Chapter 7 A New View of God in the Age of Science

Since ancient times, theologies and philosophies have debated such issues as the existence and nature of God, and what the origin of the universe and all things are. These are essential questions; the answers to which fundamentally affect the guidelines for our life in terms of our view of nature, view of man, view of society, etc. So far, however, clear answers have not been given either by theologies or by philosophies. Paul Johnson, a British historian, noted that: “We can spend a lifetime in a library studying theology, but at the end of it all we have is knowledge of what men and women have thought about God.” In order to solve the many questions that arise in nature, human relations and the structure of society, the fundamental questions about God must be answered correctly.

During the 19th century, a powerful philosophy of materialism and atheism developed under the banner of science. As a result, the traditional religious view of God was greatly shaken, and religions were driven almost to the collapsing point. However, in the current age of science, with the appearance of a new scientific view of God, we are moving beyond atheism and rediscovering God.

I. Rediscovering God In the Age of Science

Whether God exists or not is a question that fundamentally affects one’s view of life. This is why the struggle between theism and atheism has been bitterly fought historically by both sides.

A. Traditional Methods of Proving the Existence of God

The first attempt to prove the existence of God in Christian philosophy was made by Archbishop of Canterbury, St. Anselm (1033-1109). He based his proof using the concept of God, a method called the “ontological proof” of God. Anselm’s argument is: The concept of God as the “most perfect being” exists within our thinking because God actually exist. What actually exists is more perfect than what exists only within our mind. Then, if God does not exist, what is more perfect than God exists: The concept of God as “the most perfect being” will collapse. Therefore, God must exist.

René Descartes (1596-1650) added to Anselm’s proof of God, stating, “the existence of God is proved by that fact that we, imperfect human beings, have the concept of perfect God.” It is because something cannot be derived from nothing, and the cause should be more perfect than, or at least equally perfect to, the consequence. If
we have created the concept of God, it means that the imperfect being has created the concept of the perfect, which violates this principle. Therefore, we have not created the concept of God, but rather the perfect God has implanted it in our mind. This method attempts to prove the existence of God by starting with human nature as its starting point—for this reason it is called the “anthropological proof” of God.

The approach to proving God’s existence advocated by Anselm and Descartes was discredited by Feuerbach (1804-72), who said as follows: God is nothing but the idealization and the objectification of the essence of a human being who seeks to attain his or her perfection. In other words, it is not because God exists that the concept of God exists within us. The concept of God is created by human beings. In short, human beings created God.

Thomas Aquinas (1224-12), who systemized scholastic philosophies, rejected Anselm’s ontological argument and advocated the “cosmological proof” of the existence of God. According to Aquinas, examining by regression the cause of movement in the natural world, we reach the ultimate cause, the first cause, which is God. This is based on the “unmoved mover” in Aristotle’s cosmology—the being which moves others without being moved, the ultimate cause of all movement. This argument did not persuade atheists and materialists, however, as there is no reason why the first cause, the ultimate cause of all movement, must necessarily be God. Atheists and materialists argue that no matter how far back the cause of matter is traced; it cannot be something other than matter. In other words, they insist that the First Cause of the universe, if it exists, is something like an original energy, which is still a material cause.

Then, there is the “teleological argument.” This view asserts that the universe is a gigantic ordered system formed in accordance with a plan based on a certain purpose, and that the planner is none other than God. Furthermore, from the fact that there is such beauty and artistry in nature, we cannot but conclude that God with the highest wisdom created the universe. Nevertheless, it is difficult for atheists and materialists to be persuaded by this argument, for they believe that the complexity of the universe and the beauty of the natural world can be explained by natural laws and by the process of natural selection advocated by Darwin.

There is also the “moral argument” for God as the original source of the laws of morality that human beings aspire to follow in their daily life. Kant was one of those who postulated the existence of God as the foundation of morality and moral living. Those who regard conscience as God’s voice belong to this group. Such an argument also fails to persuade atheists as they regard traditional morality and ethics as norms developed in feudal societies for the purpose of maintaining and strengthening the rule
of the upper classes over the lower, or as regulations to rule over the society.

All these traditional arguments for the existence of God have lost their persuasive power—they have been swamped by the atheism that has arisen in modern times.

B. The Rise of Godless Philosophies

In Greek mythology, Prometheus was a giant who revolted against Zeus, the chief of the Olympian gods. Against orders, he stole fire from Zeus and gave it to humankind. He tried to liberate humanity from the miserable rule of the gods. Atheists consider him the ideal of a human who revolts against God and attempts to live independently.

In the modern age, the Promethean spirit of revolt was revived in the 17th century atheism advanced by Hobbs. In the 18th century, many enlightenment thinkers challenged the traditional theistic views undermining faith in God. In the 19th century, Karl Marx initiated a worldwide offensive against God with his idea of Communism based on dialectical materialism. In his doctoral dissertation, Marx quoted Prometheus, “In simple words, I hate the pack of gods,” and made it clear that he was determined to become the Prometheus of the 19th century. Charles Darwin, who insisted that living beings evolved to higher stages in the struggle for existence he called natural selection, was also a promoter of the Promethean spirit. As if guided by a mysterious fate, both Marx and Darwin appeared on the stage of history at almost the same time. About a half-century later, Freud developed the view of physiological atheism by asserting that “humans are manipulated by sexual energy” further spreading the Promethean revolt against God.

On October 4, 1957, the Soviet Union launched an artificial satellite, Sputnik, for the first time in human history. At that time, Communists trumpeted that “it was proved that God did not exist in heaven.” In 1967, the Communist Party of the Soviet Union declared, “Even the final trace of religion shall be eradicated by 1980.”

Crumbling before all these attacks by atheism, traditional theology increasingly lost its power to persuade. In the 1960’s, the theological world lost authority rapidly. As theologian Langdon Gilkey records, many theologians raised such questions as “whether there be a God for theology to talk about at all” and “if it makes any sense to speak at all of God.” Increasingly, the theological world fell into a state of confusion.

In the latter part of the 20th century, however, the Promethean revolt against God rapidly lost its power, symbolized by the collapse of Communism in the Soviet Union and Eastern Europe. Darwinism, which appeared under the guise of science, is now being confronted with Intelligent Design and the New Creation Theory of Unification Thought (as discussed in chapter 1 of this work), and is losing its preeminence. The
sexual liberation, founded on Freudianism that denies traditional morality, has borne fruit by driving many into the abyss of moral degradation. As signaled by the prevalence of AIDS and the breakdown of the family, it is clear that such theories of ‘sexual liberation’ do not liberate human beings at all, but rather lead them to destruction. In these ways, the many Promethean assaults against God are losing their malign influence.

C. Beyond Atheism: The Rediscovery of God

Modern Prometheus, who bribed with gifts from the fire of science, has failed in the revolt against God. For God, who not so long ago seemed to be discarded as mythical and irrational, is coming back to the forefront as modern science is confronted with riddles that cannot be explained rationally unless God’s existence and His awe inspiring plan of creation are included.

1. Modern Cosmology

The Big Bang theory is the accepted explanation of the origin of the universe in modern science. It explains that the universe started 13.7 billion years ago with an explosion at a point out of which all matter and energy emerged at an extremely high temperature and density. As the well-known U.S. astronomer Carl Sagan acknowledged: “Why it happened is the greatest mystery we know.”

Given that the Big Bang occurred, there is still the question as to how the overall structure of the universe developed from this. One suggestion is that the Big Bang contained small “quantum fluctuations,” and that a massive initial expansion, called “inflation,” magnified these into the seeds of later structures. Theoretical cosmologist Katsuhiro Sato, who along with Alan Guth, advocated the concept of inflation, concluded that, “The only possible answer is that, while the universe was still extremely small, seeds [quantum fluctuations] were inserted and the universe was expanded through inflation.”

There still remains, of course, the fundamental question of why the fluctuations came into existence. Even more challenging is the question of how the universe with its intricate structure and order developed out of these small fluctuations. After all, the question of what became the seeds of the universe has not yet been clarified.

It is inconceivable that such things as the superclusters of galaxies like the Great Wall, the gracious whorl of our galaxy, the solar system with its eight unique planets, and the earth with its oceans of water are products of “quantum fluctuations.”
Much more reasonable is to accept the idea of a creation planned by God. There was a design to the birth and growth of the universe rather than just inflated “quantum fluctuations.” The design refers to God’s idea for creating the heaven and earth, to His Word or Logos. To the question of “Why the Big Bang occurred?” we can answer that creation started with God’s words “Let there be light!” To the question of “Where the huge energy which produced the Big Bang came from?” we can answer it was part of God’s original energy.

According to Stephen W. Hawking, the beginning of the universe involved “imaginary time” which, he explained, is something round like a ball where time and space are completely united. The primitive universe gave birth to the universe with real time as it expanded. In his view, it seems that there was no need for God’s input at the time of the creation.

Alex Vilenkin expounded on the idea of the creation of the universe from nothing. According to him, the universe appeared through tunneling from the vacuum, where there is no time, space, nor matter. This embryonic universe, which was smaller than an elementary particle, inflated and exploded to become the mega universe, within which an infinite number of universes were born through inflations. He thought that our universe is but one of many universes that have come into existence. His theory of creation of the universe from nothing also has no role for God.

