150 "Notes of Travel."
151 *Testimonies to Ministers*, p. 106.
152 See *Education*, p. 190.
153 "Notes of Travel."
154 "Search the Scriptures."
155 *Counsels toTeachers*, p. 437.
156 *Fundamentals of Education*, p. 187; cf. *Counsels to Teachers*, p. 437.
157 See e.g., *Great Controversy*. p. 203.
158 *Christian Education*, 59; *Steps to Christ*, p. 90-91.
159 *Fundamentals of Education*, p. 187; "Bible Study" *Signs of the Times*, Sept. 26, 1895.
160 See, *Testimonies*, 4:499.
161 MS 4, 1896 in *Manuscript Releases*, 4:56.
162 *Great Controversy*, pp. 354, 423; cf. White, *Testimonies to Ministers*, p. 476.
163 *Desire of Ages*, p. 799.
164 *SDA Bible Commentary*, 7:933.
165 *Great Controversy*, p. 420.
166 *SDA Bible Commentary*, 6:1094.
167 *Prophet and Kings*, p. 489.
168 *Patriarchs and Prophets*, p. 594.
169 Ibid., 365; *Great Controversy*, p. 352.
170 "Notes of Travel."
171 *Great Controversy*, p. 521. Cf. Judas' approach in White, *Desire of Ages*, p. 719.
172 *Writers and Editors*, p. 35; *Christ's Object Lessons*, pp. 130-131.
173 *Testimonies*, 5:706.
174 *Writers and Editors*, pp. 34,35.
175 *My Life Today*, p. 310. Cf. *Testimonies*, 2:67.
176 Ibid., pp. 67, 70-71.
177 *Ministry of Healing*, pp. 464-465.
178 "Be Zealous and Repent," *Review and Herald*, Dec. 23, 1890.
179 *Christ's Object Lessons*, p. 127; *Testimonies*, 5:369.
180 *Gospel Workers*, p. 297; "Be Zealous."
181 *Testimonies*, 5:534.
182 See, *Life Sketches*, pp. 198-200.
183 *Maranatha*, p. 320.
184 *Desire of Ages*, p. 638.
185 "Ye Did It To Me," *Signs of the Times*, August 7, 1893.

Journal of the Adventist Theological Society, 4/2 (1993):137-160.

THE INFLUENCE OF PHILOSOPHICAL AND SCIENTIFIC WORLD VIEWS ON THE DEVELOPMENT OF THEOLOGY

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Next year (1994) marks the one hundred and fiftieth anniversary of the Great Disappointment (October, 1844) and the subsequent development of the Seventh-day Adventist church.[1] Since this time the denomination produced a Bible commentary (7 volumes),[2] a Bible Dictionary,[3] a couple of Sourcebooks,[4] and an Encyclopedia,[5] as well as major books on various biblical[6] topics.[7] It has not as yet published a full-fledged systematic theology in which all doctrines unfold in an inner coherence to form a system true to Scripture.[8]

Traditionally, Seventh-day Adventists consider themselves a "people of the Book." They believe in the Bible as God's word. It is a reliable presentation of divine thoughts in human language, and is best understood when Scripture interprets Scripture (*sola Scriptura*). Furthermore they believe that all of the Bible (*tota scriptura*) and only the Bible (*prima scriptura*) is the foundation of doctrinal truths.

But this has not been the customary method of approach throughout the history of theology. Rather, throughout much of the Christian era, theologians have relied upon extra-biblical sources to inform and interpret biblical truths. This reaching beyond the Bible has often distorted the comprehension of biblical truths. Such a method could do the same to Adventist theology if we ever lose

sight of the supreme and unique place of Scripture in our quest to understand truth.

The danger is especially present as we come to the end of the second millennium for, even among some Adventists, videos, tapes and pamphlets are often gaining more attention than the Bible. These Adventists could become vulnerable to repeat history. Moreover, today some Adventist scholars use historical critical methods. These are extra-biblical tools that alter the biblical message just as surely as some of the philosophical and scientific views we will mention in this article. So, in contemporary Seventh-day Adventist experience, both on a popular and scholarly level, the Bible is often removed from its place of primacy, and substituted by human ideas and methods. Those trapped in the David Koresh phenomenon in Waco, Texas, represent what can happen to any person who turns away from the Bible's authority to follow human ideas.

The names of the scholars and their contributions discussed in this article may be unfamiliar to some readers of *JATS*. Yet the unfolding saga, of which they are a part, is important for us to know. It is well that we know history, so that we will not repeat its mistakes. In this article we will briefly consider some of the major philosophical and scientific influences on the development of Christian theology.

Because of space limitations the present article will be confined to: 1. Theological method in the pre-modern era. 2. Theological method in the modern era. 3. The contribution of science to theological method in the 20th century. Of necessity, we will be selective, and consider only a few of the main influences. We will not consider evolutionary science, as it deserves an article by itself.

Theolgical Method in the Pre-Modern Era

In speaking about theological method, we will confine ourselves to the way Christian theology related to philosophy and science, and how the world views of the latter influenced it. A world view determines the way we look at reality, the way we look at God, humanity, nature, Scripture and even theological method.[9] For example, is God far removed from humankind, or immanently within the race? Is the world flat or round? Is the universe a

three-decker cosmos with heaven above the earth and hell beneath it, or is our planet just a part of a great system related to other systems in the vastness of space?

At the end of the twentieth century we find a plurality of world views. There are at least thirteen world views classified under three major types: Material (Naturalism, 5 kinds), Spiritual (Transcendentalism, 5 kinds) and a Personal God (Theism, 3 kinds).[10] But it was not always this way.

For centuries things were much more simple. There seemed to be a unified world view. Not that everyone thought alike, or agreed on everything. No, some of the most vehement theological debates took place in the early centuries over the nature of Christ and the reality of the Trinity. Nevertheless, the same way of looking at reality was shared by the majority. The world view of the pre-modern (pre-sixteenth century Reformation) was largely a unified one, based upon the thinking of Aristotle (Greek philosopher, d. 322 B.C.), Ptolemaeus (Alexandrian astronomer, 2nd century A.D.), and broadly accepted biblical interpretations.[11] Another authority that contributed to the unified world view was the Roman Catholic church. For centuries the authority of the Roman Catholic church was virtually unchallenged before the Greek Orthodox exodus from it in A.D. 1054, the Protestant Reformation revolt against it from A.D. 1517 on, and the challenge of science beginning in the fifteenth and sixteenth centuries.[12]

Another contributor to this unified world view was a conscious bridge-building (synthesis) between Greek ideas and biblical data. The following shows how indebted Christians became to Greek thinking. For example, the early church fathers, in their evangelistic zeal to convey the meaning of Christianity to those steeped in Greek philosophy, sought to express biblical truths in their philosophical categories. This kind of synthesis has a background in Philo of Alexandria (20 B.C.-42 A.D.). Philo, a Jewish philosopher, "blended Old Testament thought with Greek Stoicism and Platonism. Much early Christian exposition of scripture was influenced by his work."[13]

Origen allowed Platonic thought to influence his theology more than he realized.[14] His *Dei Principiius* (On First Principles, 220-230 A.D.) was the first Christian system of theology.[15] Augus-

tine, whose theology was the foundation for the Church for a millennium, "remained under the control of Neo-Platonism."[16] So leading defenders of the faith and the first two of the greatest theologians (Origin and Augustine) all reached beyond the Bible in order to interpret and communicate biblical truths. In this way the Bible was removed from its place of supremacy.

