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# Science and Theology: A Search for the Uncommon Denominator

# A. Lester Allen

Students in elementary math learn that to add fractions they must find a common denominator. Adding 1/3 + 1/4 is difficult until the fractions are changed so they have the common denominator of 12: 1/3 = 4/12; 1/4 = 3/12; and 4/12 + 3/12 = 7/12. The common denominator helps put together incompatible numbers or concepts.

Scholars have found it difficult to add science and theology because they lack a common denominator. The scientists' theories of evolution and the theologians' revelations of man's creation could not be integrated harmoniously into a single, acceptable narrative because of the absence of a unifying concept. This essay relates my prolonged search for such a common denominator, a search that had its origin in the assumption that truths from science and from theology ought to blend—or at least ought not to conflict with each other.

When I first came to BYU in 1954, I was surprised to discover a feud in the university concerning creation and evolution. Its roots extended back half a century and even included some leading figures in the Church. In general, those with scientific training tended to favor at least some aspects of evolution, while those who were not trained in the sciences were prone to reject evolution. Feelings often ran high, and accusations of stupidity or lack of testimony sparked heated debates. I was disappointed that such a feud existed. I knew that all truths originate with the Lord and are mutually supportive. I was confident that science and technology had good track records for unraveling and applying truths of the natural world. I saw in light bulbs, plastic bags, and electronic calculators the handiwork of God. I also had faith in the revelations of God to his authorized prophets and had witnessed the divine guidance of his children.

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Of course, I was aware that there were some misinterpreted facts and false theories of science, as well as false doctrines and uninspired misinterpretations of scripture. But I was confident that earnest scholars who were well trained in science and also qualified to receive divine guidance could identify and sort out the truths and piece them together as a beautiful, comprehensive jigsaw puzzle. This would involve synthesizing evolution—the ancient story of our planet written in the rocks—with creation—the scriptural account of man's premortal origin and advent on the earth. I knew there were Latter-day Saint scholars who were well-qualified for this task, such as the former geologist-Apostle James E. Talmage, and the late, eminent Henry Eyring. I wondered why they hadn't provided an acceptable synthesis, and perhaps I should have been content to accept their efforts. But I was encouraged by their optimistic attitude toward God's continuing revelations of the natural world and his divine guidance of the prophets. I was also bold enough to think I could search for a common denominator and an acceptable synthesis. I was spurred on in this self-appointed task by statements from presidents of the Church that seemed to indicate there was still room for creative thought on these topics. David O. McKay once declared, "On the subject of organic evolution, the Church has officially taken no position." Spencer W. Kimball said, "The creators breathed into their nostrils the breath of life and man and woman became living souls. We don't know exactly how their coming into this world happened, and when we're able to understand it the Lord will tell us." I hoped I would soon be able to understand it and that the Lord would then tell me.

As I continued to study science and theology, and scientists' and theologians' opinions, I came to feel that we only needed improved learning and communication to share our common truths. (After all, scientists could receive revelation, and theologians could be logical, couldn't they?) I looked for missing links and even forged some myself, attempting to weld together some of the disparate evidence.

As a "theistic" evolutionist, I stood on what I assumed was middle ground of debated issues, such as the origin of the physical bodies of Adam and Eve. The scriptural descriptions of Adam's entry into mortality did not seem to relate well to the physical record displayed in the fossils and cultural artifacts. For example, the Lord told Moses that Adam, presumably around 4,000 B.C., "became a living soul, the first flesh upon the earth, the first man also" (Moses 3:7). Yet anthropologists and archaeologists had cultural evidences extending back thousands of years. I thought the issue could be resolved if we could just stretch the interpretations of the scriptures.

It seemed most "reasonable" to me that the earth with its plant and animal life had evolved—that the evolution story was generally correct. In the meantime the creation of our spirit bodies was performed in the spirit world: "For I, the Lord God, created all things, of which I have spoken, spiritually, before they were naturally upon the face of the earth" (Moses 3:5). Then came the creation of Adam and Eve and their placement in the Garden of Eden as paradisiacal beings (see Abr. 5:7–8). From the Garden they fell, involving a change from the paradisiacal, immortal condition to the mortality of this world—perhaps a reversal of the process of translation of the Apostle John and the Three Nephites.