Theories of cosmology, such as those advocated by Hawkins and Vilenkin, seem to have made God’s existence unnecessary. In fact, however, they have unconsciously entered into the realm of God. For example, Hawking’s primitive curved universe with unified unbounded time and space is speaking God’s realm that transcends time and space.

The same thing holds for Vilenkin’s concept. The “nothing” which he invokes is filled with the potential for energy, which is called the “energy of the false vacuum.” It is this energy of the vacuum that drove the Big Bang and resulted in the universe. He also thinks that in the original “nothing” there is no time or space but there are physical laws. That is the same as saying that “in the beginning there were laws.” Accordingly, Vilenkin’s position is that he recognizes the existence of God as the Being who established the energy and laws with which the universe was created.

2. The Anthropic Principle

In 1974, British astrophysicist Brandon Carter proposed the anthropic principle (strong anthropic principle). This idea is that the universe has all the qualities necessary to produce beings with such abilities as consciousness and intelligence. He noted, for
example, that if gravity had been a little weaker than it is, nuclear fusion would not have occurred in stars, and the heat and light necessary for life would not have emerged. On the other hand, if gravity had been a little stronger than it is, the stars would have burned out rapidly and there would have been no time for life to develop on a planet. He concluded that the universe is adjusted with dazzling accuracy. This strongly supports the idea that the universe was designed and created by God.

3. The Search for the Ultimate Substance

The Ancient Greek philosophers searched for the root of all things, the fundamental matter or arché out of which all else was made. For example, Thales (ca. 624-546 B.C.) identified arché with “water”; Anaximander (ca. 610-547 B.C.) called it apeiron, or “chaotic limitless matter”; and Anaximenes (ca. 585-528 B.C.) related it to “air.” Heraclitus (ca. 490-430 B.C.) identified arché as “fire”; Empedocles (ca. 490-430 B.C.) considered it to be the four elements of fire, water, air, and soil; Democritus (ca. 460-370 B.C. called it the “atom,” the fundamental particle of matter that cannot be further divided.

In the 19th century, the search for the ultimate nature of matter made rapid progress with the remarkable development of science. According to current physics, matter is made of molecules, molecules are made of atoms, and the atom is made of the elementary particles called electrons and quarks. Finally, these fundamental particles are condensations of energy.

The “atom” of Democritus corresponds to the twelve fundamental particles of matter, the quarks (which come in six varieties called up, down, charm, strange, top, and bottom) and the leptons (with six varieties called electron, electron neutrino, muon, muon neutrino, tau, and tau neutrino). In addition to these ‘particles of matter,’ there are the twelve messenger ‘particles of force’ (the gauge bosons such as the photon and gluon) which couple the four fundamental forces.

Complementing this, physicists also investigated the nature of the forces in the universe. Newton (1642-1727) revealed that the force pulling things down earth and the force between the stars in the universe is the same force; namely, universal gravitation. Then, Hans C. Oersted (1777-1851), Michael Faraday (1791-1867) and James C. Maxwell (1831-79) made clear that the electric force and the magnetic force were two sides of the one electromagnetic force.

In the 20th century, the strong and weak forces which are at work inside the atomic nucleus were found. The strong force is the attractive force that unites quarks into hadrons, and its derivative is the attractive force that unites protons and neutrons in the
nucleus. The weak force is involved in the decay of subatomic particles. These are the four fundamental forces in nature: gravitation, electromagnetism, the strong and the weak forces.

Oersted investigated the relationship between electricity and magnetism, with the belief that the various forces in nature are different aspects of one fundamental force. Following this belief, Maxwell accomplished the unity between the electric force and the magnetic force.

Einstein, who was also guided by the belief that the fundamental force in nature is one, spent many years attempting to unify gravity and electromagnetism. But, he did not accomplish this task.

After Einstein, physicists continued the task of unifying the forces. In 1968, Steven Weinberg, Abdus Salam and Sheldon Glashaw united the electromagnetic force with the weak force into the electroweak force. To this day, physicists are attempting to derive the Grand Unification Theory (GUT) which can unite the electromagnetic force, weak force and strong force into one. The final step will be to include gravity in what is often grandiosely called the Theory of Everything (TOE).

Thus, physicists think that four forces are ultimately united into one force. They also think that fundamental particles of matter are ultimately united into one particle. Furthermore, particle and force are ultimately united into one. The world where particle and force is united is none other than the realm of God: The God who is strong in power (Isaiah: 40).

In *The God Particle*, Leon Lederman explains that: “[In the beginning], it was a world of one kind of particle and one force carried by one messenger.” As the universe cooled and the Higgs field emerged this original unity fractured: “Whereas before there was only one particle, now there were twelve, and whereas before the messenger and the particle were the same, now they were different, and whereas before there was only one force carrier and one force, now there were twelve carriers and four forces.” With further cooling, atoms and molecules formed and the world of various things came into existence. It was the Higgs field and its quantum, the Higgs boson, that worked this transformation, which is why Lederman labeled it the “God Particle.”

The ultimate goal of modern physics is a unified theory in which all particles and forces are united. One of the attempts at a unified theory is “superstring theory.” According to this, the universe is composed of ultra-microscopic superstrings. Those strings are the ur-stuff that underlies all matter, forces, space and time. This theory is clearly an attempt to reach towards the realm of God.
4. The Origin of Life

Evolutionists explain the appearance of life as follows: About 4.6 billion years ago, the primitive atmosphere enveloping the earth consisted of methane (CH₄), ammonia (NH₃), steam (H₂O), hydrogen (H₂), nitrogen (N₂), carbon dioxide (CO₂), and so on. This components were activated by cosmic rays, ultraviolet rays, natural electric discharges (lightning), and other phenomena resulting in amino acids, sugars, nucleic acid bases, organic acids, and so on. These molecules were carried by rainwater into the ocean where they accumulated to form a “soup of organic materials.” In this soup, amino acids combined to form protein; nucleic bases combined with sugars and phosphoric acid to form nucleotides; and nucleotides combined to form the ribonucleic acid (RNA) and deoxyribonucleic acid (DNA).

Eventually a simple cell membrane was generated from fatty materials, and a primitive cell emerged consisting of nucleic acids and protein encased in a membrane. With this starting point, evolution started and the prokaryotic cell developed into the eukaryotic cell; and finally, when cells did not separate after cell division, the multicellular organisms emerged.

It has been experimentally confirmed that amino acids and nucleic acid bases are generated when a discharge of electricity, heat, ultraviolet rays, cosmic rays activate a mixture of steam, hydrogen, ammonia, methane, and so on. This is the abiotic stage in earth’s history, resulting in the formation of the organic chemicals that are the subunits of living beings. In order to connect this simple chemistry with the origin of life it is necessary that nucleic acids and protein enzymes be formed from these subunits. It is this step that is still an open question.

The process by which amino acids and nucleic acids monomers are combined into polymers is dehydration, the loss of a water molecule between them. This is supposed to have occurred in water, and this is difficult even in a well-designed experiment. How the first stage of that process occurred is still shrouded with riddles.

Recently, scientists think that it is probable that the main element of the primitive atmosphere of the earth were not hydrogen compounds like steam, hydrogen, methane, ammonia, but carbon dioxide. An emerging theory is that life was not created by atmosphere discharge and in an organic soup in the shallow sea, but rather it was born in the depths of the ocean. It is now known that bacteria that power their metabolism not with oxygen but with hydrogen sulfide exist around the hydrothermal vents in the deep sea. Even with this shift in focus, it remains a riddle how nucleic acids and proteins were formed from their monomers.

Nucleic acids (RNA and DNA) store genetic information in the pattern of the four
bases that is the genetic code. According to the information written in the genetic code, eggs of a frog grow into frogs, and eggs of a chicken into chickens. The origin the genetic code with this remarkable property is an unsolved problem.

Jacques Monod, a French molecular biologist, wrote, “But the problem is the origin of the genetic code and of its translation mechanism. Indeed, instead of a problem, it ought rather to be called a riddle.” Francis Hitching, a British science writer, also noted that, “Biologists, it seems fair to conclude, are unanimously ignorant about the origin of the genetic code.”

Another question about the origin of life arises because, in order to function in living systems, both nucleic acid and protein are essential; they need each other. Nucleic acids are produced and function by the work of protein enzymes; proteins are produced from the information encoded on the nucleic acids. The question is “which was produced first, nucleic acids or protein?” This is the same as the puzzle of “which came first, the chicken or the egg?” It is an endless circle and no clear answer has been found to either question.

In the cell nucleus, the pattern of bases in the DNA is transferred to messenger RNA (mRNA) which exits the nucleus and binds to complex RNA ribosomes (rRNA) where protein is formed by translating the base pattern using transfer RNA (tRNA). Through the work of protein enzymes, various functions of the cell such as metabolism are carried out. This one-way process of DNA to RNA to protein is called the central dogma. Recently, however, the “RNA world,” which claims that the first life started with RNA that had both the functions of self-duplication (the role of genetic information) and metabolism (the role of enzyme), has become more convincing than the central dogma. In contrast, there are also speculations as to a “protein world” origin of life which claims that some proteins held the first genetic information. Clearly, the origin of life remains an open question.

In an interview carried in the Japanese science magazine Newton, a leading researcher of ribozymes (RNA acting as an enzyme), Gerald Joyce, professor of the Scripps Research Institute, USA, when asked about the origin of life, replied, “Though I may disappoint readers, I don’t know how it happened. Neither does anybody else in the scientific world know.”