Toward the end of the twelfth century (A.D.) the discovery of long lost works by Plato, Aristotle and Ptolemy, among other Greek writers, together with Jewish and Arabian commentaries on these works, gave renewed impetus to synthesize the Greek world view with the biblical world view. The ultimate result was the *Summa Theologica* of Thomas Aquinas (1225-1274). Thus, the two main theological systems that undergird Catholic theology (Augustine and Aquinas) were dependent to a large degree upon the philosophical and scientific world views from ancient Greek philosophy. The use of philosophical categories was not without effect on the biblical data. Rather than helping to communicate biblical truth, Greek categories often hindered its communication.

In his encyclical letter, prefacing the theological system of Thomas Aquinas, Pope Leo XIII affirms: "philosophy is great, in that it is reckoned a bulwark of the faith, and as a strong defence of religion."[17] Even in our time, Vatican II (1963-1965) encourages a study of philosophy as prerequisite for an understanding of theology.[18] But is philosophy really a bulwark for theology and an aid to its understanding?

If theology leans on philosophy, what happens when that philosophy is outmoded? This question confronted the Catholic church when the Aristotelian world view collapsed. Theology built on a world view derived from subjective speculation is no match for a world view derived from scientific observation.[19]

The theology of the Catholic church was built upon a foundation that was waiting to be challenged. And the challenges came from several scholars, including Galileo (d. 1642), and it took the church until 1992 to admit officially his contribution.

It is time to mention some specific adverse effects of philosophical world views on theology. The influence was not merely on peripherals, but altered central truths. For example, the truth about God. Platonic[20] and Aristotelian philosophy perceived the

world of the gods (*noetos*) as the real world, but the world of humans (*aisthetos*) as merely a shadow of the real world. Between these two worlds was an unbridgeable chasm (*chorismos*).[21]

Now, if the gulf between God and mankind is unbridgeable, then Christ's two advents would be impossible. Consequently, these biblical truths were rejected, because they did not fit into the confines of the Greek world view. This same dualism was also found in Ptolemaic cosmology that posited a gulf between two realms: the realm above the moon (supralunar) and the realm below the moon (infralunar).

This basic philosophical dualism between gods and humans found its way into medieval theology with God as an unmoved Mover transcendent beyond the race. Dualism continued in Newton's mechanistic science (17th century) with a Deistic God separated from humans. It is found in Kant's philosophy (18th century), with its distinction between the spiritual (noumenal) separated from the observed (phenomenal), so that God, as He is in Himself, is removed from human knowledge, which is confined to the observable. Dualism is a fundamental world view in the "closed universe theory" of the NT scholar Rudolf Bultmann (20th century), where the supernatural is separated from the natural, so that there is no inbreaking of the supernatural into space and time. In this closed universe the incarnation, miracles and second advent are events that could never take place.[22]

Dualism has had an even wider influence on one doctrine held by nearly all Christians throughout the Christian era, and even today. This is the Greek dualism of an immortal soul and a mortal body, which lies behind the theory that the soul survives death in an immediate passage to heaven.[23] This one example shows to what extent philosophy has influenced biblical truths, distorting them rather than communicating them. In this way Greek philosophy ended up doing the very opposite of what it was intended to do. It became a hindrance rather than a help. It distorted Scriptural truth.

It seems clear that non-biblical world views, ancient and medieval, philosophical and scientific, used by theologians in an attempt to do justice to biblical truths, have only done the opposite. Likewise, those in the Seventh-day Adventist church who use

historical-critical methods, or the casebook method, do so to interpret and communicate biblical truths. But critical methods hinder rather than help in the interpreting and communicating of truth just as surely as do extra-biblical philosophical and scientific world views in which they are rooted. The classic modern example is Bultmann's drive to communicate the essence of the Gospel. But his philosophical world view actually jettisoned that essence, so that he had little left to communicate.

The ideas of Aristotle concerning the impassibility (changelessness) of God impacted theology for centuries, and are another form of dualism in positing an unnecessary distinction between what God and humans experience. Thus Augustine rejected the changeableness of God, Aquinas believed God was incapable of suffering, and Calvin said He was "not sorrowful or sad, but remains forever like Himself in his celestial and happy repose."

What these theologians failed to think through was the changeableness in God, demonstrated by the incarnation, and the suffering of God, demonstrated by the crucifixion. This dependence upon Greek categories unwittingly opened up the way for Process theology (twentieth century) that challenges the impassibility of God, at the cost of making God dependent upon the world and unable to know the future. The biblical world view shows a God who is not dependent upon the world, knows the future, and is not dependent upon Greek thinking to be understood. After all, incarnation and crucifixion are incredible moments of revelation of what God is like.

Theological Method in the Modern Era

Science (Darwin) and philosophy (Descartes, Hume, Kant, Heidegger) have had a profound influence upon modern and postmodern theology, and some biblical interpretation.[24] We need to review some of the history leading up to this fact. The modern world view issues out of the Renaissance of the sixteenth century, the Enlightenment of the seventeenth and eighteenth centuries, and scientific discoveries of the nineteenth and twentieth centuries. We will give a brief overview of some of the roots that fashioned the twentieth century milieu in which we must work out a theological method.[25] Only major representatives of this period will be considered—Rene Descartes (1596-1650), David Hume (1711-1776), Immanuel Kant (1724-1804), and Albert Einstein (1879-1955). Preceding these thinkers was a largely unified medieval world view. We now need to penetrate deeper into that world view as a background for understanding the contributions of these four men.

The medieval world view perceived the earth as the center of the universe (geocentric). This view dominated western thought from Plato (427-347 BC) to Copernicus (1401-1464),[26] although some ancient Greeks believed the sun was its center (heliocentric: for example, the Pythagorean school). The medieval world view, which had adopted the Ptolemaic geo-centric world view of post-NT times, was questioned by Copernicus. The revolution begun by Copernicus was continued by Galileo (1564-1642) and Newton (1642-1727). Galileo built a telescope in 1609 and began to document what Copernicus theorized. He also discovered that the moon was not smooth but contained mountains and valleys and the Milky Way was full of stars. His scientific discoveries threatened earlier Greek philosophical teachings, whose world view formed the basis of Catholic theology.

In 1638 Galileo published his *Dialogues on the Two Sciences*, "on motion, acceleration, and gravity, and furnished the basis for the three laws of motion laid down by Sir Isaac Newton in 1687."[27] Newton's *Philosophiae Naturalis Principia Mathematica* (Mathematical Principles of Natural Philosophy, 1687) is "generally considered one of the greatest single contributions in the history of science. The book includes Newton's fundamental laws of motion and theory of gravitation. It was the first book to contain a unified system of scientific principles explaining what happens on the earth and in the heavens."[28] Newton's influence reached beyond science to effect theology.

