

Faith Pulpit

Theology and Thermodynamics: The Synergism

Science and Religion

The relationship today between science and religion is, to say the least, strained. This has not always been so. Many of the early scientists were devout Christians.¹ Their work was fundamental to the development of modern science. Their influence and the rise of Christianity liberated science from the superstitions and polytheism that for centuries viewed the material world as being filled with various spirits and gods.² Under the Christian worldview true science emerged as the material world was shown to be a proper object of study. The study of the material world, in fact, was a God-given mandate (Genesis 1:28).

Science and religion not only have a historical relationship; they also have a fundamental relationship. Theology attempts to understand God and His work in relation to man and the world He created. Science attempts to understand that world. Science can be defined as “a human endeavor directed toward understanding the world in which we live.” The findings of science provide an insight into the wonders of God’s creation. Of these wonders, the developments of science in the field of thermodynamics are particularly helpful to the theologian.

Laws of Thermodynamics

The word thermodynamics is a combination of the Greek words therme (heat) and dynamis (force). The study of thermodynamics dates back to ancient times, but the formal study began in the early nineteenth century. It is a fundamental science, since the flow of heat and energy is basic to all natural processes. Developments in this field led to what are known today as the Laws of Thermodynamics. Two of these laws are quite popular: the First Law and the Second Law.

The First Law states:

Neither matter nor energy can be created or destroyed.

The Second Law states:

All natural, isolated processes proceed with a degradation of energy.

These laws may be stated in a number of ways, but all variations proclaim clearly that the origin of matter and the existence of order in the universe have no naturalistic explanation. Scientific laws are observations of how nature works or behaves the same upon repeated observations. There are no known exceptions, and the theoretical foundations show that any attempt to circumvent them will fail. The implications of these laws support the concept of non-natural origin and operation of the world in which we live. This non-natural implication is understood by the theologian to be “supernatural.”

It should be noted that scientific laws are quite different from God’s laws. Scientific laws are descriptive. They cannot be imposed. They can only predict the outcome of natural occurrences. God’s laws are proscriptive. They are declarations by God of certain outcomes, i.e. “Thou shalt not . . .” (Exodus 20:1–17), and “The soul that sinneth, it shall die,” (Ezekiel 18:4). Scientific laws describe how the natural world works. God’s laws reveal how God works. Scientific laws have no inherent authority. They result from observations of nature. God’s laws are authoritative. They are a reflection of His sovereignty. Scientific laws are man’s interpretation of nature. God’s laws are an expression of the nature of God, His creation, and His conditions for our activities. His laws are set forth in His revelation, the Bible.

The principle incorporated into the Second Law of Thermodynamics—that all natural processes proceed with a degradation of energy (or an increase in disorder)—has been found to hold universally. In information theory, information is degraded in all isolated processes; in design theory, complexity is always decreased in any isolated or natural processes, and there is a tendency toward disorder; in communication theory, information content is degraded in any communication process unless influences are present. It is now known that all natural processes that would result in increased complexity or order are not possible in our present world unless “non-system” influences or assistance are invoked.

Differing World Views

The current opposition of science (actually scientism) to theism results not from the statements of science about the world but from a different worldview. The worldview of naturalism does not embrace the idea of the supernatural. As a result, those with such a worldview try to find naturalistic (even fanciful) explanations for processes that are contrary to the principles of the First and Second Laws of Thermodynamics. Naturalistic proposals for processes (such as evolutionism), which would operate contrary to the principles of thermodynamics, actually support the principle because such

explanations require the injection of some “outside” energy, information, influence, or assistance into the process. An example is the classical experiment on the “Origin of Life” by Stanley Miller. This heralded demonstration³ used an electrical discharge ignition of a gaseous mixture of hydrogen, water, ammonia, and methane and produced a mixture of hydrocarbons. The experimental design, materials, operation, and control were all “non-natural,” and would have been present even if the experiment had produced some sort of life, which it did not. The requisite of non-natural assistance to “natural” processes in order to achieve any increase in complexity gives support to the thermodynamic principle that natural processes can only proceed toward greater entropy of less ordered products. Such dependence upon the non-natural is a strong argument for the theological declaration that “All things were created by Him, and without Him was not anything made that was made” (John 1:3).