If we consider that the origin of life happened by accident, this question remains a riddle. However, with the view that that God’s design, the Logos, has been input onto the DNA written in genetic code, this riddle has a simple answer. Rather that asking “which came first, nucleic acid or protein?” we can postulate that both nucleic acid and protein arose simultaneously in the origin of life.
There is another unsolved question about the origin of life. That is the question of chirality, or the left-right asymmetry in molecules. Prof. Charles Starling, a British chemist, states:

While seemingly symmetric, the human form has asymmetry. In the face, there are delicate differences between the right half and the left half. The heart is located on the left side. The right lobe of the brain is bigger than left one. They have different functions. Nobody knows why they exist in that way. . . . All the twenty kinds of amino acid that make up the physical body of living beings on earth are of the left type for unknown reasons. It is the greatest riddle concerning the origin of life.11

Discussing this question, Louis Pasteur concluded, “The universe is asymmetrical.” The cause of this asymmetry exists within the characteristics of the Creator. In other words, the universe came into existence with asymmetry between right and left as subject and object reflecting the nature of God who has the dual characteristics of subject and object.

5. The Origin of Mind

Since Ancient Greece and through the Middle Ages, a predominant belief was in the dualism of mind and body which claimed that mind is completely different from body. Since the Renaissance, however, with the development of natural sciences, the human body was described with anatomy and the structure of the brain investigated. In neurophysiology, the brain is currently being investigated at the level of cells, and the majority of today’s neurophysiologists believe that mind is a function or product of the brain. In this view, it seems that spirit and God have been excluded from brain science.

However, as the result of the detailed physiological research of the brain, a new viewpoint is appearing: that the human mind cannot be explained solely as a function or product of the brain. For example, two Nobel Prize winning brain physiologists have championed this perspective:

Roger Sperry said that mind is something beyond the physical brain, and that mind is prior to the brain. He does not, however, recognize that the mind is a separate entity to the brain.

In the same way as Wilder Penfield, John C. Eccles insisted that, if we compare our brain to a computer, we need the soul or psyche as the computer programmer. As he explains:
An appealing analogy is to regard the body and brain as a superb computer built by genetic coding that has been created by the wonderful process of biological evolution. On the analogy, the soul or psyche is the programmer of the computer. Each of us as a programmer is born with our computer in its initial embryonic state. We develop it throughout life. . . . It is our lifelong intimate companion in all transactions. It receives from and gives to the world, which includes other selves. The great mysteries are in our creation as programmers or experiencing selves and in our association throughout life, each person with its own computer [italics added].

It seems that God has been shunted to a corner by the science of the brain. However, He has not been excluded, rather, His reinstatement is near at hand.

II. Unification View of God

A. God as the Origin of Spirit and Matter

The question, “Is the original source of the universe spirit or matter?” involves serious issues which also influence our view of life. Underlying this question is the enigma of how spirit and matter can relate to each other.

1. Materialism, Idealism, and Dualism

In Ancient Greece, philosophy started with materialism. Philosophers searched for the root of all things, or the fundamental matter (arché). They identified arché with, fire, water, air, or soil. Then, the atom, as a fundamental particle of matter that cannot be further divided, was considered arché.

In comparison with those materialistic philosophers, Pythagoras (ca. 570-496 B.C.) proposed the ideal principle which is different from arché. He noticed that mathematical relations are unchanging in the world of changing things and regarded “numbers” as essential. Numbers referred to the laws or types giving certain order to material beings.

Plato (427-347 B.C.) called the ultimate matter composing all things as chōra (matter). It was the same as apeiron (the limitless) proposed by Anaximander. The question, however, was how all things with shape and quality can come into being from unlimited matter with no shape and no quality. Plato thought of Idea or form as essential being. According to him, Idea, which is a non-material being, imprints itself into chōra and produces all things.

It was Aristotle (364-322 B.C.) who further developed Plato’s dualism of form and
matter. According to Aristotle, substance consists of form (eidos) and matter (hylé). Form refers to the essence that makes the substance into what it is, and matter refers to the material that makes up the substance. When we trace eidos and hylé back to their ultimate origin, we arrive at pure eidos (or prime eidos) and prime hylé. Pure eidos, or God, is pure activity without any matter; it is nothing but thinking itself. Thus, God was regarded as pure thinking, or thinking of thinking. Prime hylé, however, was considered to be entirely independent of God. In other words, according to Aristotle, there was a spiritual being (God) along with chaotic material at the origin of the universe. Therefore, his ontology was a kind of dualism.

Plotinus (ca. 204-270), founder of Neoplatonism in the Roman Era, called God the “One,” taking a position of monism. According to him, all things emanate from the One, the perfect God. In the process of emanation, as a created being gets further from God, the perfect nature of God is gradually diminished in spirit, soul, and matter. Matter, the lowest being, was regarded as the most imperfect.

In the Medieval Age, Thomas Aquinas (1225-74), who systemized Scholasticism and incorporated Aristotle’s thought, considered pure eidos, or thinking of thinking, to be God. However, from the viewpoint that God is the Creator of all, he did not recognize prime hylé as independent of God. Hence, following Augustine (354-430), he also claimed that God created the world from nothing: the doctrine of “creation from nothing” (creatio ex nihilo). God created everything, including matter.

To the Ancient Greeks, the study of natural science was recognized as being of great significance. Aristotle exemplifies this, being both a philosopher and a scientist who recognized not only pure eidos but also prime hylé as the ultimate origin of the universe. In the medieval age, however, Christianity excluded material elements from the origin of the universe, so the development of natural science was discouraged. As a matter of fact, the Church Fathers did not admit any significant meaning in making research of natural phenomena.

Giordano Bruno (1529-97), a philosopher of the Renaissance period, interpreted God as the “absolute identity of universal form and matter.” However, Bruno denied God as being transcendent and asserted a pantheistic worldview. He also taught Copernican heliocentrism. For these ideas, he was declared a heretic and burned at the stake. Nevertheless, he bridged the gap between God and nature, and opened the way to finding God within nature.

René Descartes (1596-1650) held that God, spirit and matter are three types of substance. He held that God’s substance is absolutely one but that in the created world, substance is dual, namely, spirit and matter (or mind and body). For him, spirit and
matter are independent of each other, though each of them is dependent on God. This dualism of Descartes made it difficult to explain how spirit and matter can interact with each other.

The Flemish philosopher A. Geulincx (1624-69), who followed Descartes in developing the doctrine of dualism, sought to solve the problem of how mind and body interact by explaining that God mediates between the two. In other words, the occurrence of a mental state gives God the occasion to cause a physical action corresponding to it; and the occurrence of a physical state gives God the occasion to cause a mental state corresponding to it. This is the essence of ‘occasionalism,’ a convoluted explanation that has no adherents these days. The root of Descartes’ problem was that he conceived of spirit and matter as being totally heterogeneous entities.

Spinoza (1632-1677) tried to overcome the difficulty of Descartes’ philosophy. According to him, thought and extension are not substances but merely attributes of God. All things do not exist independently outside of God; they are made to exist within God. In this way, he advocated pantheism, stating, “God is nature.” In Spinoza, God the Creator and the Dominator who exists outside the world has disappeared.

It was Leibniz (1646-1716) who developed Descartes’ and Spinoza’s standpoint of rationalism. According to Leibniz, substances are beings made of indivisibles he called monads. Each monad is a “living mirror of the universe” which reflects the universe. There are four stages of monads: the first is the monad that is almost unconscious (sleeping monad); the second is the monad of life (dreaming monad); the third is the monad of understanding (monad of spirit); the fourth is the highest monad, namely God. Leibniz was an idealist.

Locke (1632-1704), an empiricist, argued how cognition occurs, and said that the existence of God and spirit is certain but that the existence of material things is not certain. This point of view was developed by Hume (1711-1776) who doubted the existence of matter as substance; furthermore, he doubted the existence of spirit as substance. According to him, what actually exists is merely the “bundle of ideas.” In this view, there is no God.

Kant (1724-1804), who is considered the philosopher who united rationalism and empiricism, said that the noumenal world exists behind the material world of phenomena. He called the former the world of “things in themselves,” which is beyond the framework of our cognition. In Kant, God cannot be an object of cognition; His existence can merely be postulated.

Schelling (1775-1854), who followed Kant’s philosophy, thought the Absolute Being was perfectly indiscriminate, having absolute identity. According to him, spirit
and matter are not qualitatively different from one another; they are different only quantitatively. In other words, element of matter exists within spirit, but element of spirit is superior; and element of spirit exists within matter, but the element of matter is superior. However, there is a problem in this theory: it is not clarified how the difference between spirit and matter was brought about from the absolute identity.

Hegel (1770-1831) criticized Schelling’s concept of an Absolute Being having absolute identity. Though God is the being of identity, He has various differences in Himself, and therefore He is not static but dynamic and developmental. He insisted that Logos or God’s thinking develops, following a process in which *thesis* is opposed by *antithesis*, and both are united in *synthesis*, whereby thesis and antithesis are preserved and superseded (*aufgehoben*). He thought that the development of Logos leads the natural world and human society.

Feuerbach (1804-72) was greatly influenced by Hegel to begin with, but gradually rebelled against Hegel’s position of explaining everything based on God. He insisted that God is nothing but what man idealizes and objectifies about human nature (species-essence). He said that God did not create man; man created God. According to him, what exists is only man as a physical, sensory being.

