastly different – a much older and far bigger universe.

Today we can marvel that we live in a galaxy with billions of stars and that our universe contains billions of other galaxies. Even more amazingly, evidence now indicates that all of the vast quantities of matter and energy across the entire universe emerged spontaneously from a single sub-atomic “quantum nugget” of immense heat and unimaginable density. The theory of the “Big Bang,” first proposed in the 1920s by a Belgian physicist and priest named George Lemaitre, has been well substantiated by subsequent observations.

Numerous leading scientists have concluded that the earliest moments of creation were astonishingly precise. Several physical constants had to be almost exactly what they are or chaos, rather than creation, would have resulted from the Big Bang. For example, if gravity had been slightly greater, re-collapse would have ensued; if gravity had been slightly weaker, the stars from which all heavier elements come would never have formed. Extraordinary precision, not randomness, prevailed at the initial creation of our universe. That precision enabled the entire universe (us included) to have emerged. The story from the “book of God’s works” seems to affirm that the creation of our universe was no accident.

We live in what appears to us to be a three dimensional world moving through a fourth dimension that we call “time.” Science, however, suggests that there are several dimensions of existence beyond the four dimensions that we can readily perceive. For nearly a century, scientists have been trying to discover how the basic physical forces of the universe are linked together. It seems that the only way that scientists can mathematically explain what has been observed is to posit the existence of dimensions beyond the four in our observable universe. These dimensions apparently exist throughout the universe, within every atom. That means these dimensions exist within each of us. Belief in the existence of additional dimensions of reality is fundamental to all religions.

In a sense, each of us carries within ourselves multiple copies of the “book of God’s works.” The text exists in the subatomic particles, atoms and encoded

molecules of our genes. The science of genetics began in the 1850s, in the gardens of a monastery in Austria, when a monk named Gregor Mendel (1822-1884) became curious as to why pea plants exhibited different characteristics. Scientists who study our genetic origins have discovered that all of us modern humans are indeed members of one extended family that originated in Africa within the past 200,000 years. Some research suggests we may even be descended from a single mother. We are all the products of one creation story and we carry the text of it in our genes. *The “book” we carry within us tells us of our underlying unity.* If religious leaders across the world would celebrate our common story of creation, and interpret their scriptures accordingly, perhaps the differences that separate us might be lessened. The curiosity of scientists who follow in the footsteps of a monk in a monastery has made that a possibility as never before in human history.

Research into evolution, the cornerstone of modern biology, has been difficult for some persons of faith to accept. Being non-creedal, Unity does not issue declarations of doctrine. It is our tradition to encourage every person to critically examine evidence and to make their own decisions regarding their personal beliefs. It is fair to say, however, that many Unity members would likely agree with the conclusions of the Rev. Professor Baden Powell (1796-1860) on matters related to evolution.

Powell was an active Anglican minister and a professor of geometry at Oxford University. He was one of Great Britain’s leading mathematicians in the 19<sup>th</sup> century and he carefully studied the research of Charles Darwin (1809-1882) as published in 1859 in Darwin’s landmark book *On the Origin of Species*. In 1860, Powell published a remarkable essay titled “On the Study of the Evidences of Christianity” in which he concluded that Darwin’s reasoning was sound, that his findings should be accepted as well grounded science, and that Darwin’s findings posed no threat to Christianity. Powell marveled how the new research revealed “the grand principle of the self-evolving powers of nature.” He realized that science had given humanity a vital new insight – that creation is continuous.

Unity’s founders taught that each of us, as we explore the divine presence within us, becomes a participant in the processes of continuous creation. Charles Fillmore, who accepted the evidence for biological evolution, wrote that ultimately, “Evolution is the unfolding in consciousness of that which God involved in man in the beginning.” His views were very similar to those of the French paleontologist and priest Pierre Teilhard de Chardin, an expert in human evolution, who taught that evolution is an ascent to ever higher levels of consciousness and awareness of divine love.

Today it is evident that humanity is affecting the evolutionary path of our planet. Our actions are threatening vast numbers of species and we have developed the capacity to alter genetic codes. It has become more important than ever before that the application of scientific knowledge be guided by wisdom and love. Each of us, therefore, shares a responsibility to seek the assuring presence and guidance of divinely inspired love.

We are fortunate to live in a time of unprecedented scientific exploration. Each new discovery promises new insights into the “book of God’s works.” In Unity, we celebrate those discoveries just as we celebrate each new discovery and insight in our own spiritual journeys.

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Wm. Earle Klay, Ph.D. is a professor at the Florida State University in Tallahassee, Florida, USA. A social scientist and policy analyst, he often studies the findings of natural science research to learn their implications for decision makers. He, his wife Irene who is a science teacher, and his family are members of the Unity of Tallahassee church. In 2009, he presented a paper titled “Celebrating the Asking of Questions” at a conference on science and religion held at Unity Village. While spending a few moments of contemplation in the Silent Unity building following his presentation, the thought of writing this essay occurred to him. It is a gift to all Unity centers to share with any person who wishes to find a religious home in which they can celebrate both spiritual discovery and scientific discovery. In Unity we happily celebrate both.

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## SELECTED REFERENCES

### **Charles Fillmore:**

Paragraph 1: *Modern Thought*, (April 1889) Vol. 1, No. 1, page 9.

