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**A BIBLICAL EPISTEMOLOGY
FOR ADVENTIST SCHOLARSHIP?**

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Since the creation of the first Adventist Universities early in the second half of the twentieth century, the Seventh-day Adventist church has engaged in scientific research in several secular and theological scholarly disciplines that involve the use of human reason and methodologies. Because, normally, researchers select and use methodologies based on the current consensus of their scholarly disciplines, we have to assume Adventist scholars do the same. Seldom do scientists take time to analyze, evaluate, and criticize the intellectual tools they use. As far as I know, Adventist scholarship has engaged in scientific research while consistently neglecting Epistemological research and conclusions.¹

Epistemology is the philosophical discipline that studies the intellectual tools of science in order to ascertain their nature, limits, and reliability when reaching conclusions and developing the teachings of each scholarly discipline. Eventually, the Adventist scholarly community should clarify its position on Epistemology. Is continuous neglect of Epistemology acceptable for scientists and theologians? Does Adventist scholarship need to become involved in epistemological thinking? If reason and method do not affect the outcome of research and teaching, Adventism probably could go on without concerning itself with Epistemology. Yet, if they do, we should get involved immediately because of the unity and mission of the Church. Absence of a shared Epistemology produces scholarly divisions (scientific and theological) and promotes views incompatible with the mission of the church.

The purpose of this article is double. First, I will introduce readers to basic epistemological concepts that may help them to answer this question. Second, I will argue that Adventist scholarship not only needs to participate in Epistemological studies, but should also develop a Biblical Epistemology as a general hermeneutical framework for disciplinary and interdisciplinary research in Adventist Universities. The intentional application of Biblical Epistemology to all scholarly disciplines is the necessary intellectual basis for intellectual unity, for the emergence of the Adventist University project, and for advancing the mission of the church through the scholarly community.

What issues does Epistemology study?

Epistemology is a philosophical discipline that studies the human act of knowledge. When we know we are conscious of objects and ideas. For instance, we know a painting, the contents of a book, a car, a person, a biblical verse, and so on. Medicine studies the human being. Geography studies the physical features of the earth. Biology studies living things and so on. In a high level of abstraction, Epistemology turns the act of knowledge on itself. Epistemology studies not what we know (object of knowledge) but how we know it (the rational action generating knowledge).

Epistemology focuses on understanding the act of scientific knowledge. The word “epistemology” is a composite of the Greek words “episteme” (epistemh, knowledge), and “logos” (logoj, word, subject matter, study) that means the study of scientific knowledge in

¹ I will be pleased to find exceptions to my assumption around the world.

contraposition to everyday personal knowledge Plato labeled opinion (doxa, glory, appearance, opinion).²

In classical times, reflection on human reason and science began as Theory of Knowledge, a subdivision of ontological anthropology that dealt with the origin, conditions, essence, limits, and truth of human reason. By bringing the study of knowledge and the sciences (Mathematics, Physics, and Metaphysics) together, we may credit Immanuel Kant with the origination of modern Epistemology as an independent philosophical discipline. Today, Epistemology studies knowledge and its role in the sciences. Philosophy of Science is a chapter in Epistemology. Here is where epistemologists discuss the role reason plays in the scientific method in general and in the specific method of each discipline of modern science.

As we start thinking about Epistemological issues, several questions may come to mind.³ Are there several theories about knowledge? Can human reason generate knowledge that is true and certain? How do we distinguish between personal opinion and scientific knowledge? What relation takes place between knower (subject) and known (object)? What are the limits of human knowledge? What foundations do we find in Scripture that may help to develop an epistemology for Adventist scholarship? How do revelation and reason interact in the cognitive process? In what way do our personal worldview, tradition, and social context condition our knowledge? How does Biblical Epistemology help Adventists to evaluate hypothesis and theories in theological and scientific disciplines? What is the role of the Holy Spirit in human knowledge? What are the practical implications of Epistemology for the Adventist believer? I will not answer all these questions in this article because of my double purpose stated above. Yet, I have included them to stir the mind of the reader and to help her/him to become involved in epistemological thinking.

² Plato, *The Republic*, 477, a-b.

³ The questions in this paragraph were formulated by Doctor Humberto Rasi (personal e-mail, 1/10/2008).