Karl Marx (1818-83) fully developed Feuerbach’s atheism dialectically. Opposing Hegel’s idea, Marx denied that Logos develops dialectically in constructing the world. According to Marx, what exists is just matter; matter develops through the struggle of opposites, namely, thesis and antithesis.

In Hegel’s philosophy, the question was why Logos, or Idea, should lead to self-development. This difficulty was expressed by Max von Rümelin of Tübingen University, when he wrote, “Do you understand? Without your doing anything, will the Idea move by itself within your mind?”

While Marx’s material dialectic declares that things develop through the struggle of opposites, this does not accord with the way things work in the real world. If there is conflict, things tend to fall apart and not develop. Also in cognition, one cannot reasonably explain the active functions of inference, concern, binding, and so on from the materialistic position.

There are problems with all these viewpoints: materialism, which regards matter as the only ultimate source of the universe; idealism, which regards spirit as the only ultimate source; dualism, which regards both spirit and matter as the ultimate source; and the philosophy of identity, which insists on the absolute identity of spirit and matter in the Absolute Being. All these traditional views have their problems so there is a need for a new view of spirit and matter.
This summary of the development of the conventional philosophical theories concerning spirit and matter compared with the position of Unification Thought is illustrated in figure 7.1.

2. A New View of Spirit and of Matter

In Unification Thought, God is the “Being of harmonious dual characteristics of Original SungSang (essential character) and Original Hyungsang (essential form),” and is “the First Cause of the entire universe.” SungSang refers to the fundamental cause of spiritual, invisible and functional elements of the created beings. Hyungsang refers to the fundamental cause of physical and visible elements of created beings. To say that God is the “Being of harmonious dual characteristics of Original SungSang and Original Hyungsang” means that sungsang and hyungsang are not separated but united within God.

Materialism has been unable to explain how spirit comes into existence. Idealism has been unable to reasonably explain how matter comes into existence. Dualism has a problem that, while it recognizes God as absolute being, it also recognizes the material world as independent of God. Another problem of dualism, as Descartes recognized, is that it cannot reasonably explain the interaction between spirit and matter. Furthermore, if God is grasped as the absolute identity, as Bruno and Schelling did, it cannot explain how spirit and matter come into being from an absolute identity.

On the other hand, Unification Thought describes God as the “Being of harmonious dual characteristics of Original SungSang and Original Hyungsang,” and therefore, all the problems mentioned above disappear. God is not the absolute identity but rather He has the dual characteristics of Original SungSang and Original Hyungsang, so it is reasonable that both spirit and matter spring from God. God is also the subject harmonizing spirit and matter, namely, God is the oneness who consists of the two attributes, spiritual and material. Accordingly, spirit and matter in the created world are not totally heterogeneous. Spirit has necessarily material element, and matter has necessarily spiritual element. Therefore, spirit and matter can interact with one another.

According to Unification Thought, God’s SungSang has two aspects: Inner SungSang and Inner Hyungsang. Inner SungSang corresponds to the functions of intellect, emotion and will within the mind; Inner Hyungsang, corresponding to the elements of form within the mind, referring to such things as ideas, concepts, laws (principle), and mathematical aspects. Accordingly, God’s SungSang (mind) is the unity through the give and receive action between Inner SungSang and Inner Hyungsang. The center of this give and receive action is Heart and love, which constitutes the core of
Inner *Sungsang.*

Hegel thought that Idea or Logos itself is God and argued about the dialectical self-development of Idea. As already discussed, however, it is impossible for Idea to develop by itself. Ideas are formed and develop within the Inner *Hyungsang* of mind under the activity of intellect, emotion and will centered on Heart.

Theoreticians in modern science have variously concluded that the cause of the Big Bang was “primordial energy” (Jean Guittion), “the infinite energy with the appearance of nothing” (John Wheeler), or “the energy of false vacuum” (Alexander Vilenkin). We can assume that they are all speaking of the energy that exists in God’s *Hyungsang* and gave rise to the energy of the created world. In Unification Thought, the energy of God’s *Hyungsang* is called “pre-energy.”

When God’s pre-energy appears in the world of creation, it is manifested as the “forming energy” condensed in particles and the “acting energy” expressed as interaction. Leon Lederman said that there was one kind of elementary particle and one kind of force in the beginning. They correspond to the forming energy and the acting energy, respectively, that are united as “pre-energy” within God’s *Hyungsang.*

Lederman says, “In the beginning there was a Higgs field,”13 and that “The Higgs field is filled with energy.”14 He calls the particle or quantum of the Higgs field, the Higgs boson, the “God particle.” It is thought that the masses of the fundamental particles came into being through the interactions with the Higgs field. The views of Unification Thought and of modern physics are illustrated in figure 7.2.

With the development of quantum physics, there is no longer a scientific divide between material entities and non-material entities. According to the French philosopher Jean Guittion (1901-99), the distinction between matter and spirit corresponds to the complementary nature of the particle aspect and the wave aspect. He concludes that now is the time when a new way can be formulated to understand the unity of mind and matter. He calls his position “super realism.”15 His view is in harmony with the Unification Thought view that God is the “Being of harmonious dual characteristics of Original *Sungsang* and Original *Hyungsang.*”

However, the Unification Thought view of God is not pantheistic. God is the Being transcending the natural world. All things in the natural world are individual truth beings expressing God’s dual characteristics. In other words, nature is not God Himself but an expression of God. The way God manifests Himself in human beings is different from the way He does so in nature. God manifests Himself in image through human beings and symbolically through all things. “In image” means that God’s nature (Divine Character) and His image (Divine Image) are fully expressed in a true human being. A
human being, however, is not God Himself; rather God is the transcendental being who
dwells within human beings.  

This new view of spirit and of matter, which Unification Thought advocates, not
only regards God as the Creator with personality but also embraces the insights of
natural sciences. This is the foundation upon which theology/philosophy and science
can develop a harmonious unity.

**B. God as the Unity of Masculinity and Femininity**

According to Oriental thought, the origin of the universe is called *T’ai-chi* (The
Great Ultimate), which engendered two kinds of “ch’i,” namely, yang and yin. All
beings in the universe were generated from yang and yin, which permeates both spirit
and matter. Oriental philosophers thought that all existence and activity of both humans
and nature could be explained by this principle of yang and yin.

On the other hand, Western thought did not include this concept of yang and yin,
dealing only with spirit and matter. As we shall discuss, however, the universe does
involve the duality of yang and yin. This is why we need to discuss the relationship
between yang and yin within God, the ultimate origin of the universe.

**1. Modern Science and Pair System**

Modern science supports the yang and yin principle of the Orient, the existence of
complementary opposites. An example is the discovery of antimatter. In 1932, Carl D.
Anderson at the California Institute of Technology built a cloud chamber designed to
register and photograph the tracks of subatomic particles passing through it. He noticed
a bizarre new particle in his cloud chamber. It was exactly like an electron except for its
direction of curving in the magnetic field permeating the chamber. Analyses showed
that they were looking at the track of an electron with a positive charge. He called this
strange new object a “positron,” the first example of an antimatter particle.

Following the discovery of the positron, physicists at the University of California at
Berkeley succeeded in 1955 in producing the antiproton, a proton with a negative
charge. One year later, the scientists at Berkeley confirmed the existence of the
antineutron with a magnetic moment that was opposite to that of the neutron.

As physicists have clarified since those early experiments, all particles have an
antiparticle (although in some cases, such as the photon and neutral pion, the particle
and antiparticle are the same). Particle and antiparticle are identical in all aspects except
in the sign of their quantum numbers. This pairing of particles and antiparticles is an
example of yang and yin.
Within an atom, negative electrons and positive protons attract each other. In the chemical realm, anions and cations are united, forming various kinds of molecules. Why do positive charges and negative charges exist? To this fundamental question, physicists can only say, “We don’t know why. That’s the way it is.”

In this fashion, the microworld consists of positive and negative elementary particles, positive and negative atoms, positive and negative molecules, as well as neutral elementary particles, neutral atoms, and neutral molecules, in which positivity and negativity are combined.

We now turn our attention to the realm of living organisms. The first bacteria-like living organisms started with asexual reproduction (although even these can participate in ‘conjugation’ between pili+ and pili– varieties), but later, more sophisticated, living things developed the pairing of male and female which is the essence of sexual reproduction. How did sexual reproduction come into existence? This question is still an enigma as is explained in chapter 1.

2. God as the Harmonious Being of Yang and Yin

We have seen that the structure of the universe is based on the paired system: the mineral world is made up of paired yang and yin, and living beings are paired as male and female. Rev. Sun Myung Moon, the founder of Unification Thought, summarizes this point:

If there is a most arcane mystery in the world of beings, it is that man and woman have come into existence, and that male and female in animals have come into existence. Furthermore, in the plant world there are stamen and pistil; and in the mineral world there are cation and anion. In this way, everything has been made according to the pair system. Man and woman, male and female—the reason why things exist in this way is the mystery of mysteries.

For the universe to be based on pair systems implies that God, its ultimate origin, also has this nature. To say that God has nothing to do with yang and yin, nothing to do with male and female, is as unreasonable as saying that “God created the universe from nothing.” After all, God is neither masculine nor feminine but the unity of the two; God is the parent having both characteristics in harmony.

In monotheistic Christianity, God has traditionally been addressed as “Father,” a being with a masculine personality. Some have said that this expression was used not because God was regarded as masculine but because of the traditional patriarchy from
ancient times. These days, many theologians assert that God has no gender. As British historian Paul Johnson notes, this opens the question of “Why did God, being himself without gender, create gender in the first place?”  