Another divisive issue was whether the holy writ indicated there was death of any living thing before the fall of Adam. Even Apostles of the Church were divided on this issue. Some felt that Lehi implied there was no death before the Fall when he said, "And now, behold, if Adam had not transgressed he would not have fallen, but he would have remained in the Garden of Eden. And all things which were created must have remained in the same state in which they were after they were created; and they must have remained forever, and had no end" (2 Ne. 2:22). But I agreed with Elder Talmage, who wrote, "These [organisms] lived and died, age after age, while the earth was yet unfit for human habitation."

I thought the word "state" might have been used by Lehi to mean that all things God had created remained in a state of ineligibility for the resurrection unless Adam fell from immortality to mortality and thus became subject to death. So it seemed to me that harmony could be achieved, at least in the Latter-day Saint community, if we would accept some concepts and reject others, according to my interpretations.

But my proposals didn't settle anything. Scientists felt my allowance for the supernatural was an escape from reality. Believers thought my testimony was shaky. As Joseph Fielding Smith said, "The theistic evolutionist is a weak-kneed and unbelieving religionist, who is constantly apologizing for the miracles of the scriptures, and who does not believe in the divine mission of Jesus Christ."

And so the debate continued. I started to wonder if the differing points of view would ever be reconciled. But how could they *not* be? God was the creator of the earth and all the creatures that produced the fossils. He also created our spirits and the mortal bodies in which they were placed. The record interpreted in the rocks seemed to reveal truths, as did the interpretations of scripture. The different stories of our origin and history should have been mutually supportive. Then why was there not more concordance?

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After pondering on these issues for many years, I have come to believe that the origin of the debate lies in the fact that the mind has two different processing systems. Knowledge from reason and knowledge from revelation don't follow the same tracks. Reason and logic employ the temporal mind whereas revelation and faith employ the spirit mind. Our rational mind allows us to *know* facts, but revelation to the spirit mind lets us *feel* knowledge. We can prove facts to others, but knowledge of revelation can be accepted by others only on faith—it isn't always logical. The two kinds of knowledge use mental tools that are not interchangeable. And they have no common denominator that would allow their synthesis.

Yet the ultimate source of all truth is the Lord, and this can serve as an *un*common denominator. When a prophet needs direction for the Church, or when a distraught mother is entitled to divine guidance for her child, the Lord transmits information to the qualified soul. Likewise, when the Lord needs to enlighten the world with a *new* truth, perhaps an invention to help set the stage for the millennium, a seeking, prepared mind receives a sudden "insight." Much of the time what is called insight seems to be only the intelligent application of natural processes in the mind. But the Lord may also use this vehicle of mental enlightenment at times for his own purposes. Brigham Young said, "God has revealed all the truth that is now in the possession of the world, whether it be scientific or religious. The whole world are under obligation to him for what they know and enjoy; they are indebted to him for it all, and I acknowledge him in all things."

The ways in which the two kinds of knowledge are tested for their validity are also profoundly different. The principle of a new invention may be passed on to others using only reason and logic, without prayer or further divine intervention, but the truth of a revelation to one person can only be accepted by another as a matter of faith. We may believe that the prophet has received a revelation, but if we want to know its truth for ourselves we must seek our own divine assurance. An experience of the temporal mind can be directly transferred to another person by reason, whereas an experience of the spirit mind must come through the intervention of the Holy Spirit. Faith, alone, will not generate an understanding of temporal events as effectively as reason does, and revelation does not unfold to logical analysis. Furthermore, the dualism of the mind seems to create a barrier to mutual understanding, especially between those who rely principally on reason and those who rely on revelation for their understanding.