The Basic Structure of Knowledge

We need to start at the beginning. In Epistemology, the beginning is the generation of knowledge. How do human beings generate knowledge?⁴ All knowledge originates from the subject-object relationship, which functions as the foundational cognitive unit. Knowledge, then, takes place when a cognitive subject (human being) and a cognitive object (whatever falls within the intentional consciousness of human beings) meet each other (see illustration 1, below). Epistemology studies and assumes the activity of a subject and its relation to an object.

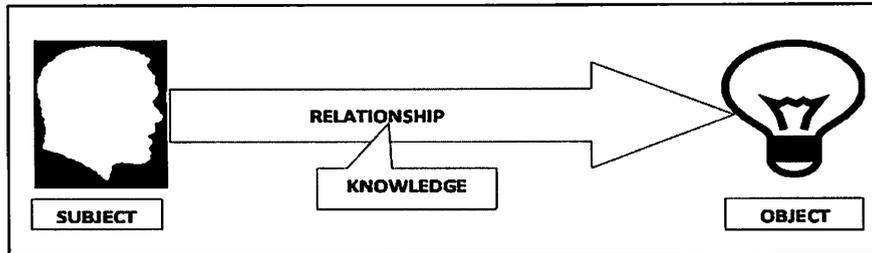


Illustration 1: Grounding Cognitive Event

The cognitive subject (a thinking brain) apprehends a cognitive object. The object is anything we can think or dream. Thus, the object can be both intra and extra mental. This much is a fact beyond interpretation. Yet, the way in which each, subject and object, contributes to the origination of knowledge has been interpreted in various ways.

Classical and modern philosophers believe knowledge originated wholly from the object. In this view, the cognitive subject passively receives the content of knowledge for the object.⁵ On this conviction our idea of “objective” knowledge stands. To qualify knowledge as “objective” means that it originates from the object wholly, without any contribution from the subject that may distort its “objectivity.” Contributions from the subject are personal distorted biases scientists should avoid in their constructions and conclusions. Departing from the classical and modern views, over the last three centuries, epistemological reflections have led to the realization that the cognitive subject also contributes to the generation of our scientific “objective” knowledge. During the last decade of the twentieth century, postmodern thinkers broadly accepted this conviction. Epistemology became hermeneutics.

Epistemology and Hermeneutics

For centuries, Hermeneutics dealt with interpretation of texts, especially of the biblical, literary, and legal texts. With the development of Philosophical Hermeneutics in the twentieth century,

⁴ Technically, this is the question of the origin of knowledge. In modern times, rationalists and empiricists argued this point against each other. Following Descartes, rationalists argued that scientific knowledge started within the human soul in its God given “innate” ideas. Empiricists, following Lock and Hume, argued that human knowledge originates with sensory perception experiences. The latter have led to what we today know as modern science. This helps to start answering the question we formulated earlier: Are there several theories about knowledge? Yes, there are several, rationalism and empiricism are two of them.

⁵ This is the case when we look at the subject-object relationship from the perspective of the content of knowledge. If we look at the same relationship from the perspective of the apprehension of knowledge, then, the subject is active and the object is passive. As far as I know, no one disputes this point.

the borders between Epistemology and Hermeneutics became blurred. On one hand, scientists realized that their teachings included not only natural information but also the humanly originated conclusions of research. On the other hand, philosophers turned their attention to interpretation as a general cognitive phenomenon not limited to texts but including all human cognition. In short, interpretation became a synonym of knowledge.

To know is to interpret.⁶ To interpret means that the cognitive subject contributes to the origination of our knowledge of nature and humanly originated forms (texts, artifacts, language, etc...). Hermeneutics and Epistemology, then, are closely related. During the twentieth century, as scholars attempted to understand the general phenomenon of interpretation, "Philosophical Hermeneutics" was born. Since philosophers of science already recognized the contribution of the subject in their descriptions of scientific methodology, one might argue that in postmodern times Epistemology has become Hermeneutical.

Presuppositions as Conditions of Knowledge

To recognize that each concrete individual contributes to the formation of scientific and theological knowledge does not call for the dismissal of the contributions of the object, or imply relativism. Instead, hermeneutical Epistemology encourages the free and total contribution of the object in the process of knowledge formation.

Because the contributions of the subject are in the subject before the act of interpretation takes place, we call them "*presuppositions.*" Consequently, presuppositions are ideas tacitly assumed by the subject before he/she engages in an act of knowledge. They are necessary to make sense of the object. Knowledge results from the complementary meeting of the presuppositional and objective contents. Perhaps the best way to understand the role of presuppositions is to relate them to the more familiar idea of context.