In answering this question, he hints at the possibility that God is the unity of both as Parent by stating, “If it is helpful, it is perfectly permissible to see him as a Father, or a Mother, or both.”

This perspective is advocated by American theologian Jack Miles in his book, *God: A Biography*, which became a bestseller in the category of religion in the United States. There he suggests that God is the Original Being uniting masculinity and femininity as one within Himself:

*The human male alone is not the image of God, only the male and the female together.* And this duality in the image must somehow be matched by a duality in the original. It is this fact that requires us to speak of the exclusion rather than the mere absence of the feminine from God’s character (italics added).

In Unification Thought, God is the “Being of harmonious dual characteristics of Original *Sungsang* and Original *Hyungsang*” and, at the same time, He is the “Being of harmonious dual characteristics of Original Yang and Original Yin.” In terms of the relationship between God and the created world, God is the masculine subject partner and the created world is the feminine object partner.

Since God is the Being of harmonious Original *Sungsang* and Original *Hyungsang*, every created being (individual truth being) is a union of *sungsang* and *hyungsang*. Further, God has the harmonious dual characteristics of Original Yang and Original Yin, which are the attributes of Original *Sungsang* and of Original *Hyungsang*. Therefore, the created world consists of the following pairs: the “united being of *sungsang* and *hyungsang* with yang characteristics,” and the “united being of *sungsang* and *hyungsang* with yin characteristics,” namely “yang substantial being” and “yin substantial being.” In this way, on every level the created world is composed of the paired system of yang and yin.

In minerals, God’s Yang and Yin are manifested as yang and yin, both in *sungsang* and *hyungsang*, in the physicochemical realm. This is how yang and yin substantial beings are cation and anion.

In plants, God’s Yang and Yin are manifested as yang and yin, both in *sungsang* and *hyungsang*, in biological life activity. This is how yang and yin substantial beings are the male plant and female plant, or stamen and pistil.

In animals, God’s Yang and Yin are manifested as yang and yin, both in *sungsang*
and *hyungsang*, in instinctual activity. This is how yang and yin substantial beings are male and female.

In humans, God’s Yang and Yin are manifested as yang and yin, both in *sungsang* and *hyungsang* in the act of love: the harmony of masculine love and feminine love, and masculine body and feminine body. This is how yang and yin substantial beings are man and woman.

It should be noted here that the yang and yin elements of the lower beings are included in the higher beings. The pair system of yang and yin is illustrated in figure 7.3.

Then, for what purpose do yang and yin exist? They exist for the sake of love. Adam and Eve were supposed to grow up and love each other by becoming God-centered husband and wife. If they had been successful, they would have become the image of God resembling His harmony of Yang and Yin and God would have dwelt within them. God would have been filled with joy of love through Adam and Eve, and God’s purpose of creation would have been fulfilled. Male and female in the animal world, stamen and pistil in the plant world, and cation and anion in the mineral world were created as the symbol of masculine love and feminine love.

The purpose of all things is to create an environment of love where man and woman can love each other. All things are accessories to the love of humans. For instance, it is to enhance the atmosphere of love between man and woman that flowers bloom and birds sing.

Due to the Fall of Adam and Eve, however, love between man and woman was not true love. From that time, all things were unable to fulfill their original mission; they are earnestly longing for the appearance of true man and woman.

All things exist not only for the love between man and woman but also they exist to enhance the love between parents and children, and love between brothers and sisters. The reason why love between man and woman is stressed here is that the love between man and woman is the key for the perfection of human loves.

**C. Unity of Universality and Individuality**

**1. The Dispute over Universals**

One of the great arguments in the Scholasticism of the Medieval Ages was the dispute over universals with regard to the existence of universal concepts. In the early days of Scholasticism, the upper hand was with Platonic realism, which had that “universals are prior to individual things.” John Scotus Erigena (810-877) and Anselm
(1033-1109) were the representatives of this perspective. On the other hand, Roscellinus (ca.1050-ca.1120) advocated nominalism, which stated that “universals follow after individual things.” Only individual things are true reality, while universals are merely abstracts or names which humans created. In this fashion, realism and nominalism took opposing points of view.

Later came a third position, called Aristotelian realism, which tried to mediate between those two positions. While Plato maintained that the universal form (Idea) is the true being, Aristotle considered the individual concrete being as the primary substance and the universal as the secondary substance, which exists in an individual being as its form.

Peter Abelard (1079-1142) thought that universals exist first within God, that they then exist within individual things as common essentials, and finally they exist within the human mind as concepts used in thinking. Thomas Aquinas (1225-1274) thought, like Abelard, that universals exist within God and that God created the world using them as prototypes. He also maintained that, since characteristics within individuals are universal, it is matter that makes individual beings individual; “matter is the principle of individuation,” in the same way as Aristotle did. The position of Aristotelian realism was that “universals exist as the forms in individual things.”

On the other hand, John Duns Scotus (1265-1308) insisted that it is not matter but individual forms within individual beings that make individual beings individual. Although he accepted the position of Aristotelian realism, he regarded individuality as important and tried to take a position closer to nominalism.

In the Scholasticism of a later period, William of Ockham (ca.1280-1349) clearly advocated the position of nominalism. According to him, what really exist are only individual beings. The universals are merely terms or words for the categories of many individual things. He even denied the universal idea within God and thought that what exist within God are the images of individual beings.

Against the abstract and speculative thinking, nominalism took a position that gave importance to intuitive and empirical knowledge. This promoted a separation between knowledge and faith, which heralded the collapse of Scholasticism and the birth of modern philosophy.

In the Modern Age, nominalism developed into British empiricism, which put an emphasis on individual facts and specialties. On the other hand, following in the tradition of Scholasticism, the ideas of conceptual realism were maintained in both Peirce’s philosophy, which emphasized the universality of reason and laws, and logical positivism, which emphasized the importance of mathematics and logic.
2. Views of Modern Biology

In Biology, a species refers to a group of organism that can sexually reproduce with each other. The sexual intercourse between individuals of the same species gives rise to offspring also capable of reproducing with members of the species. For example, the result of sexual intercourse between a horse and a donkey is a mule. A mule, however, is sterile and cannot give birth to offspring. This is why a horse and a donkey are regarded as belonging to different species. A leopon, born of the mating of lion and leopard, is likewise sterile, so lion and leopard are considered different species.

We see from this that the concept of a species is not just merely a name that human beings invented for the sake of expediency. It indicates that there are universal as well as individual aspects to living organisms.

3. The View of Unification Thought

From the Unification Thought viewpoint, “idea” and “concept” exist within Inner Sungsang of God’s Sungsang. “Idea” refers to concrete representation; “concept” refers to abstract, universal representation. “Idea” is individual; concept is universal. An “idea” existing within God is called an individual image. It should be noted here that the universal in God is often referred to as Idea in the ordinary textbook of philosophy, while in Unification Thought, “concept” refers to universal image and “idea” refers to individual image within God.

When God created human beings, He envisaged concrete images of Adam and Eve. At the same time, however, He had abstract, universal concepts such as man, woman, and a human being. This does not mean that “idea” and “concept” exist separately from one another within God’s Sungsang. When God envisaged the image of Adam and Eve, those images included not only individuality but also universality such as man, woman, and a human being. In other words, individuals and universals, or “idea” and “concept”, are united within God’s Sungsang.

Created beings consist of dual characteristics of sungsang and hyungsang, and the individual and the universal are united in both. For example, Adam had his unique individuality, while having universality as a man and as a human being, both in his mind and in his body. It should be noted here that individuality and universality in sungsang (mind) is cause, while individuality and universality in hyungsang (body) is result. Therefore, matter is not the principle of individuation. Individuality originate from the idea in God, and the idea reside in the sungsang of individual being, which is to be clothed in matter.
When God created human beings, He gave unique individuality to each person, while, in the case of all things God gave an individual image to each species rather than each individual. The individual image of human beings is called “personal individual image,” while the individual image of all things is called “species individual image.”

God envisaged and created individual beings in order to love and feel joy from them. God gave individuality to each human being so that He could obtain unique joy from each one. To all the other beings, He gave individuality to each species so that He could obtain joy from each species. For God, all things are His indirect object partners of joy, and all things were created as direct object partners of joy for human beings. Therefore, God gave the individual image to each species of all things. It is possible, however, for all things to develop a unique individuality by being kept and loved by human beings. The dispute over the priority of individual or universal in Scholasticism, and their unity in Unification Thought is summarized in figure 7.4.

Traditionally, Scholasticism thought that Ideas in God are universals. The view that individual ideas exist within God did not appear until nominalism was advocated at the end of the Scholastic period. When it was developed by Ockham, he recognized the existence of individual ideas within God; however, he became too extreme by insisting that there was no universal idea or concept within God. From the Unification Thought viewpoint, however, universality and individuality are united both within God and in the created world.

In modern philosophy, there was empiricism on the one hand, which put emphasis on individual facts and particularity; on the other hand, there arose rationalism and logicalism, which see the existence of universal laws within things. For the reasons discussed above, however, both views are harmoniously united in Unification Thought.

**D. God of Heart—Creation out of Love**

Before this time, both religion and philosophy have been unable to clarify the reason why God created the universe. They made creation a fait accompli and went on from there. It is necessary, however, to understand the reason as it determines the significance of human life and the universe we inhabit.