The scientific discoveries of Copernicus, Galileo and Newton overthrew the earlier Greek "scientific" world view which had influenced Catholic theology. The earlier Greek world view was in large part dependent upon philosophical speculations. By contrast, the new world view was based upon scientific observations. The Catholic Church opposed the new science for more than two hundred years. The Church clung to an outmoded and false world view and held onto a theological method and content indebted to it.

That history is a sorry example of basing theology and theological method on extra-biblical and philosophical sources.

When experimental science exposed the fallacy of philosophical science (Aristotle) that undergirded Catholic theology, the church as well as its theology was affected. The scientific revolution brought a revolt from the authority of church and Scripture. When the philosophical foundation of the church crumbled from the advances in science, the church scrambled to keep its authority. Its decree in 1616 did not repudiate the new findings of science. Rather, exponents "were condemned not so much because they defended the heliocentric theory but because they claimed that this theory was consonant with the teaching of Scripture."[29] Yet Galileo opposed Aristotelian ideas found in Catholic theological tradition, rather than opposing scripture.[30] Because the Aristotelian foundation of church theology was shown to be in error by the new science, the wisdom and authority of the church was called in question. By extension, the Bible as the proper basis for church theology was also called in question. For the revolt against all authorities included a revolt against biblical authority.

With the challenge of science to church authority, and by extension to biblical authority, the floodgates opened for other authorities.[31] The Bible was an innocent victim. The new science had rightly exposed the inadequacy of the foundation of Catholic theology, but it had not discovered any inadequacy in a biblical foundation for theology. Rejection of Aristotelian authority was legitimate. Rejection of biblical authority was illegitimate. This rejection of biblical authority has had profound affect on subsequent biblical scholarship and the development of the historical-critical methods. Besides this, rejection of authorities does not make sense, because it undermines the ability of scientists to do science. Every scholar, in whatever discipline, must accept the work of authorities in the discipline, because it is impossible for any one person to verify all that has been researched by others.

Today humans depend upon many authorities. In fact, "Most of what we believe, we believe on authority."[32] It is obvious that modern science could not function without its own belief in scientific authority.[33] "The method of disbelieving every proposition which cannot be verified by definitely prescribed operations would

destroy all belief in natural science."[34] It is important to note that science had not shown the Bible to be invalid. It exposed as false the method used to interpret the Bible from an Aristotelian and Ptolemaic perspectives. Biblical interpretation was at fault, not the Bible itself. The same problem was to be repeated when Darwin published his *Origin of Species* (1859) and *The Descent of Man* (1871). His theories opposed the teaching of the Church rather than the teaching of Scripture. The sad fact is that the Bible would not have become suspect if the church had developed its theology inductively from Scripture alone. For the biblical world view is not at odds with the new discoveries from nature.[35]

Rene Descartes (1596-1650).[36] Known as the father of modern philosophy,[37] Descartes wanted to be the new Aristotle for the Church, by providing it with a philosophical substructure to replace the Aristotelian. He believed the new science also needed a new philosophy. He set out to sever natural theology from cosmology, that is, to separate faith from knowledge. Rather than looking to nature for evidences of God (as practiced in medieval theology), he proposed looking within human experience to an innate God. He believed this would take theology away from the domain of natural science and protect it from further scientific attacks.[38]

Descartes wanted to protect the church and theology from any future onslaughts from scientific observation. The problem was that he attempted to be another Aristotle for the church. He thought he could supply a replacement philosophy to undergird Catholic theology. His philosophy was different, but the method was the same—dependence of theology on philosophy instead of upon Scripture alone.

Descartes sought certainty through a method of doubt. He methodically doubted everything except that he could doubt. That he was the one doubting demonstrated to him the fact that he existed. If he did not exist, then he could not doubt. He said, "*Cogito, ergo sum*" ("I think, therefore I exist"). In a slightly different way, this idea had been expressed by Augustine (354-430) in his words "*Si fallor, sum*" ("If I am deceived, I exist").[39]

Descartes concluded that the only locus beyond the clutches of doubt (and by extension—safe from scientific critique) is the human mind. He looked to individual consciousness as the ultimate

criterion of truth.[40] He would develop a complete system upon a self-evidential basis without presuppositions.[41] He "developed a method of demonstrating truths according to the order demanded by the exigencies of reason itself."[42] Whereas Aristotle looked to human reasons (philosophical speculations), Descartes looked within human experience. Influences on theology from both mitigated against the fundamental basis of theology in Scripture alone.

Descartes' focus on human thought profoundly influenced philosophy and theology. His inward look was to influence Kant, Kierkegaard, Schleiermacher and subsequent Existentialism (focus on human existence), with an impact on biblical interpretation and theological method. His pathway to knowledge (epistemology) moved from man in an attempt to get to God (theology "from below"). So to an even greater degree than under Aristotle, theology was impacted by philosophy as it had already become impacted by science. Theology was impacted now by science and philosophy to a degree not realized in ancient and medieval times. Hitherto theology had always set the ground rules for science and philosophy. "Now this situation was reversed, and the findings of science were setting the problems for philosophy which in turn was beginning to define new rules for theology."[43]

Much of modern theology has forgotten that authentic theological method turns Cartesian (Descartes) method upside down. Instead of "I think, therefore I exist" (Descartes), true theological method says, "God is, therefore I think."[44] The Bible says "In the beginning God" (Gen 1:1; cf. John 1:1). The Bible begins with God, and presents a movement of God to man, rather than the reverse. These methods move in opposite directions.

Not only is the pathway to knowledge opposite in these two methods, but a change of focus has taken place too. Ontology (ontic, being) was the focus of medieval and ancient theology.[45] Now thought (noetic) was to take precedence. In other words, the focus has slipped away from God to man, with the methodological starting point in man and not in God. As Thielicke notes, "Looking at his (Descartes) system we find pointers to whole stretches of philosophical and theological history. There is an increasing depersonalizing of God, whether as substance or idea."[46]

Seventh-day Adventists need to ask what pathway to knowledge (epistemology) they should take. When studying the nature of Christ, should Adventists start from the human side and work up to the divine (called a Christology "from below"), or should they begin with the divinity of Christ and work down to His human nature (called a Christology "from above")? In the study of last day events, should Adventists begin with the newspaper and then go to Scripture, or should they begin with Scripture and interpret it on the basis of itself, independently of the daily news? In biblical interpretation should Adventists begin with cultural or sociological considerations and then move to Scripture, or should they begin with Scripture and allow its propositions to judge the passing cultural or sociological scene?

Descartes looked within. Theology became a study of man's experience, albeit Christian experience, rather than a study of God and His revelation in Scripture. Should Adventists look within as a criterion for truth rather than look to Scripture, which alone can judge any passing experience? Should Adventists judge Scripture by human reason (as in historical critical methods) or should they judge reason by Scripture, using sanctified and transformed reason?

Whereas Aristotelian philosophy was cosmocentric, Cartesian (Descartes) philosophy was anthropocentric. This set the stage for Hume and Kant, for reason (rather than nature) had become the principle instrument for obtaining knowledge. "Descartes initiates movements which come to full fruition only in the 18th and 19th centuries and which still have an incisive and pregnant impact upon the history of theology today."[47] Pre-Kantian philosophy is divided into two main types: rationalist in continental Europe (from Descartes to Wolff) and British empiricism down to and including Hume.[48] Both were a primary focus on human reason or experience apart from Scripture.