By the word "context," we mean the parts of a discourse or writing that immediately precede and follow a word or passage which help us to clarify and determine its meaning. Presuppositions are ideas or information tacitly assumed before we interpret nature or human generated forms (texts artifacts, etc...).

From where do presuppositions come? They originate from previous life experiences. Thus, the sum total of our presuppositions includes the experiences of our entire life until the present moment stored up in our memories as on a hard disk. Yet, not all presuppositions play the same role or work simultaneously. Instead, as our knowledge intentionally focuses on a cognitive object, we automatically and non-intentionally select from our memory the ideas and information that directly relate to the object of our intentional attention which we need as context to understand it. Illustration 2 may help us to see how this process works.

A professor of Biology prepares a tissue sample to examine under the microscope. Then he calls an advanced chemistry student and an advanced theology student to observe it. After they study the specimen carefully, the professor asks that they write a report. Not surprisingly, the reports are widely different. The presuppositions each brought to the apprehension of the same cognitive object is reason for the discrepancy.

⁶ For an introduction to this phenomenon see Fernando Canale, *Creation, Evolution, and Theology: The Role of Method in Theological Accommodation* (Berrien Springs, MI: Andrews University Lithotech, 2005).

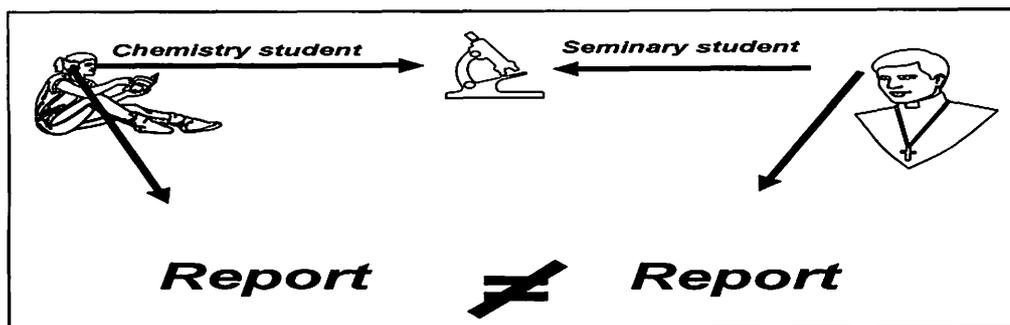


Illustration 2: Microscope Analogy

With this in mind, we can understand the technical meaning of the word “condition” in Epistemology. This language found a permanent role in Epistemology ever since Kant published his *Critique of Pure Reason* (1781). Presuppositions are conditions of our understanding of objects (texts, events, imagination etc...) because they tacitly contribute to our knowledge of them. Therefore, when we say that an idea *conditions* a view, or that a view is *conditioned*, epistemologists refer to the tacit presuppositions that the reason applies to the understanding of any object or event.

We can draw a partial conclusion; presuppositions condition all knowledge because each act of knowledge forms part of the larger discourse of life and history (personal and social). If this is so, tacit presuppositions condition our understanding of Scripture and doctrines. Presuppositions condition our understanding of Epistemology and scientific methodology. Let us see how the basic phenomenological analysis of the act of knowledge we have described above helps us to discover the macro hermeneutical presuppositions that condition the task of Christian theology.

Ontology Conditions Epistemology

The subject-object relationship is the act from which all knowledge originates. A closer look reveals that Epistemology is about understanding the way in which the cognitive subject and the cognitive object relate to each other. Epistemology studies the nature and limits of cognitive relationship and its extension in scientific methodology. However, the generation of knowledge includes a previous understanding of the reality of both the subject and the object. Clearly, unless the subject and the object are somehow “real,” there can be no subject-object relationship, knowledge, or Epistemology. More importantly, our assumed understanding of the reality of the subject and the object radically influences the way we understand. This is especially true in scientific and theological thinking.

Tacit assumptions about reality span from highly specific to extremely broad ideas. Because broad ideas are the implicit context of specific ones they function as the condition of their understanding. While philosophy focuses on general ideas, “hard” and “soft” sciences focus on ideas that are more specific. For this reason, philosophy studies the assumed reality each empirical science studies. Since, in philosophy, Ontology is the discipline that studies the nature and general characteristics of what is real, we can say that Ontology conditions epistemology and, that both condition our scholarly understanding of all sciences including biblical interpretation and Christian Theology.