**1. Ambiguous Traditional Views as to Why God Created the Universe**

In Christianity, God’s essence is love. That love is regarded as freely given love with no underlying purpose. In other words, God does not love for some particular reason, but loves unilaterally. God’s love stands by itself, having nothing to do with the object of love. As Henry Thiessen, a systematic theologian, puts it, “The universe and
man are not necessary to the exercise of God’s love.” The notable Swiss theologian Karl Barth (1886-1968) also states, “God is not lonely even if there is no world or human beings.” God is a being of self-sufficiency. God’s love is a gift that, as a matter of grace, is given unilaterally from the perfect God to sinful human beings.

If this is so, then why did God create the universe and human beings? To this question, Thiessen answers, “He created in order to display his glory;” while Jacobs (1844-1932), a systematic theologian, says that it “was for the purpose of manifesting God’s perfection.” These are not satisfactory reasons for creation, however, for if God is the self-sufficient, perfect being, then God’s glory and his perfection must also be self-sufficient.

In Christianity, there is a great difference between God’s love and human love. If there is no necessity for God to create humans and the universe, it is difficult to have confidence in the existence of God. If God did not necessarily have to create human beings and if He did not necessarily have to love them, then from the human standpoint, God’s presence is not an absolute necessity. Such a lack of a reason makes room for the rise of atheism and the view promoted by Feuerbach that God did not create man but “Man created God.”

According to Feuerbach, the essence of human beings is reason, will, and love. As an individual, a human being is finite but still hopes for perfection in these qualities. Therefore, Feuerbach considered perfect reason, perfect will, and perfect love as the essence of our species. He insisted that the objectification of this species-essence, the essence of human being, is the being we call God. An artist paints a picture by objectifying the idea envisioned in the mind. By the same process, according to Feuerbach, human beings came to worship God by objectifying the ideal within their mind. He concluded that God did not create human beings and the universe. Rather, human beings created God.

Christian thinkers were unable to discredit such an attack. If they had clearly known why God created human beings and the universe, they would have been able to refute such a view with confidence. However, that was not the case and Feuerbach and others promulgated this point of view. Marxism later developed based on such atheistic concepts.

Likewise, other religions have been unable to clearly explain why God created human beings and the universe. In Islamic creation, it is said that the Allah created the world “to set forth his truth.” However, it is not clear, as in the case of Christianity, why Allah, the perfect and almighty being, needed to create humans and all the other creations. I-Ching of the Oriental explains that Taichi produced yin and yang, from
which the four symbols and then eight trigrams came into being. On this foundation, all
things came into existence. It does not clarify, however, why yin and yang came out of
T’ai-chi and why they developed into the universe and humans.

2. The Cause of Creation from the Standpoint of Modern Science

Cosmologists seek to understand what caused the birth of the universe. Michael
Turner, an American cosmologist, says as follows:

I suspect that we may always find ourselves in this position—that to go the next
tiny fraction of a second we will need some further knowledge that we won’t yet
have. . . . If so, it may be a very long time, if ever, before we can answer the
question that everyone would like to know—the question of what caused creation.25

Lederman hopes that clarifying the Higgs filed and finding the Higgs particle will
clarity how God created the universe:

Before Higgs, symmetry and boredom; after Higgs, complexity and excitement.
When you next look out at the night sky you should be aware that all of space is
filled with this mysterious Higgs influence, which is responsible, so this theory
holds, for the complexity of the world we know and love. . . . And our picture of
how God made the universe depends on finding the Higgs boson.26

John Wheeler, an American physicist, thinks that the answer may be found beyond
the Planck boundary, the limit of current physics. He expressed this conviction in 1985:

To my mind there must be, at the bottom of it all, not an equation, but an utterly
simple idea. And to me that idea, when we finally discover it, will be so compelling,
so inevitable, that we will say to one another: “Oh, how beautiful. How could it
have been otherwise?”(italics added)27

As John Wheeler expects, a beautiful answer to the cause of the creation of the
universe will emerge based on some simple idea, transcending mathematical equation.

3. A New Theory of Creation

Unification Thought views God as the God of Heart, heart being the emotional
impulse to seek joy through love. God is the God of love, but He cannot have the
stimulating joy of love if it just exists within God as a concept. It is only by having an object to love that one obtains joy. Accordingly, God could not help but create human beings as His object of love. He also had to create the universe and all things as the object of love for human beings and as the environment for human beings to live in.

God created Adam and Eve, intending to be joyful by loving them. He was pleased to see Adam and Eve grow, but that was not His ultimate goal. When Adam and Eve matured and married, then God would have dwelt in Adam and Eve, and His heart would have been filled with joy by experiencing conjugal love between Adam and Eve, and when children were born to them, God would have been filled with joy by experiencing parental love, together with Adam and Eve. It is in this way that God’s love would have become perfected. Due to the Fall of Adam and Eve, however, they did not perfect their love, and consequently, God was not able to perfect His love, either.

According to the traditional view of God, God’s love is considered to be perfect in itself. From the viewpoint of Unification Thought, however, that cannot be the case. When human beings as man and woman perfect their love, then God’s love also can become perfect. Since the universe and all things were created as the environment of love for human beings, they also would become perfect when human beings perfected their love. Accordingly, as a result of the human Fall, the universe and all things have not yet reached their perfection.

**E. God of Logos**

In the Gospel according to John, it is written, “In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God; all things were made through him, and without him was not anything made that was made” (John: 1: 1-3). God created the world through His Word. This Word, or Logos, is God’s thinking, not literally a speech uttered by God, it refers to God’s idea, blueprint, and the design of His work of creation.

From the viewpoint of Unification Thought, Logos is formed when the Inner Sungsaeng and Inner Hyungsang within God’s Sungsaeng are engaged in the give and receive action centering on God’s purpose of creation. In other words, Logos is formed when God intends and plans the creation of heaven and earth. In the formation of Logos, reason within the Inner Sungsaeng and law within the Inner Hyungsang play particularly important roles. This is why Logos is sometimes referred to as “reason-law,” which denotes the unity of reason and law. It should be noted here that law refers to both natural laws which govern nature, and to norms, or moral and ethical laws, which guide us.
1. The Work of Logos

God created the universe through Logos, and guided the development of the universe through Logos. All things were also created through Logos and to grow in accordance with Logos. Takafumi Matsui, a geophysicist, who drew world attention to his theory concerning the birth of the ‘planet of water’ earth, states:

If we describe the evolution of the earth, taking into consideration only its cooling, it would be difficult to recognize some will giving direction to its evolution. However, what is the meaning of the fact that the earth made the sea and the continents and has been evolving in the direction of reducing carbon dioxide? Does it not seem that one will is working there in the sense that the direction of evolution has been determined through mutual relations among those things? The evolution of the earth does not simply mean that the earth has cooled down in terms of temperature. The earth has been evolving as if it had its clear will. Needless to say, the will refers to the direction of giving birth to life, higher life and making such a comfortable and stable environment in which the life can multiply (italics added).28

That “one will is working” implies that there is a purpose and a plan for the birth of the earth. In a similar way, philosopher Jean Guittton, states:

When we think of the “mathematical order” which manifests itself at the center of reality, we cannot help reasonably thinking that the mystery hidden behind the universe must be at least a super-mathematical intellect. It is calculative, and “relational,” though this word may not be appropriate. In other words, it must be abstractive and spiritual being which produces various relations. Accordingly, some intellectual, rational being, which the Greek once called “Logos,” does exist and adjusts, guides, moves, and by its action makes the universe orderly rather than chaotic (italics added).29

Here he clearly states that Logos must be guiding the universe. Lederman also says, “The laws of nature must have existed before even time began in order for the beginning to happen.”30 The laws correspond to the Inner Hyungsang aspect of Logos.

2. The Music of the Vacuum

According to superstring theory, elementary particles come into being through the
vibration of superstring in vacuum. In this, only the elementary particles of a particular type with certain mass are allowed. In this theory, the vacuum produces various particles just as a violin string produces distinct notes of sound—the music of the vacuum.

John Hogan, a science writer, explains superstring theory in just this way: “Just as vibrations of violin strings give rise to different notes, so could the vibrations of these strings generate all the forces and particles of the physical realm.”

Michio Kaku, a theoretical physicist, concludes, “In summary, the ‘notes’ of the superstring are the subatomic particles, the ‘harmonies’ of the superstrings are the laws of physics, and the universe can be compared to a ‘symphony’ of vibrating superstrings.”

Music is a series of notes ordered by a musical score. That elementary particles and forces are produced as music of the vacuum implies that they are produced through the Logos which corresponds to a musical score. With regard to the origin of the universe, Alan Lightman, professor at the Massachusetts Institute of Technology, states:

A more vexing question is whether Vilenkin’s nothing is truly is nothing. According to the theory of quantum physics, the physicists’ vacuum is jammed full with information about all the various types of particles that it might suddenly spit forth. For example, only certain types of subatomic particles with certain masses can exist, and the vacuum must somehow know what it is allowed to materialize as and what not. Indeed, in some interpretations of the quantum theory, the multitudes of subatomic particles that occupy our world already have ghostlike existences in the vacuum, waiting to be summoned forth by random microscopic events. In this picture, Vilenkin’s nothing would actually be a haze of potential universes waiting to come into being (italics added).