David Hume (1711-1776). Sometimes described as the father of empiricism[49] and positivism,[50] Hume sought to develop a science of human nature patterned after Newtonian science. In his *Treatise* he says, "In pretending, therefore, to explain the principle of human nature, we in effect propose a complete system of the sciences, built on a foundation almost entirely new, and the one upon which they

can stand with any security." He claimed that all contents of the mind enter through experience. There are no innate ideas, no *a priori* thoughts, and all classical evidences for God's existence are jettisoned, including belief in metaphysics. Our look at Hume is brief, because he serves as an introduction to Kant's thinking which had an enormous impact on all subsequent thought.

Immanuel Kant (1724-1804). Kant launched a veritable revolution in philosophy comparable to that caused by Copernicus in science.[51] He did so by making a systematic investigation of reason's functions.[52] Though Hume influenced him in some respects,[53] Kant reversed Hume's empiricist view that our ideas come only from experience.[54] For Kant "the human intellect does not draw its laws out of nature but reads them into nature,"[55] "so that those objects must in some sense conform themselves to the mind."[56] Whereas, for Plato, objects in the sense realm are but images of the non-physical realm,[57] for Kant "the objects of thought are none other than the products of thought itself."[58]

How does this affect theology, or our knowledge of God? As Richard Grigg says, "Kant's analysis of *how* we know leads to a momentous conclusion about *what* we can know. We may be able to form an idea of God, but we can never be certain that anything in reality corresponds to that idea. The idea must always remain empty."[59] Compared to Aristotelian philosophy, not only was the pathway to knowing reversed by Descartes, but now the source of knowing God (from Scripture) was changed by Kant. God was not given in revelation. He was a construct of human thought, or at best a categorical imperative on which human thought depended.

Kant further reversed Hume's thesis by denying that things can be known "in themselves." Kant's position was that things can only be known as they appear (phenomenal), but never as they are in themselves (noumenal). As Torrance observes, "So far as Jesus Christ is concerned, it means that all knowledge of Jesus Christ in himself must be ruled out of account as mere pretence, for all that may be known of him derives from his appearance to his contemporaries or rather from what they made of his appearance for themselves; but in the nature of the case what they made of Jesus' appearance for themselves is not something which can be known in itself for we can do no more than claim to know what we can shape

for ourselves out of their objectifying operations. That is the devastating effect that Kant's inversion of the Newtonian mode of scientific knowing has had on so much New Testament scholarship in modern times."[60]

Like Descartes, Kant was a Catholic and believed in God. He wanted to save religion and the Enlightenment.[61] He opposed Rationalism that put so much focus on the ability of reason. He set out to demonstrate the limits of reason, and ended up with a limited God. At the age of seventy he wrote *Religion within the Limits of Reason Alone*.[62] Religion was all that he could know within rational confines. Theology, however, can only be known from revelation.

"One of the major influences of Kant's thought upon Protestant theology was accordingly a gradual but increasing turning away from the propositional understanding of revelation and developing of other ways of understanding the nature and meaning of revelation."[63] This led to a non-cognitive understanding of revelation as seen in much of modern theology, represented by Schleiermacher (feeling), Brunner (encounter), Bultmann (preaching/*kerygma*) and Barth (Christ), just to name a few. Here, the very essence of biblical revelation was jettisoned through dependence upon Kantian philosophy. So Kant and Descartes, like Aristotle, presented different but human substitutes for the supremacy of Scripture.

Kant's influence led, in 1975, to a call for a new theological method. That year the American Academy of Religion published "An Essay on Theological Method" by Gordon D. Kaufman.[64] In it he asserts that the task of theology is not "to be restricted to the parochial confines of the church"[65] (an opposite position to Karl Barth).[66] Kaufman includes the world with all its cultures and religions as the broader context for doing theology.[67] Following Kant, Kaufman believes that the concepts or images of God are constructs of the human mind rather than objectively given to human thought,[68] and thus more subjective in origin. He concludes "that the distinctive and proper business of theology is neither interpretation of the vagaries of religious experience nor the exposition of the particularities of scripture or of church doctrines but analysis, interpretation and reconstruction of the concept and

images of *God,* as found in the common language and traditions of the West."[69]

Kaufman calls for a "radical reconception of both the task of theology and the way in which that task can be carried out."[70] He calls for a new paradigm in theological method, which is really the logical outworking of the methodology of Kant, Schleiermacher and Hegel.[71] As Clark Pinnock notes, "Kaufman has constructed an entire theology on the basis of relativity."[72]

Consider the implications. If God is a mere construct of the human mind, then how can we arrive at a unified understanding about Him? Particularly, if all world cultures and religions are to contribute to an understanding of God. As no single mind can determine which construct is authentic, and thus act as normative, every mind is left to do its own constructing. The result is a pantheon of gods as numerous as the minds engaged in the task. This is pure relativism and idolatry. No meaningful understanding of God can arise from such an approach, let alone a unified comprehension necessary for doing theology.

This is one dead-end of Kantian method. It demonstrates how bankrupt theological method is when it leaves the firm ground of Scripture to build upon the sands of other sources. No human construct can replace the revelation of God in Scripture and still be called Christian, whether it be from Plato, Aristotle, Newton, Descartes, Hume, Kant or anyone.

Contribution of Science to 20th Century Theological Method[73]

The new science[74] of the twentieth century caused a Copernican revolution in epistemology[75] comparable to that made in science and philosophy.[76] Albert Einstein's (1879-1955) work on relativity theories, quantum logic and field theory has, made him a foremost exponent of the new science. Newton's self-contained system "gave stability and intellectual guidance to science for nearly two hundred years," until the beginning of the twentieth century, when theoretical physics outgrew Newton's system."[77]

Consider the world view of the new science.[78] Clerk Maxwell's (1831-1879) research in the microsphere discovered that light waves are electromagnetic and not mechanical.[79] His *Treatise on Electricity and Magnetism* (1873) became the foundation for

electromagnetic theory.[80] Building on Maxwell's work, Einstein theorized the dynamic relativity between space and time.[81] Einstein's relativity theory (special, 1905; general, 1915) is a theory of the mind, just as Newtonian physics and Kantian logic. But it penetrates deeper into the reality of the phenomenal world.

For example, the relativity theory rejects the Newtonian absolute space and absolute time for a one unified absolute space/time continuum. Thus a clock moving at near the speed of light would run slower than one on the ground, as seen by one on the ground; whereas a 200 foot spacecraft flying at 9/10ths the speed of light would appear as less than 100 feet long from mission control at Houston. As physicist Russell Stannard put it, "Depending on their relative motion, different people have different spaces and different times."[82] Concerning movement in the cosmos, a planet travelling around the sun chooses the "shortest possible path throughout the four dimensional world" (general relativity), not because of the sun's gravitational force, as in Newton.[83] "Really, it's a new way of explaining gravity," says Adventist physicist Ray Hefferlin.[84]

Einstein's theory of relativity and Planck[85]/Bohr's quantum mechanics[86] constitute new world views in physics, hitherto dependent on Newtonian science and Euclidian geometry. The new world view is what Pannenberg calls an open universe,[87] in which the absolute laws of Newtonian physics can no longer deny divine miracles. The German physicist Werner Schaaffs notes that "even the physicist must officially concede the possibility of intervention by God."[88] Whether the theoretical possibility is translated into actual reality is a rather different issue in the mind of the scientist.