Ontology, includes general and regional ontologies. General ontology studies the issue of Being (the meaning of the word “is”), and entities in general (categories all entities share). Regional

ontologies include ontological anthropology, cosmology, and metaphysics. Anthropology studies the general characteristics of human entities. Cosmology or worldview studies the origin, functions, and nature of the physical universe. Metaphysics studies the harmony of whole things, including all cognitive subjects.

Ontology, anthropology, cosmology, and metaphysics are the general issues we usually assume tacitly in the formation of scientific or theological knowledge. Philosophers have interpreted these philosophical issues in various ways because philosophical thought emerges from the same subject-object event where all knowledge originates.⁷

Epistemology conditions science and theology

Most scientists and theologians live under the epistemological illusion that their conclusions and teachings are “objective.” By “objective,” normally they mean, “biding to all rational creatures.” After being extremely careful and exhaustive in dealing with all data and evidence related to their study subjects, theologians and scientists expect all rational persons will agree with their conclusions. They assume their views are absolute, that is, they have universal validity for all rational beings. In fact, tacitly they assume classical and modern epistemological views.

However, the modern understanding of science claims universality based only on permanent empirical verification. Consequently, modern epistemology regards the outcome of science not as absolute but as hypothetical. Karl Popper was one of the greatest philosophers of science of the twentieth century.⁸ Being a specialist in scientific method, he concluded on the certainty of scientific knowledge by using the analogy of a building and its foundations. “The empirical basis of objective science has thus nothing ‘absolute’ about it. Science does not rest upon solid bedrock. The bold structure of its theories rises, as it were, above a swamp. It is like a building erected on piles [testing]. The piles are driven down from above into the swamp, but not down to any natural or “given” base; and if we stop driving the piles deeper, it is not because we have reached firm ground. We simply stop when we are satisfied that the piles are firm enough to carry the structure, at least for the time being.”⁹

In my opinion, Adventist scientists and theologians implicitly assume classical and modern epistemological ideas. The notion that rational truth is universal and absolute seems to fit the conviction of established Adventist theologians and scientists. Not surprisingly, most see postmodernity as a threat to their basic conviction that truth is absolute.¹⁰ If there are no

⁷ This brings us to existence and contribution of the “spontaneity” of the cognitive subject. When we realize that freedom and knowledge coincide in the “spontaneity” of the “cognitive subject,” we have reached the ultimate ground of the act of knowledge. The spontaneity of the subject implies the unlimited capability of the cognitive subject to create diverse interpretations of the same object. The “spontaneity” of the subject springs from the conjunction in the cognitive subject of feeling, imagination, and freedom. On the role of imagination and feelings in metaphysics see, for instance, John Kekes, “Feeling and Imagination in Metaphysics,” *Idealistic Studies* 7, 1977: 76-93.

⁸Stephen Thorton, *Stanford Encyclopedia of Philosophy* (Stanford, CA: Sanford University, <http://plato.stanford.edu/entries/popper/>, 2006): Karl Popper.

⁹ Karl Popper, *The Logic of Scientific Discovery* (London: Hutchinson, 1968).

¹⁰I know few Adventist assessments of postmodernity, see for instance, Norman R. Gulley, “The Fall of Athens and the Challenge of Postmodernity,” *Journal of the Adventist Theological Society* 10, no. 1/2

absolute truths, then Adventists cannot claim their truth and message are absolute. Consequently, we no longer could claim to be the remnant Church with an absolute message.

Nonetheless, few have noticed that postmodern relativism is positive for the Adventist Church. We need only to realize that postmodernity shows that *rational and scientific conclusions are not absolute*. In short, reason does not have what it takes to produce universal absolute truths. Those who suppose postmodern relativism forces Adventists to theological relativism should remember that the absolute truth of the Third Angel's Message *does not stand on the powers of reason but of Biblical revelation*.¹¹

Modern Epistemology tacitly shared by Adventist university scholars makes constructive dialogue between science and theology difficult, particularly in Adventism. They unconsciously incorporate modern epistemological ideas simply by learning and doing research in their disciplines. Hence, the tendency to judge Scripture from the teachings of science seems logical to many scientists, even theologians, in spite of Ellen White's advice to judge Science from Scripture. Unseen and uncritically adopted, modern Epistemological teachings are shaping the Adventist mind, the scholarly research in Adventist Universities, and even Adventist theology and practice.¹²

After all, many argue, God is the originator of all truth both in Scripture and in nature. This is a true. Yet, they neglect to factor in the conditioning role of Epistemology in the origination of scientific and theological knowledge. Moreover, they also fail to realize that scientific and theological knowledge are not absolute fact but interpretations.