This may help us more clearly understand the causes of the debate between evolutionists and creationists. The concepts and

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evidence for evolution are processed with rational tools while God's divine acts in the creation are comprehended through the spirit. The rational mind can know *about* God's dealings, but cannot know their reality. On the other hand, gaining knowledge of the fossil record is rational, not an act of spiritual faith. Thus we have two distinct systems of perceiving and assimilating knowledge. They do not have a common denominator and therefore can't easily be combined. But they do have an *un*common denominator: both knowledges have a divine origin. This gives us the assurance that they do—they must, somehow—work together. Yet it still may not be easy to see how they blend.

Perhaps we should not expect an understanding of how the two separate stories of evolution and creation—one read in nature and the other in scripture—relate to one another. They probably describe different events. They have been obtained through different media and are interpreted through our different minds. But it is my firm conviction, resulting from both reason and revelation, that they are not mutually exclusive. Through the use of the *uncommon* denominator they will eventually be harmonized. In the meantime, we keep trying to fit the pieces of the puzzle together. We may hope to be able to do this at a time in the future when "[t]he Lord . . . shall reveal . . . things of the earth, by which it was made, and the purpose and the end thereof" (D&C 101:32–33).

In addition to mind dualism, there is another barrier to harmonizing information from science with that from theology. We have some restrictions of our perception of reality. Our mortal minds are limited to the extent that we can comprehend only certain aspects of matter, space, energy, and time.

What is the nature of *matter* or substance? A "solid" table is made of minuscule atoms whose ultimate nature is still largely unknown, which evidently are mostly empty space containing extremely tiny particles and electrical charges. If we could view the table from the dimension of subatomic particles, we would see that solid matter is almost entirely empty space.

A consideration of other *states* of matter—paradisiacal, celestial, and spirit matter—is even more overwhelming. Joseph Smith said, "All spirit is matter, but it is more fine or pure" (D&C 131:7). The heavens and their angels apparently exist in states of matter that cannot even be discerned with our vision.

The nature of *space* is related to matter. The mortal mind cannot fathom space that is infinitely large or infinitesimally small. Our perception of space is related to our size. If we were a million miles tall or as small as an electron, our view of reality would be much different than it now is.

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Further, our perception of space is limited to three dimensions, but perhaps there are more. In Edward Abbot's delightful little book *Flatland*,<sup>6</sup> the inhabitants perceive only two dimensions. Objects have length and breadth but no height. If your body were to pass through their flat plane of existence, they would see only a circle or oval section of you, viewed from its edge. They would not know that there was more of you, up and down from their plane, because "up" and "down" would be inconceivable. An adventurous Flatlander escapes into Spaceland and discovers the wonderful reality of three-dimensional objects. On his return to Flatland, he tries to describe what he has seen, but the others cannot comprehend his experience and refuse even to consider the possibility of a third dimension. The adventurer later encounters Lineland, whose inhabitants' view of objects is limited to only one dimension. From the points they occupy along a line they can only see forward or backward. Linelanders would see only one line of you. They cannot conceive of there being a second dimension and angrily reject Flatlander when he describes it. Later, when Flatlander asks a three-dimensional Spacelander to consider the existence of a fourth dimension, the latter flies into a rage. Back home in Flatland, our adventurer tries to teach his countrymen of a three-dimensional world, but they think he is insane and put him in an institution.

Are we as smug in our three-dimensional world as the Flatlanders in theirs? Perhaps the Lord operates in more dimensions than we can envision. If we will acknowledge that he *could*, it becomes less compelling for us to demand to know all of his works. Then we need not try to force the descriptions of his activities in spiritual or paradisiacal kingdoms into our limited, finite models.