“The conflict between science and religion has waged long but the contestants are never weary, for both are confident of the right, and the battle goes on ...; then why do they not close the breach? There are two broad reasons; science has not gone far enough in her investigations, and religion is not aware of the scientific facts underlying the pure biblical record. The burden of proof undoubtedly lies with religion, as science has proven her facts as far as she has gone, and demonstrated what she preaches.”

Paragraph 2: *Modern Thought*, (April 1889) Vol. 1, No. 1, page 10.

“The development of that principle of love and charity, so thoroughly taught and exemplified by Christ, just as certainly sweeps men into universal brotherhood, as does the river its sands to the sea.” Also, “*Modern Thought* hopes to perpetuate its existence by showing the good in all religions and philosophies, and by demonstrating to men and women that they can acceptably serve God without being bound hand and foot by creeds of church or beliefs of isms.”

Paragraph 14: *The Revealing Word*, page 65.

### **Socrates:**

The writings of Xenophon, of Plato, and even of his critic Thucydides, all revealed aspects of Socrates’ religious thinking. Socrates lived four centuries before Jesus and knew little or nothing of the teachings of Jewish prophets, yet his own contemplations and “inner voice,” as he called it, convinced him that the essence of that which is divine is good. He promoted the asking of questions, living a well examined life, as a way of finding that which is good. In doing so, he became a father of philosophy. A good source is Mark L. McPherran, *The Religion of Socrates*, University Park: Pennsylvania State University Press, 1996.

### **St. Augustine:**

An often cited modern translation is *The Literal Meaning of Genesis*, translated and annotated by John Hammond Taylor, S.J., (New York: Newman Press, 1982). The specific quote using the word “foolish” is: “Usually, even a non-Christian knows something about the earth, the heavens, and the other elements of this world, about the motion and orbit of the stars and even their size and relative positions, about the predictable eclipses of the sun and moon, the cycles of the years and seasons, about the kinds of animals, shrubs, stones, and so forth, and this knowledge he holds to as being certain from reason and experience. Now, it is a disgraceful and dangerous thing for an infidel to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics.... Reckless and incompetent expounders of Holy Scripture bring untold trouble and sorrow on their wiser brethren when they are caught in one of their mischievous false opinions and are taken to task by these who are not bound by the authority of our sacred books. For then, to defend their utterly **foolish** and obviously untrue statements, they will try to call upon Holy Scripture for proof and even recite from

memory many passages which they think support their position, although they understand neither what they say nor the things about which they make assertion.”

**Francis Bacon:**

*The Advancement of Learning*, 1605, Book 1

available on line through the University of Oregon at

<https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/646/advancement.pdf?sequence=1>

In the frontispiece of his *On the Origin of Species*, Charles Darwin included the following quote from Bacon’s *Advancement of Learning*, "To conclude, therefore, let no man out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far or be too well studied in the book of God's word, or in the book of God's works; divinity or philosophy; but rather let men endeavour an endless progress or proficiencie in both."

**Rene Descartes:**

his *Meditations*; for example in his fourth meditation he wrote “God, therefore, is known to us at the outset, the moment we take the trouble to look into the nature of our own minds; and this is enough to eliminate the hypothesis of an evil genius that would take pleasure in deceiving us; it is enough also to secure the validity of all our deductions, whatever be their length, for I recognize that it is impossible that He should ever deceive me, since in all fraud and deceit there is a certain imperfection.” In her critical review of Descartes’ ideas, philosopher Marjorie Glicksman Grene wrote, “... he unquestioningly accepted the innate idea of an infinite all-good all-powerful Deity. His vision of science ... depends innately on that idea.” (Marjorie Glicksman Grene, *Descartes*, Indianapolis, IN: Hackett Publishing, 1998” p. 8.

**Isaac Newton:**

See his “*A short Schem(e) of the true Religion*”

“Beloved let us love one another for love is of God & every one that loveth is born of God & knoweth God & he that loveth not knoweth not God; for God is love.” King's College, Cambridge, Keynes Ms. 7: 'A short Scheme of the true Religion'

<http://www.newtonproject.sussex.ac.uk/texts/viewtext.php?id=THEM00007&mode=normalized>

**“the earliest moments of creation were astonishingly precise”:**

Numerous books written by major scientists make this point. One of the best known is that by Sir Martin Rees of Cambridge University in his book *Just Six Numbers: the Deep Forces that Shape the Universe*, NY: Basic Books, 2000. The precision present at the beginning moments of the universe is the starting point for the book by astrophysicist Bernard Haisch titled *The God Theory: Universes, Zero-Point Fields, and What’s Behind It All*, San Francisco: Weiser Books, 2006. In the book, Haisch writes that he attends a

Unity church. His book is an accomplished treatise on how a Unity oriented perspective facilitates the interpreting of scientific discovery.

**“Science, however, suggests that there are perhaps several dimensions of existence beyond the four dimensions that we can readily perceive.”:**

The Kaluza-Klein theory, dating from the 1920s, showed that the relationships between general relativity theory and electromagnetic theory could best be explained mathematically by including an additional dimension. So called M-theory, which seeks to interrelate multiple versions of string theory, has eleven dimensions. Columbia University professor of physics and mathematics Brian Greene has written some of the most widely read popular explanations of this body of theory, notably his book titled *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory*, London: Vintage-Random House, 1999.