Besides this, natural philosophers believed fundamental concepts and postulates of physics were deduced from experience by abstraction. Einstein says that, "a clear recognition of the erroneousness of this notion really only came with the general theory of relativity, which showed that one could take account of a wider range of empirical facts, and that, too, in a more satisfactory and complete manner, on a foundation quite different from the Newtonian."[89]

Einstein explains his method. "I am convinced that we can discover by means of purely mathematical constructions the concepts and the laws connecting them with each other, which furnish

the key to the understanding of natural phenomena. Experience may suggest the appropriate mathematical concepts, but they most certainly cannot be deduced from it. Experience remains, of course, the sole criterion of the physical utility of a mathematical construction. But the creative principle resides in mathematics."[90] Einstein believed that guidance by pure mathematics is essential because "the physical experience of the experimenter cannot lead him up to the regions of highest abstraction."[91] Here Einstein goes beyond the confines of mere subjective thinking to mathematical objectivity.

Einstein speaks of the "stratification of the scientific system" in which there are layers or levels of reality. The lowest is what we see in everyday experience. Striving for logical unity takes the theorist up to the highest level.[92] "Some scientists in our day have been trying to elaborate a new kind of logic on different levels, sometimes called 'quantum logic,' in order to give appropriate and adequate rational expression to the distinctive kind of connection between the geometrical and dynamic aspects of reality."[93] What is involved is the difference in approach[94] taken by classical physics, that observed concrete particulars and organized the data in a mechanical way, from the new science that looks at the totality "within which events, far from being isolated from one another in space and time, are already found in a field of continuous wave-like interconnections, where no single event can be apprehended adequately in indissociable relationship with the whole."[95]

Some believe that the new science has opened up new ways to come to knowledge which are in harmony with theological method.[96] Theological method, if true to biblical objectivity, strives to grasp the totality of Scripture on any truth. Such a method breaks beyond the confines of a construct of the human mind to reach out to grasp reality in its own broad context. Relativity has shown that "what is observable cannot be represented with scientific precision without reference to what lies outside observation altogether."[97] Duns Scotus, Godel, Heim and Torrance speak of different levels of knowledge "which are coordinated through one another to the supreme level" in God.[98]

The really decisive advance, according to Torrance, was Einstein's "establishing of mathematical invariances in nature

irrespective of any and every observer, in which he was able to grasp reality in its depth. This was decisive not only because it broke through the idealist-presuppositions[99] stemming from Kant but because it broke through the positivist concept of science"[100] (Positivists restricted knowledge to observational phenomena).

Karl Heim's book, *The Transformation of the Scientific World View*, speaks of the three major absolutes that have been removed.[101] The three are: 1. Absolute object (matter and geocentric world view), 2. Absolute space and time, 3. Absolute determination of the world processes (#s 2, 3, Newtonian causal-mechanistic world view).[102] All three absolutes were constructs of the human mind. They collapsed under the new science,[103] for "the absolute object lost its status as absolute when it appeared that two mutually complimentary pictures of the same object arose at the same point, varying in accordance with the condition of the subject and his means of observation, and that these two pictures could not be held together in one moment of intuition but could be related to one another only by means of non-intuitive mathematical formulae."

Newtonian absolute space and absolute time collapsed when it was demonstrated that spatio-temporal measurements are conditional on the state of the motion of the observer. Also, the position of an object and its momentum cannot be measured simultaneously. Hopper finds the new physics to reveal more of an unpredictable world than the deterministic mechanistic Newtonian world view. Karl Heim believes this is true of the microscopic realm.[104]

Science underwent three major advances from the Pythagorean/Ptolemaic world view through the Newtonian world view to twentieth century science. What makes the new science different from the science of the previous two paradigms is its rejection of the "dualist bases of the two previous eras."[105] Some of these dualisms include absolute time/space, form/matter, appearance/reality, theoretical/empirical, concept/reality, explanation/understanding and subject/object. Torrance believes that the overthrow of these cosmological and espistemological dualisms constitute the new science as "one of the greatest transitions of history."[106] Furthermore, Torrance believes the new science calls in question the historical-critical methods, because they attempt to

interpret Scripture "within a general framework that is still governed by dualist and phenomenalist assumptions which do not admit of knowledge of things in themselves or in their own intrinsic significance but only as they appear to us"[107] (Kantian view). And yet the historical-critical methods are still the most used in biblical study today, and even by some Adventist scholars.

The new science has made advance beyond Aristotelian/Newtonian/Kantian world views. It reveals the narrowness of previous world views. In other words, the Kantian method of imposing *a priori* constructs upon nature could never have led to the discovery of relativity and quantum physics. The researchers did not only discover the reality of the objects under investigation but also their relationship to other objects in an inter-relationship. In the same manner Bible study is not a reading of human constructs onto Scripture, but a discovery of biblical truths in their inter-relationship. This is the system of theology that still awaits to be done in the Adventists church.

Taking stock on the impact of the new science, philosopher Bernard Lonergan observes: "One might say that it has taken modern science four centuries to make the discovery that the objects of its inquiry need not be imaginable entities moving though imaginable processes in an imaginable space-time." He concludes "it was left to twentieth-century physicists to envisage the possibility that the objects of their science were to be reached only by severing the umbilical cord that tied them to the maternal imagination of man."[108]

For our purposes it is important to realize that just as medieval theology was wedded to an Aristotelian/Ptolemaic world view, so Kant's philosophy was wedded to a Newtonian world view. Both world views, in different ways, presented an orderly (Aristotelian) or mechanistic (Newtonian) view of reality which influenced theological and philosophical formulations dependent on them. Aristotelian science posited God as the first cause for all reality, but unmoved by it. Newtonian science posited God as removed from all reality in a deistic "Wholly Other" sense. As such, one can never know Him as He is "in Himself" (Kant). Both views removed God from His proper relation to mankind and human history, and thus from the biblical perspective of creation-redemption.

In overcoming the dualism of these two world views the new science (unlike previous world views) does not pose a threat to biblical revelation. For Jesus Christ, incarnate in space and time, revealed (phenomenon) what God is like in Himself (noumenal, John 14:9). Just as Einstein used mathematics to rise beyond empirical data to grasp the depth of cosmic reality as it is in itself (opposed to Kant), so through biblical study the student transcends the confines of human experience (mysticism, rationalism, existentialism) to grasp the inner depths of the truths of God as they are in themselves in Scripture.

The great need in contemporary theological method is to begin with Scripture as ultimate authority and think through the inner coherence of truth. The great need is for a theology that is dependent upon God's cognitive revelation provided in Scripture and one that is free from all philosophical and scientific dependence. What a challenge to Seventh-day Adventists! The various essays in this issue of *JATS* take up this challenge and will contribute to it in the future.