Epistemology in Christian Theology

Christian theology stands on the multiple sources of revelation. This means that theologians draw their data from Scripture, tradition of the Church, philosophical and scientific teachings (ontology and epistemology) and experience, all considered as vehicles of divine revelation. This view developed early in the history of Christianity and provides the foundation to the Roman Catholic system of theology, worship, and administration. The Protestant Reformers never really challenged this base. In the formation of Christian theology, the Reformation cry for the *sola Scriptura* never actually replaced the multiplex sources of revelation basis for theological data; it only modified it on selected issues. Today, mainline Protestant denominations and conservative Evangelicals accept the multiple sources of revelation principle, best known as the Wesleyan Quadrilateral.

Of course, this became necessary after Greek philosophical ideas on Ontology and Epistemology replaced Old Testament teachings as presuppositions to understanding the New Testament. Ever since, classical (conservative) Christian theologians accept, dogmatically, the basic ontological and epistemological teachings created by heathen Greek philosophers, notably,

(1999), Larry L. Lichtenwalter, "Generation Angst and the Ethical Paradox of Postmodernity," *Journal of the Adventist Theological Society* 10, no. 1/2 (1999).

¹¹ Fernando Canale, "Absolute Theological Truth in Postmodern Times," *Andrews University Seminary Studies* 45, no. 1 (2007).

¹² For a brief introduction to the effects of Modern Epistemology in Adventist theology see, Fernando Canale, "From Vision to System: Finishing the Task of Adventist Theology Part 1: Historical Review," *Journal of the Adventist Theological Society* 15, no. 2 (2004).

Parmenides, Plato, and Aristotle. Modern (liberal) Christian theologians reject Greek philosophy and replace it with scientific ontologies and epistemologies (Process ontologies and epistemologies). In fairness to conservative Evangelical theologians, I have to say that most of them actually believe that their doctrines are fully biblical without any influence from human ontologies or epistemologies. They implicitly confuse their ignorance of ontological and epistemological issues with the absence of non-biblical presuppositions and data in their belief system. The more biblical oriented believers are, the less they see the ontological and epistemological teachings that condition their thinking.

Creative and solidly biblical theology is rare among Adventists. Following a tradition we can trace back at least to 1888, Adventists have felt comfortable to borrow their theology from classical and modern protestant theologians. Consequently, most of us are also unaware of the role ontology and epistemology play in our own Adventist theological thinking. This explains the existence of Modern Adventists,¹³ and the overall “protestantization” of Adventism that have been taking place in the last fifty years.

An Adventist Epistemology?

To know is to interpret. To interpret we need presuppositions. To do science and theology we need epistemological assumptions. Normally, we adopt epistemological assumptions unconsciously through the processes of learning and research. Consequently, most Adventist scientists and theologians have not dealt with epistemological questions and their conditioning role in their disciplines. This process is rapidly secularizing Adventist thought, life, ministry, institutions, and mission. Additionally, at the scholarly level there is a fateful disconnection between disciplines and theology. As university disciplines develop in disconnection from Scripture and theology, opposite views arise among professors, originating hot debated issues and divisions in the community of faith that are passed, unresolved, from generation to generation.

The question is, can Adventist scholars revert this process? They could become aware of the conditioning role of Epistemology in each discipline. Yet, a mere awareness of Epistemology as it exists today will only help them to understand the intellectual reasons for their theological divisions and interdisciplinary disconnections. If we were to ask Ellen White how to do it, she might tell us to compare science with Scripture searching for the harmony between the truths of nature and revelation.¹⁴

Yet, Adventists have been following her advice for a long time and still have not reached scholarly agreement on the creation-evolution issues. Clearly, Adventists need to find a better way to relate Scripture to science. Perhaps Ellen White’s basic principle according to which “the

¹³ Modern Adventists are those who follow the leads of science to interpret Scripture. The label of their preference is “Progressive Adventists.”