The Second Law

The principle of the Second Law of Thermodynamics is not a surprise to the theologian. When Adam disobeyed God and was ejected from the Garden of Eden, God said, “In the sweat of thy face thou shall eat bread” (Genesis 3:19). All human experience since then has shown that processes do not proceed from the simple to the complex by themselves. Agricultural crops do not “bring forth” by themselves. They must be planted, cultivated, harvested, and prepared. Likewise, every action of man has tended toward disorder without unique human intervention or God’s deliverance.

This principle—that all natural processes tend toward disorder or chaos unless direct counter actions are taken—has been shown to be true for all physical processes. This raises the question whether or not the Second Law principle might apply to living systems such as individuals, groups, or organizations.

To answer this question, a review of the history of organizations is helpful. Governments, societies, and organizations are, in a real sense, living units since all groups are composed of individuals. Individuals invoke various processes—social, economic, technological, and others—which are subject to the limitations of the Second Law principle. A 20th century example is the history of fundamentalism in the United States. Prior to the fundamentalist movement beginning during the last half of the 19th century, most religious denominations and organizations were to a large extent fundamental. The Bible was held to be the inerrant Word of God, biblical doctrines were the basis of religious teaching and worship, and personal separation from worldliness was assumed to be the norm for the believer’s life. These guiding, founding convictions became less significant in many of these religious groups over time, and the Federal Council of Churches (later the National Council of Churches) was formed, cutting across denominational distinctions and teaching that “doctrine divides, service unites.” Concerned believers began to leave their historic denominations because of the disintegration of these founding doctrines. To preserve the fundamentals, they formed new organizations and associations, sometimes with great trials and hardships. Among those withdrawing was a group taking on the banner of The General Association of Regular Baptists.

By most accounts the National Council of Churches exhibited the Second Law principle, departing over time from a fundamental belief in the Bible as the “sole authority for faith and practice” to a position of relativism and a denial of the beliefs with which its member denominations had initially been formed. This liberal trend in the major denominations seems to mirror the Second Law principle. Paul identified this trend in Galatians 5:9, in a reference to false teaching: “A little leaven leaveneth the whole lump.”

Conclusion

In recognition of the principle disclosed in the Second Law, evangelical groups—churches and organizations alike—should guard against the tendency to “water down” biblical truths. Unless strong doctrinal discipline and militant emphasis on traditional beliefs are maintained, the Second Law principle will be exhibited. Individuals and groups of believers are exhorted to “be not conformed to this world” (Romans 12:2). Paul pleaded for an aggressive stand against this conformity.

The lessons of history and the testimony of the principles of thermodynamics are a clarion call for our church organizations to resist the tendency to moderate fundamental principles. Without a “militant” resistance to this liberal trend, our church bodies and organizations will inevitably conform to the world around them.

Works Cited

1. Morris, Henry M. *Men of Science/Men of God*. San Diego, CA: Creation-Life Publishers, 1982.
2. Percy, Nancy and Charles B. Thaxon. *The Soul of Science*. Wheaton, IL: Crossway Books, 1994.
3. Thaxon, Charles B., Walter L. Bradley, and Roger L. Olsen. *The Mystery of Life's Origin*. New York, NY: Philosophical Library, 1984.

Dr. David Boylan

Former Professor and President at [Faith Baptist Bible College & Theological Seminary](#) | [Other Articles](#)

Dr. David Boylan was a distinguished educator, pastor, and leader with a lifelong commitment to advancing biblical education and ministry. He served faithfully as the president of Faith Baptist Bible College and Theological Seminary from 1974 to 1980, where he focused on spiritual growth, academic excellence, and the training of servant-hearted leaders.

Known for his dedication to sound doctrine and a deep love for the Word of God, Dr. Boylan influenced countless students and colleagues through his teaching and administrative leadership. In January 2025, Dr. Boylan was promoted to Heaven. His legacy was marked by a steadfast commitment to equipping others to serve Christ effectively.