Here, the statements that “the vacuum is jammed full with information about all the various types of particles” and that “the multitudes of subatomic particles . . . have ghostlike existence in the vacuum” are the same as stating that underlying the vacuum, the Logos, or design of particles, is working to give it form.

3. A Magic Box Opened as the Universe

Astrophysicists variously state that “The universe is the fluctuations of vacuum,” “The universe came into being abruptly after tunneling through an energy barrier,” and “The universe came into being as a result of expansion and explosion through the
inflationary Big Bang.” However, is it reasonable to consider that the orderly and beautiful heavenly bodies were made just through simple fluctuations, expansions, and explosions? With regard to this point, scientists find themselves in a state of doubt and the impression that there is more at work.

Consider a burst fireworks launched into the dark night sky. Fireworks involve the explosion of gunpowder with metallic salts added for color. If the powder is put into a ball at random and launched, only sparks come off in all directions without making beautiful flowers of fire. The beautiful flowers of fireworks come into being due to the time-honored techniques and skills of pyrotechnists. In a pyrotechnic display, fireworks can be regarded as a “magic box of flowers opened in the sky at night.”

The heavenly bodies in the universe also have a beautiful appearance. The Andromeda Galaxy, which is famous for its spiral beauty, and the Lagoon Nebula, which is called a flower in the heaven, are as flowers blooming in the universe. While hard to see as we are inside it, our home galaxy, the Milky Way, is equally beautiful. Our home planet, the blue water Earth is marvelous in its beauty. They are all a “magic box of stars opened in the universe.” Like a genius pyrotechnist, God set His Logos at work on energy of the universe, which deployed itself through expansion and explosion. Logos is not something simple like fluctuations. Logos is the structure of the universe designed with the clear purpose of making the earth as the dwelling place for human beings. The Logos has been guiding the universe from its very beginning through its development into the universe of today.

After describing the history of the earth, Takafumi Matsui exclaims that “The third planet in the solar system has become the ‘planet of water’ with its truly remarkable perfection”\textsuperscript{34} and that “we cannot help thinking that the universe has the necessity of producing the earth.”\textsuperscript{35} Indeed, the universe was formed by Logos so that the earth could come into being as the home for humanity.

4. Mathematical Principles in the Natural World

Pythagoras of Ancient Greece considered “number” as the \textit{arché} of all things. According to him, numbers give forms to all things; what is indeterminate becomes determinate (harmony) through numbers. Numbers are none other than the mathematical principles within Inner \textit{Hyungsang}. The Pythagoreans observed the Logos, in its mathematical aspects, at work in the natural world.

According to Unification Thought, each number has an internal meaning. As explained in the previous chapter, we see similar mathematical patterns in the viewpoint of Unification Thought, that of the \textit{I-Ching}, and the discoveries of modern science. Such
diverse patterns are a reflection of the mathematical principles within God’s Logos at work in the world about us.

5. The Puzzle of the Genetic Information

As noted above, the puzzle as to the origin of the code used in DNA is solved when it is understood as reflecting God’s Logos. Kazuo Murakami, a genetic researcher, who decoded the genes for renin, says that there is a ‘library’ of genetic information in a cell. He has drawn attention to an important question: “Who on earth has drawn the design for this remarkable genetic code, a code that stores the elaborate design of life?” He thinks it unlikely that this design emerged randomly and concluded that it must have been brought about by some great being, a being transcending the human. He labels this transcendent being as “Something Great.”

The Inner Hyungsang of God is like a library in the mind of God. The content of this library was transferred into the cells of living beings as genetic information. This supports, from the viewpoint of modern science, the view that living beings were created through Logos.

6. The Norm of Human Being

A human being aspires to be moral and ethical, which implies that human beings observe a norm. Since ancient times, philosophers have said that a human is a being of norm. For example, Socrates taught that human beings should become virtuous. He taught that, to accomplish that purpose, one must realize that one is ignorant and listen to the voice within. Only in that way, he said, can one obtain the truth. This insight taught by Socrates referred to the norm that human beings should observe.

According to Kant, the inner moral law urges us to action as the voice of duty. He said, “Duty! Thou sublime and mighty name that dost embrace nothing charming or insinuating, but requires submission . . . but merely holdest forth a law which of itself finds entrance into the mind, and yet gains reluctant reverence.”

The ‘inner voice’ of Socrates and the ‘voice of duty’ invoked by Kant are none other than God's Words working within the human mind. God's Words were given to Adam and Eve, the first ancestors of humankind, as the commandment that “You shall not eat the forbidden fruit.” Later, the Word was given to Moses as the Ten Commandments. Similar Words from God were also given to the founders of other religions. These Words had a continuing impact on the human mind. Based on them, morality and ethics came into being. Therefore, the norm that human beings should observe is derived from God’s Words, or Logos.
F. God of Creativity: Creator of a Beautiful Universe

Creativity is the ability to make a new thing through give and receive action. God’s creativity has two stages. The first stage is His ability to form the Logos through the give and receive action between Inner Sungsang and Inner Hyungsang. The second is His ability to make created beings through the give and receive action between Logos (which is formed within Sungsang) and pre-energy (Hyungsang). Give and receive action is performed centering on the purpose of creation, which is established by Heart. Accordingly, God’s creativity is centered on Heart. In other words, His creativity is based on love. That means that God created the universe and all things in order to love human beings.

God’s love-centered creativity is illustrated by the earth, the third planet in the solar system. It is miraculously and beautifully constructed as the environment for human beings and all things to live, as explained as follows:

1. The Planet of Water

The existence of water is an absolute necessity for life. According to the theories of modern science, the ocean on earth came about in the following way.

Comets and asteroids collided with the primitive earth, bringing with them the volatile molecules, particularly water. These molecules became the earth’s initial high-temperature atmosphere whose main component was water vapor. When this period of bombardment ended, the surface temperature of the earth cooled as the heat radiated away into space. The water vapor in the atmosphere condensed as rain, which fell in torrents onto the surface of the earth. In this way, the earth became the planet of water with its surface covered by the ocean.

We see design in the appropriate existence of the comets and asteroids with their cargo of water, and the appropriate ending of their bombardment on the earth. Also we see design in the appropriate positioning of the earth in what scientists call the “Goldilocks Zone” of not too hot, not too cold. The earth is not too near to the sun, so the water is not disassociated by the sun’s ultraviolet and so escape into space as it did on Venus. The earth is not too far away from the sun that the water is not all frozen as it is on Mars. It was just right for the vapor to cool into rain and create the oceans. Considering this, we see that the earth was thoughtfully designed to become the beautiful planet of water.

2. An Atmosphere of Much Oxygen and a Little Carbon-Dioxide

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The present day atmosphere of the earth consists of 78% nitrogen and 21% oxygen with carbon dioxide at only 0.03%. For human beings, who maintain life by inhaling oxygen and exhaling carbon dioxide, the abundant existence of oxygen is an absolute necessity. If there were too much carbon dioxide in the atmosphere, the temperature of the atmosphere would soar due to the green house effect. Such a minimal amount of carbon dioxide is thus also an indispensable condition for life. The atmosphere of the earth fulfills both those requirement remarkably well.

About 3.5 billion years ago, the blue-green algae in the ocean began to make oxygen through photosynthesis. Oxygen accumulated for a long time, and about 400 million years ago, the oxygen reached its current level of 21% of the atmosphere. The carbon dioxide, which started at quite a high concentration in the primitive atmosphere, was carried by rainfall into the ocean where it combined with calcium and precipitated out as calcium carbonate. This was transferred by tectonic convection into the depths of the earth. This process was hastened in later ages by organisms, such as coral and diatoms, that used carbon dioxide to make calcium carbonate skeletons that fell to the ocean floor creating limestone strata. In this fashion, the concentration of carbon dioxide in the atmosphere decreased to the current level of 0.03%.

However, if the concentration of carbon dioxide decreases further, plant life would be impossible, and the temperature of the atmosphere would go down and the ocean of the earth gets frozen just as that of Mars did. It is important, therefore, that the carbon dioxide within the atmosphere must be maintained at the level of 0.03 %. Volcanic activity returns carbon dioxide to the atmosphere in a cycle that keeps it at a constant level. In this way, the constituents of the atmosphere are beautifully adjusted so that they do not go up or down too much.

3. Existence of the Ozone Layer

Oxygen was discharged into the atmosphere by blue-green algae. In the upper layers of the atmosphere, molecular oxygen was dissociated into atomic oxygen by the sun’s ultraviolet light. These free atoms combine with a regular O₂ molecule of oxygen to form O₃ ozone molecule.

This ozone layer absorbs the harmful ultraviolet from the sun and prevents it from reaching the surface of the earth in appreciable quantities. Without this, it would be impossible for life to exist on earth. We see that the ozone layer was also created to prepare an environment where human beings and other living beings can thrive.

4. Formation of the Magnetosphere
The earth is bathed in the “solar wind,” a current of plasma emanating from the sun. It is also constantly bombarded by high-energy “cosmic rays,” mainly protons, that fleet through the universe. Both of these are dangerous to living organisms because they destroy genes. There is, however, a magnetic field about the earth generated by the convection of the molten iron core. It is the magnetosphere that prevents the solar wind and cosmic rays from penetrating to the surface. The magnetosphere is just like a space suit, protecting living beings on earth from the hostile environment of space. The magnetosphere and the ozone layer were created for the safety of human and other life.