Endnotes

1 1844 is the date when major pioneers of the later Seventh-day Adventist church experienced the great disappointment (Oct 22). Later the church was named in 1860 and organized in 1863.

2 *Seventh-day Adventist Bible Commentary*, ed. F. D. Nichol (Washington D.C.: Review and Herald Publishing Assn., 1953-1957), vols. 1-7.

3 Siegfried H. Horn, *Seventh-day Adventist Bible Dictionary* (Washington D.C.: Review and Herald Publishing Assn., 1960).

4 *Seventh-day Adventist Bible Students' Source Book*, eds. Don F. Neufeld and Julia Neuffer (Washington D.C.: Review and Herald Publishing Assn., 1962).

5 *Seventh-day Adventist Encyclopedia* (Washington D.C.: Review and Herald Publishing Assn., 1966).

6 This includes archaeological writing as well as contributions on chronology.

7 Some of these include LeRoy E. Froom, *The Prophetic Faith of our Fathers* (Washington D.C.: Review and Herald, 1950-1954), vols. 1-4. LeRoy E. Froom, *The Conditionalist Faith of our Fathers* (Washington D.C.: Review and Herald Publishing Assn., 1966), vols 1-2. T. H. Jemison, *Christian Beliefs, Fundamental Biblical Teachings for Seventh-day Adventist College Classes* (Boise, ID: Pacific Press Publishing Assn., 1959), *Questions on Doctrines* (Washington D.C.: Review and Herald Publishing Assn., 1957), *Seventh-day Adventists Believe* (Hagerstown, MD: GC Ministerial Dept., 1988), and various Biblical Research Institute books such as *A Symposium on Biblical Hermeneutics*, ed. Gordon M. Hyde (Washington D.C.: Review and Herald Publishing Assn., 1974), William H. Shea, *Selected Studies on Prophetic Interpretation* (Lincoln, NE: College View Printers, 1982), *Symposium on Daniel*, ed. Frank B. Holbrook (Washington D.C.: BRI, 1986), *70 Weeks, Leviticus, Nature of Prophecy* (Washington D.C.: BRI, 1986), *Issues in the Book of Hebrews* (Washington D.C.: BRI, 1989), *Symposium on Revelation* (Washington D.C.: BRI, 1992), vols 1-2, Gerhard F. Hasel, *Biblical Interpretation Today* (Lincoln NE: College View

Printers, 1985). There are also numerous volumes written by biblical and theological professors on biblical and doctrinal topics and volumes published by the Andrews University Seminary doctoral dissertation series.

8 Although not a full fledged systematic theology, Richard Rice has presented an attempt at a system to date, entitled, *The Reign of God, An Introduction to Christian Theology from a Seventh-day Adventist Perspective* (Berrien Springs MI: Andrews University Press, 1985). See my review of this book in *Andrews University Seminary Studies* 25:3 (1987), pp. 312-314.

9 Some books on world views include, Gordon H. Clark, *A Christian View of Men and Things* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1952). Norman L. Geisler and William D. Watkins, *Worlds Apart: A Handbook on World Views* (Grand Rapids, MI: Baker Book House, 1989); Ronald H. Nash, *Faith and Reason: Searching for a Rational Faith* (Grand Rapids, MI: Zondervan Publishers, 1988); James Orr, *The Christian View of God and the World* (New York: Scribner's and Sons, 1904). W. Gary Phillips and William E. Brown, *Making Sense of your World from a Biblical Viewpoint* (Chicago: Moody Press, 1991); Robert Redfield, *The Primitive World and its Transformation* (Ithaca, NY: Cornell University Press, 1953); James W. Sire, *The Universe Next Door* (Downers Grove, IL: InterVarsity Press, 1988); Brian J. Walsh and J. Richard Middleton, *The Transforming Vision* (Downers Grove, IL: InterVarsity Press, 1984). Chapters on world views are found in William H. A. Halverson, *A Concise Introduction to Philosophy* (New York: Random House, 1981): "The Christian World View," pp. 21-66); James L. Garrett, Jr., *Systematic Theology, Biblical, Historical, and Evangelical* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1990), 1:70-84. For world views in theology see *Paradigms and Progress in Theology*, eds., J. Mouton, A. G. van Aarde and W. S. Vorster, (Human Sciences Research Council, 1988).

10 1. Naturalism includes Atheism, Physicalism, Humanism, Existentialism and Hedonism. 2. Transcendentalism includes Pantheism, Animism, Panpsychism, Panentheism and Polytheism. 3. Theism includes Deism, Finitism and Traditional Theism. See W.Gary Phillips and William E. Brown, *Making Sense of Your World from a Biblical Viewpoint* (Chicago: Moody Press, 1991), pp. 41-67.

11 See Jeffrey Hopper, *Understanding Modern Theology. Cultural Revolutions and New Worlds* (Philadelphia: Fortress Press, 1987), vol. 1, p. 5. Hopper traces the impact of modern science on the modern world view.

12 The heliocentric cosmology of Copernicus (15th century) led to a confrontation between the Church and Galileo (16th century).

13 Millard J. Erickson, *Concise Dictionary of Christian Theology* (Grand Rapids, MI: Baker Book House, 1986), p. 128.

14 Johannes Quasten, *Patrology* (Westminster, MD: Christian Classics, 1990), 2:42.

15 *The Ante-Nicene Fathers* (Edinburgh: T&T Clark, 1989), 4:239-384. Origen divides his system into four parts, presented in four books, i.e., theology, cosmology, anthropology and teleology.

16 Wilhelm Windelband, *A History of Philosophy* trans. James H. Tufts, (New York: Harper and Row Publishers, 1958), 1:266.

17 Encyclical Letter of Pope Leo XIII, in preamble to St. Thomas Aquinas *Summa Theologica,* trans. by Fathers of the English Dominican Province (Westminster, MD: Christian Classics, 1981), 1:xi.

18 *Documents of Vatican II*, eds. Walter M. Abbott, S. J., Joseph Gallagher, (London: Geoffrey Chapman, 1967), p. 246.

19 Some of the speculations include the thought that the world is animate, with a soul and intelligence, with heavenly bodies surrounding it in a hierarchical order in a cosmocentric cosmology. Bonaventura, for example, believed in fourteen levels in the hierarchy of the universe, with ten celestial and four elementary spheres (see N. Max Wilders, *The Theologian and His Universe: Theology and Cosmology from the Middle Ages to the Present* [New York, NY: The Seabury Press, 1982], pp. 19-43). Aristotle believed that there are consecutive spheres around the world, with the bodies within each ascending sphere purer and more dignified (see Wilders, p. 23).

20 The cosmology of Parmenides lay behind the Platonic/Aristotelian dualism through

his *chorismos* (gulf) between "the sensible world (*Lebenswelt*) and the world of Truth and Reason." Fernando Canale, *A Criticism of Theological Reason, Time and Timelessness as Primordial Presuppositions,* Andrews University Seminary Doctoral Dissertation Series:10 (Berrien Springs, MI: Andrews University Press, 1983), p. 84.

21 Not all Greek thinking posited this dualism, as seen in that period of Greek mythodology in which the gods visited planet-earth.