Consider the properties of *time*. Its onward flow seems to be one of the constants in our existence. But let us use our imaginations to change time as we look at our world through the eyes of visitors from two other realms. *Minim* is from a planet where ten thousand of his years are compressed into one second of our time. Suppose he comes into our world where you sit by a tree, tossing rocks into a pond. He would find everything absolutely motionless and conclude, "In all recorded history nothing has changed. Everything is absolutely still. This creature called man has never breathed or had a heartbeat. The water is standing in stationary waves. A leaf and a bird are suspended in the air. Gravity is different here." *Chronos* comes from another strange planet, where one of his seconds is ten thousand years of our time. How would he see the same scene? By the time he sat down, taking

sixty thousand of our years to do so, the pond and forest would have vanished. You would be invisible to him, since your entire lifespan would be less than 1/100 of one of his seconds. The earth would be a dangerous place for him, undulating as mountains are built up and worn down in minutes. The time concepts of these imaginary beings provide different perspectives of what we call reality.

Let our imaginations carry us further. What would it be like if time were to have another dimension. Our time seems onedimensional—linear. It comes from the past and extends through the present into the future. Perhaps, in God's view or in the spirit world, there exist added dimensions of time. A line has only one dimension. No matter how long it is, when viewed from the end, the second dimension, it occupies only a point. Perhaps our infinitude of time—eternity—occupies only a point as the Lord sees it. At least, the Lord need not be restricted by our mortal perception of time. Alma said, "All is as one day with God, and time only is measured unto man" (Alma 40:8). Neal A. Maxwell, discussing God's foreknowledge of all events in our world, stated, "The past, present, and future are before God *simultaneously*—even though we do not understand how. . . . God does not live in the dimension of time as we do. . . . In ways which are not clear to us, he actually sees, rather than foresees, the future."

In addition to matter, space, and time, another "unknowable" is *energy*. We don't fully understand electricity, even though we have learned to harness and use it. Another form of energy that completely eludes our perception is priesthood—the energy we use when doing God's work. We see manifestations of priesthood power as miraculous events and do not demand a complete understanding. As we try to understand the complete (physical and spiritual) world around us, we must remember that God is not limited to the "reality" we can perceive.

Now back to the story of my search for an "official BYU position" that would settle the arguments about evolution and creation. After some struggle, I decided to ask the Lord how the separate stories relate to each other. Even though I was surrounded by those superior to me scientifically, as well as spiritually, I was brash enough to hope the Lord would assist me in finding an answer. After personal preparation, I petitioned the Lord and asked, "What is the answer?" There came clearly into my mind the statement, "There is an answer." I didn't learn what the answer is, but it is reassuring to know that it all fits together. I have come to realize that I don't need to know the answer now. Possibly I couldn't understand it if I had it.

My awareness of the uncommon denominator for reason and revelation, for science and theology, for evolution and creation, has changed me from one who thinks he knows to one who knows he doesn't know; from a position of hesitant uncertainty to one of admitted ignorance. I have developed a great appreciation for the unknown. While I don't know what I don't know, at least I am coming to realize *that* I don't know what I don't know! As de Hartog wrote, "Life and the universe are not only much more complicated than thou thinkest, they are more complicated than thou canst think."

# **NOTES**

<sup>1</sup>David O. McKay to Professor William Lee Stokes, 15 February 1957.

<sup>2</sup>Spencer W. Kimball, "The Blessings and Responsibilities of Womanhood," *Ensign* 6 (March 1976): 70–73.

<sup>3</sup>James E. Talmage, *The Earth and Man* (Salt Lake City: Church of Jesus Christ of Latter-day Saints, 1931), 2.

<sup>4</sup>Joseph Fielding Smith, *Doctrines of Salvation*, 3 vols. (Salt Lake City: Bookcraft, 1954), 1:143. <sup>5</sup>Journal of Discourses 8:162.

<sup>6</sup>Edwin A. Abbott, Flatland: A Romance of Many Dimensions, 5th ed., rev. (New York: Harper and Row, 1963).

<sup>7</sup>Neal A. Maxwell, "A More Determined Discipleship," Ensign 9 (February 1979): 69-73.

<sup>8</sup>Jan de Hartog, The Peaceable Kingdom (New York: Atheneum, 1971), 380.