5. The Tilt to the Earth’s Axis

The axis of rotation of the earth is inclined at 23.5 degrees to the plane of revolution about the sun. It is this axial tilt that creates the four seasons of spring, summer, autumn and winter on earth. If there were no tilt to the earth’s axis, there would be no change of seasons. The temperature would not change throughout a year; the climate would be monotonous. The earth’s axis has a tilt of 23.5 degrees so that there may be the change in the seasons.

6. The Speed of the Earth’s Rotation

If the earth were rotating more slowly than it does at present, the temperature would get very high during the daytime and very low at night. If the earth were rotating much faster, the winds would be much stronger and there would be a constant leakage of the atmosphere due to centrifugal forces. The speed of rotation is just right to maintain a beneficent environment for human and other life.

7. The Moon Keeps the Earth Stable

In its rotation about the earth, the moon gives a rhythm to life on earth. Furthermore, the earth by itself would be unstable in its orbit around the sun. The moon keeps the tilt of the earth’s axis constant, unlike Mars or Venus, for example, which has had a wide variety of axial tilts in their long histories. Just as a high wire acrobat maintains balance with a long pole, so the earth maintains its stability with the moon going round it at a distance: the moon plays the role of a pole to maintain the balance of the earth. Thanks to the moon, the earth has a stable orbit, maintaining a stable climate as well as the regularity in the change of seasons.

8. Saturn and Jupiter Protect the Earth

There is a danger that asteroids and comets could collide with the earth. In July
1994, Comet Shoemaker-Levy 9 collided with Jupiter making earth-sized splashes. Astronomers were very excited with this event as it is estimated to only occur once in tens of thousands of years. If this comet had hit the earth, however, it would have made the survival of humankind problematic. In clearing out any comets that sweep into the inner solar system, the gas giants of Saturn and Jupiter greatly decrease the danger of such an event. In this role, Saturn and Jupiter play the role of guardians of the earth.

9. Dispersion of Solar Energy by Clouds

The quantity of heat supplied to the earth by the sun is the most at the equator. The heated atmosphere picks up water there and flows from the equator to the north and to the south. The clouds whirl counterclockwise in the northern hemisphere and clockwise in the south. There the clouds release their water as rain and liberate the latent heat. In this way, the solar heat is transported from the tropical to the temperate zone, and the solar energy spreads all over the earth.

Looking at the earth in the ways mentioned above, it is clear that the earth has been created with every care as the environment for human beings to live in.

G. Four Position Foundation and Two-Stage Structure of Creation

In God, when Sung Sang and Hyungsang are engaged in give and receive action centered on Heart, a harmonized, unified being is established. In this way, the positions of Heart, Sung Sang, Hyungsang, and harmonized Union are determined. This structure consisting of four positions is the “four position foundation.”

Furthermore, Inner Sung Sang and Inner Hyungsang within God’s Sung Sang are also engaged in give and receive action, forming a four position foundation. The give and receive action between Inner Sung Sang and Inner Hyungsang is the process of God’s thinking. The four position foundation within the Sung Sang is called the “inner four position foundation.” The four position foundation formed through the give and receive action between Sung Sang and Hyungsang is called the “outer four position foundation.”

When the give and receive action between Inner Sung Sang and Inner Hyungsang, or between Sung Sang and Hyungsang, is centered on Heart, the give and receive action is static, forming a unified, harmonized being as a result. This structure manifests the eternal and unchangeable aspect of God. On the other hand, when a purpose is established founded on Heart, and the give and receive action takes place centering on that purpose, the give and receive action is dynamic and produces a new being. This structure is the dynamic aspect of God’s creation.

In God’s process of creation, centering on purpose, first the Inner Sung Sang and
Inner *Hyungsang* engage in give and receive action to form the Logos within God’s *Sungsaeng*. Logos is God’s plan or blueprint for all things. Second, centering on the same purpose, Logos and the pre-energy of *Hyungsang* engage in give and receive action, creating all things as new beings. The formation of these two four position foundations is the “two-stage structure of creation,” which is illustrated in figure 7.5.

The four position foundation in Unification Thought corresponds to Aristotle’s theory of four causes. According to Aristotle, all movements have four causes: (1) the material cause, (2) the formal cause, (3) the efficient cause, and (4) the final cause. Consider the construction of a house as an example. The wood, stone, soil, bricks, etc. necessary for construction are the material cause. The form or the blueprint of the house is the formal cause. The architect or his technique is the efficient cause. Lastly, the completed house is the final cause. Since the four position foundation in Unification Thought is about God, it is not quite the same as Aristotle’s theory of four causes. Still, there seems to be corresponding relations between the two in their logical structure as illustrated in figure 7.6.

As explained above, Unification Thought explains God’s creation of the universe by the theory of two-stage structure of creation: (1) formation of Logos, (2) creation of the world. On the other hand, Aristotle explains the generation or development of the universe by the theory of potentiality and actuality.

According to Aristotle, matter is potentiality, and matter moves towards form, which is supposed to exist within matter. For example, a seed is matter with the potentiality for a tree, and a tree is its actuality; furthermore, a tree is matter with the potentiality for furniture, and furniture is its actuality. Thus, starting from prime matter, which has no form, matter continuously moves towards newer and newer forms, and finally reaches the pure form, or God, which has no matter in it at all. Aristotle does not clearly explain the origin of forms. Thus, his cosmology is not creationism, but rather it is a kind of generation theory where universe has developed by itself. Aristotle’s view of potentiality and actuality is diagrammed in figure 7.7.

In contrast, in Unification Thought, matter does not move, but rather it is used to shape things according to Logos. Matter, as God’s Original *Hyungsang*, is pre-energy and it has the potentiality to assume any form. In accordance with the step-by-step engagement of Logos, all things have been created starting from lower beings to higher beings. This is called “creation by stages.” At a certain stage of creation, with the engagement of a new level of the Logos, the beings that have already been created are used as materials for the creation of a new being. Let me explain more concretely the Unification Thought view of creationism, “the two-stage structure of creation.”
In the formation of Logos, God first planned the human being. Then, taking the human image as a model, and by abstracting and transforming it, God conceived the images of animals and plants. He first conceived the images of higher animals, and gradually the images of lower animals. He did the same when planning plants. Then God planned heavenly bodies. Then, He created images in the following order: minerals $\rightarrow$ molecules $\rightarrow$ atoms $\rightarrow$ elementary particles.

The creation of the phenomenal world occurred in exactly the reverse order: Out of the Big Bang, elementary particles, atoms, and molecules emerged. Those atoms and molecules combined to form heavenly bodies. Then the earth, a special planet among heavenly bodies, was formed. On the surface of the earth, first algae and amoebae, then higher plants and animals, and finally human beings were created. The two-stage structure of creation is illustrated in figure 2.4 in chapter 2.

When we look at living beings, which appeared during the second stage of creation, they seem to have evolved from lower beings to higher beings. In other words, the process of the second stage is in accord with that claimed by evolutionism. However, it occurred not by evolution based on mutation and natural selection, but rather it was creation by stages, carried out according to God’s plan or Logos, which was formed in the first stage.

In order to deepen our understanding of the two-stage process of creation in Unification Thought we can compare it with Aristotle’s theory of form and matter, and with Darwin’s theory of evolution.

In the Bible it is written, “Every house is built by someone, but the builder of all things is God” (Hebrews 3:4). Actually, nobody would think that a house, no matter how simple a hut, could be built by trees and branches being blown about by a storm (see figure 7.8). In Darwinism, living beings evolved through mutations caused by cosmic rays, ultraviolet rays, lightening and so on. However, it is inherently impossible for organisms to come into possession of sophisticated structures and qualities as a result of such randomizing event—just as it is impossible to believe that hurricanes build houses. Also, in Darwinism, humans continue to evolve although it is unclear what such future forms would be. The Darwinian view of evolution is illustrated in figure 7.9.

In Aristotle’s view we start with unformed ‘prime matter.’ This prime matter is given form, step by step, finally reaching the pure form, which is God. It is not clear, in Aristotle’s view, where the forms come from. Aristotle’s view of steps of nature is illustrated in figure 7.10.

In Unification Thought, the purpose of creation is established based on God’s Heart.
The Logos is created centered on this purpose. Finally, all beings were created in accordance with the Logos. Unification Thought view of creation is illustrated in figure 7.11.
Fig. 7.1. Historical Views of Spirit and Matter

[Diagram showing historical views of spirit and matter, with nodes labeled for different philosophers and their associated ideas.]
Fig. 7.2: The View of the Origin of Matter

- Quarks
- Leptons (electrons, neutrinos, etc.)

Higgs Field

- Primordial Force
- Gravity
- Strong Force
- Weak Force
- Electromagnetic Force


OHS = Original Hyperstrange
SSS = Original Strange
GH = God
Fig. 7.3. Pair System of Yang Substantial Being and Yin Substantial Being
Fig. 7.4. Dispute over the Universals and Unification Thought View.
Fig. 7.5. Unification Theory of Two-Stage Structure of Creation

Fig. 7.6. Four Position Foundation in Unification Thought and Aristotle’s Theory of Four Causes
Fig. 7.7. Aristotle’s Theory of Potentiality and Actuality

Fig. 7.8. Can a House Be Built by a Storm?
Fig. 7.9. Darwinism View of Evolution

Fig. 7.10. Aristotle’s View of Steps of Nature

Fig. 7.11. Unification Thought View of Creation