22 Rudolf Bultmann, *History and Eschatology* (Edinburgh: University Press, 1957).

23 For further study on this, see Norman R. Gulley, "Death: New Testament," *The Anchor Bible Dictionary,* ed. David Noel Freedman (New York: Doubleday, 1992), 2:110-111.

24 This includes the effect of evolutionary theory on the doctrine of creation. This deserves a separate article.

25 A Seventh-day Adventist theological system needs to unfold the meaning of Scripture to a world culture, and not just to individual cultures. To show how this can be done would take another article, but Scripture truth would be judge and guide to cultures in the system.

26 Wilders, p. 83.

27 *The Worldbook Encyclopedia* (Chicago, IL: Field Enterprises Educational Corporation, 1972), 8:12.

28 *The World Book Encyclopedia,* 14:307.

29 Wilders, p. 139.

30 Francis Schaeffer, *How Should We Then Give?* (Old Tappan, NJ: Rozell, 1976), p. 131.

31 See Langdon Gilkey, *Naming the Whirlwind:The Renewal of God-Language* (Indianapolis, IN: The Bobbs-Merrill Company, 1969), p. 51.

32 Richard Swinburne, *Faith and Reason* (Oxford: Clarendon Press, 1981), p. 42.

33 Alexander Thompson, *Tradition and Authority in Science and Theology, with Reference to the Thought of Michael Polanyi* (Edinburgh: Scottish Academic Press, 1987), pp. 24-35.

34 Michael Polanyi, *Science, Faith and Society* (Chicago, IL: University of Chicago Press, 1946), p.76. Theology can only operate through belief in the authority of Scripture.

35 We are not referring to the evolutionary world view which is philosophical rather than proven science.

36 See Rene Descartes, *The Essential Writings*, trans. John J. Blom (New York: Harper and Row, Publishers, 1977).

37 Wilders, p. 149, or "the father of modern philosophy in the pre-Kantian period." Frederick Copleston, *A History of Philosophy* (Westminster, MD: The Newman Press, 1959), 4:152.

38 Wilders, pp. 149-152.

39 Frederick Copleston, S. J., *A History of Philosophy* (Westminster, MD: The Newman Press, 1959), 4:90.

40 See Colin Brown, *Philosophy and the Christian Faith* (Downers Grove, IL: InterVarsity Press, 1968), pp. 49-53. Brown penetrates to a basic weakness in Descartes' method. A thought is not true because logical, but only if experience checks it as corresponding to its object. This is precisely what Descartes disallowed "driving a wedge between the mind and its thoughts on the one hand and the world and experience on the other."

41 Copleston, 4:66.

42 Copleston, 4:69.

43 Jeffery Hopper, *Understanding Modern Theology. Cultural Revolutions and New Worlds* (Philadelphia: Fortress Press, 1987), 1:36. See also pp. 23-37.

44 See Helmut Thielicke, *Modern Faith and Thought,* trans. Geoffrey W. Bromiley (Grand Rapids, MI: Wm. B. Eerdmans, 1990), p. 51.

45 David Hume, *Treatise* (Oxford: University Press, 1951), p. xx.

46 Thielicke, p. 73.

47 Thielicke, p. 75.

48 Copleston, 4:15.

49 Empiricism is a philosophical theory that believes that all knowledge comes via sensory perception.

50 Positivism limits human knowledge to sense perception.

51 Kant claimed that there had been no radical changes in logic since Aristotle, and he set out to make that contribution. He influenced natural science throughout the central part the 19th century. See R. G. Collingwood, *An Essay on Metaphysics* (Oxford: The Clarendon Press, 1940), pp. 5-95. In fact, he dominated the 19th century. Copleston, 4:54. He practically removed all place for metaphysics, "anticipating the Romanticism of Schleiermacher, Hegelian Idealism, Ritschl's moral kingdom, and Kierkegaard's distant God." Rodney Petersen, *Continuity and Discontinuity. Perspectives on the Relationship between the Old and New Testaments*, ed. John S. Feinberg (Westchester, IL: Crossway Books, 1988), p. 30. His three major works, *Critique of Pure Reason, Critique of Practical Reason*, and *Critique of Judgment* were to be viewed as complementary approaches to knowledge, but each approach led philosophy to split up into separate "stands." His first *Critique* led partly to evolutionary positivisms, scientific positivisms, historical positivisms, sociological positivisms, humanistic positivisms, logical positivisms and linguistic positivisms. See Thielicke, p. 289; Nels Ferre, *Faith and Reason* (NY: Harper and Brothers Publishers, 1946), pp. 102-103 and Hendrikus Berkhof, *Two Hundred Years of Theology, Report of a Personal Journey*, trans. John Vriend (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co., 1989), p. xiii. Kant influenced Schleiermacher, Barth and Bultmann.

52 Kant wrote three major Critiques: *Pure Reason, Practical Reason* and *Judgment*. He worked through the principles of knowledge (thinking), morality (willing) and feeling. These examined the theoretical, practical and aesthetical dimensions of reason.

53 Hume caused Kant to awaken from his dogmatic slumbers, and also influenced him in his attitude toward metaphysics. See Copleston, 4:61, 6:194.

54 Kant said, "all our knowledge begins with experience." *Critique of Pure Reason*, trans. Norman K. Smith (London: MacMillan and Co., Ltd., 1929), p.41. Kant called such knowledge empirical philosophy, whereas "doctrines from *a priori* principles alone we may call *pure* philosophy." Kant, *Critique of Practical Reason and other works on the Theory of Ethics*, trans. Thomas K. Abbott (London: Longmans, Green and Co., 1948), p.2.

55 T. F. Torrance, *Christian Theology and Scientific Culture* (Belfast: Christian Journals ltd., 1980), p. 20. cf. Hopper's view on this, as follows. "We are always limited by the ways in which our senses and our minds condition what we perceive and conceive." Hopper, p. 55.

56 Richard Grigg, *Theology and a Way of Thinking* (Atlanta, GA: Scholars Press, 1990), p. 26.

57 *Evangelical Theological Dictionary of Theology*, ed. Walter A. Elwell, (Grand Rapids, MI: Baker Book House, 1987), pp. 858-860.

58 Wilhelm Windelband, *A History of Philosophy, Renaissance-Enlightenment-Modern* (New York: Harper and Row, Publishers, 1958), 2:543.

59 Grigg, p. 28.

60 T. F. Torrance, *Christian Theology and Scientific Culture* (Belfast, Ireland: Christian Journals Limited, 1980), p. 21.

61 Berkhof, p. 5.

62 Immanuel Kant, *Religion within the Limits of Reason Alone*, trans. Theodore M. Greene and Hoyt H. Hundson (New York: Harper and Row, Publishers, 1960).

63 Hopper, p. 56.

64 Gordon D. Kaufman, *An Essay on Theological Method* (Missioula, MN: Scholars Press, 1975).

65 Kaufman, p. 16.

66 Karl Barth, *Church Dogmatics*, trans. G. T. Thomson (Edinburgh: T&T Clark, 1963), 1/1, 1-25.

67 Kaufman, p. 37. See also Gordon D. Kaufman, *Systematic Theology. A Historicist Perspective* (NY: Scribner, 1968).

68 Kaufman, *An Essay on Theological Method*, p. 23.

69 Kaufman, *An Essay on Theolgical Method*, p. 41.

70 Kaufman, *An Essay on Theological Method*, p. 26.

71 See Kaufman's assessment, Gordon D. Kaufman, *An Essay on Theological Method*, p. 36.

72 Clark H. Pinnock, "Prospects for Systematic Theology" in *Toward a Theology for the Future*, eds. David F. Wells and Clark H. Pinnock (Carol Stream, IL: Creation House, 1971), p.102.

73 I am indebted to my colleague, physicist Ray Hefferlin, for checking over the scientific aspects of this presentation, and for valuable suggestions and insights.

74 Old science, interprets nature in terms of numbers and geometrical form (Pythagorean), new science interprets nature in terms of matter in motion. Alexander Thompson, *Tradition and Authority in Science and Theology with Reference to the Thought of Michael Polanyi* (Edinburgh: Scottish Academic Press, 1987), 1-2. The New Science can trace its more recent roots to Galileo's work on dynamics of motion. See Hopper, 1:5-30. In this section we are not speaking of the natural sciences. I agree with Clark Pinnock that "the central issue in modern theology" issues out of "a failure to confront the issue of naturalistic science properly." Pinnock, p. 116.

75 Michael Polanyi spoke of the "Einsteinian process of thought as 'a new epistemological method of speculative discovery,'" Thomas F. Torrance, *Reality and Scientific Theology*, (Edinburgh: Scottish Academic Press, 1985), p. 77. Karl Heim notes that classical epistemology was flawed with its separation of investigating subject from object of investigation. Karl Heim, *The Transformation of the Scientific World View*, (NY: Harper and Brothers Publishers, 1953), p.62.

76 Nicholas Wolsterstorff speaks of "radically new developments in the field of philosophical epistemology," in *Faith and Rationality: Reason and Belief in God*, eds. Alvin Plantinga and Nicholas Wolsterstorff (Notre Dame, MI: Univ. of Notre Dame Press, 1983), p. 1.

77 Albert Einstein, *Ideas and Opinions*, trans. Sonja Bergmann (New York: Bonanza Books, 1954), p. 257.

78 See Werner Heisenberg, *The Revolution in Modern Science* (NY: Harper and Row Publishers, 1958).

79 *The World Book Encyclopedia* (Chicago: Field Enterprises Educational Corporation, 1973), vol. 13, p. 253. Quantum research discovered that electrons and light behave as a particle and as a wave.

80 *The World Book Encyclopedia*, vol. 16, pp. 4-5.

81 T. F. Torrance sees this as transcending the "what" and "how" of classical physics, and opening up to ultimate questions of origin and end. T. F. Torrance, *Divine and Contingent Order* (Oxford: University Press, 1981), pp. 75-81.

82 Russell Standard, *Grounds for Reasonable Belief* (Edinburgh: Scottish Academic Press, 1989), p. 35. Cf. with Kant's view of space and time, Immanuel Kant, *Critique of Pure Reason* (London: Macmillan and Co., Limited, 1929), pp. 67-82.

83 *The Worldbook Encyclopedia*, vol. 16, pp. 201-204.

84 Ray Hefferlin's comment on this part of the manuscript.

85 Carl Henry suggests that Planck's "projection of quantum-energy ended the classical era of physics." Carl F.H. Henry, *God, Revelation and Authority* (Waco, TX: Word Books, Publisher, 1976), 1:162.

86 Light appears to be a continuous stream, but actually is given off in units called quanta, comparable to a motion picture made up of separate frames. See *The World Book Encyclopedia*, 16:4-5.

87 Wolfhart Pannenberg, see Millard J. Erickson, *The Word Became Flesh, A Contemporary Incarnational Christology* (Grand Rapids, MI: Baker Book House, 1991), p. 110.

88 Werner Schaaffs, *Theology, Physics, and Miracles* (Washington: Canon, 1974), p. 66. quoted in Erickson, pp. 486-487.

89 Einstein, p. 273.

90 Einstein, p. 274.

91 Einstein, p. 282.

92 Einstein, pp. 293-295.

93 Thomas F. Torrance, *God and Rationality* (London: Oxford University Press, 1971), p. 12.

94 Epistemological as opposed to procedural.

95 Torrance, *God and Rationality*, p. 13.

96 With the collapse of the Newtonian mechanistic world view that was static, the new science of relativity, with its dynamic fourth dimensional comprehension of reality, has not only opened up new possibilities for authentic epistemology but also contributed to Process theology of John Cobb and Charles Hartshorne, based upon the philosophy of Alfred Whitehead. See Hopper, 1:93-94. For an evaluation of Process theology, see Norman R. Gulley, "An Influential Force in Contemporary Theology," *Adventist Perspectives*, 2:1, (1988), pp. 11-34.

97 T. F. Torrance, *Space, Time and Incarnation* (London: Oxford University Press, 1969), p. 83.

98 Torrance, *Space, Time and Incarnation*, pp. 84-90; Karl Heim, *The Transformation of the Scientific World View* (New York: Harper and Brothers Publishers, 1953), p. 76.

99 This refers to epistemological idealism and not to ontological idealism.

100 Torrance, *Reality and Scientific Theology*, p. 21.

101 Karl Heim, *The Transformation of the Scientific World View* (NY: Harper and Brothers Publishers, 1953).

102 Heim, pp. 17-24.

103 Even though Einstein was a determinist.

104 Heim, p. 127.

105 Torrance, *Reality and Scientific Theology*, p. 80.

106 Thomas F. Torrance, *The Ground and Grammar of Theology* (Charlottesville, VA: University Press of Virginia, 1980), p. ix.

107 Torrance, *Reality and Scientific Theology*, p. 81.

108 Bernard J. F. Lonergan, *A Study of Human Understanding* (New York: Harper and Row, Publishers, 1978), p. xxi.

Journal of the Adventist Theological Society, 4/2 (1993):161-171.

HISTORICIZATION AND CHRISTIAN THEOLOGICAL METHOD

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"The great question is that of method, everything else follows in due course," Arthur Samuel Peake.[1]

This essay discusses three epoch-making moments of historicization,[2] crafted respectively by Friedrich Schleiermacher, Charles Darwin, and Alfred North Whitehead, which have radically shaped not only liberal, but also aspects of evangelical Christian theological method. The study reflects upon the challenges presented by these three moments to Adventist theological method. It concludes by suggesting three methodological presuppositions needed to give shape to a fruitful Adventist approach to theology.

Schleiermacher's Impact on Method

The first moment to be considered is the remarkable historicization of Christian doctrine by the father of modern liberal theology, Friedrich Schleiermacher. Taking his cue in part from philosophical signals from Descartes and Kant, Schleiermacher, articulates his own turn to the subject in a theological shift which serves as the basis for a radical change in theological method still followed by many leading contemporary academic Christian theologians.

In the second speech entitled "The Nature of Religion" printed in his *On Religion: Speeches to its Cultured Despisers*, 1799, we find the basis of Schleiermacher's theological turn to the subject in his famous definition of religion: "[R]eligion is the sense and taste for