¹⁴ “The Bible is not to be tested by men's ideas of science, but science is to be brought to the test of this unerring standard. When the Bible makes statements of facts in nature, science may be compared with the written word, and a correct understanding of both will always prove them to be in harmony. One does not contradict the other. All truths, whether in nature or revelation, agree. Scientific research will open to the minds of the really wise, vast fields of thought and information. They will see God in his works, and will praise him. He will be to them first and best, and the mind will be centered upon him.” Ellen White, *Healthful Living* (Battle Creek, MI: Medical Missionary Board, 1898), 286-287.

Bible is not to be tested by men's ideas of science, but science is to be brought to the test of the unerring standard"¹⁵ may point us the way ahead. Her principle is not new, but the application of the Protestant *sola Scriptura* principle.

Let us analyze Ellen White statement. Expressed in the active voice, the first part of the sentence says, "men's ideas of science must not test the Bible." The question arises, what is the meaning of the expression "men's ideas of science"? The preposition "of" that usually means "from," to indicate origin and possession, at times can also mean "about."¹⁶ Consequently, the expression "men's ideas of science" could have two complementary meanings. First, it can mean "men's ideas from science," that is, scientific ideas originating from scientific activity. Second, it can mean "men's ideas about science," that is, ideas about the nature of science. I am sure Ellen White did not intend the latter. However, the latter meaning does not contradict the earlier but makes it more general. Arguably, then, a broad reading of Ellen White's principle not only does prevent specific scientific ideas to "test" Scripture, but also affirms we cannot use human views about the nature of science as a standard to judge Scripture.¹⁷

The second part of Ellen White's sentence in the active voice states, "The unerring standard [Scripture] must test (judge) science." Implicitly and probably unknowingly, Ellen White advances the positive concept that Scripture should test Epistemological theories. An Adventist view of Epistemology, should interpret reason and science based on the *sola* (only) and the *prima* (first) *Scriptura* principle. In short, macro epistemological principles should come from Scripture *only* and, once identified, they should be applied to all scientific activity (*Scripture first*).

Scripture and Epistemology

An Adventist Epistemology should be a Biblical Epistemology. To the casual eye, a biblical Epistemology seems impossible because, as explained earlier, Epistemology is a philosophical discipline dependent on Ontology, another philosophical discipline. Moreover, Scripture does not contain epistemological or ontological teachings we can access via exegetical analysis. However, although the Bible does not address the epistemological question, it assumes its existence and operation. Scripture is a fact or product of human reason. Without rational activity, there would be no Scripture or revelation. Epistemology, then, is the condition of biblical revelation.

To the trained eye however, a Biblical epistemology is possible as interpretation and construction. As pointed out earlier, Epistemology is the interpretation of the subject-object-relationship. Throughout history, philosophers have produced a variety of Epistemological views. A careful study of the history of philosophy reveals that changes in Epistemological theories follow changes in ontological teachings. This confirms the phenomenological analysis of reason that shows its dependence from ontological theories (see page 4). In short, due to the variety of ontologies epistemologists have constructed several interpretations of reason. Since

¹⁵ Ellen White, *Counsels to Parents, Teachers, and Students*. (Mountain View, CA: Pacific Press Publishing Association,, 1943). 425.

¹⁶ *Noah Webster's American Dictionary*, 1828, in *Ellen G. White Writings Complete Published Edition*. The Ellen White Estate, Inc., www.WhiteEstate.org, 2007.

¹⁷ *Ibid*.

reason as subject-object-relationship generative of human knowledge and language belongs to the realm of nature the only condition for the interpreting Epistemology biblically is the existence of a Biblical Ontology.

Incontrovertibly, Scripture speaks about Being in general (Exodus 3:14-15); Anthropology, the nature and actions of human beings; Cosmology, the origin and nature of the universe and life on earth; and, Metaphysics, the restoration of the harmony among the One (God) and the many (creatures). However, because of the traditional conviction that human interpretations of Epistemology are compatible with Scripture, Christian theologians including Adventists scholars have never used these ideas to develop a Biblical Ontology or Epistemology.

Since Parmenides, Plato, and Aristotle's pioneering work in ontology, philosophers and theologians understand "ultimate reality" as timeless and spaceless because they believed that what is real should not pass away. Temporal and spatial things are real only in an illusory sense because they pass away. From this ontological view, Christian theologians defined God's being as incompatible with time and space, the human "soul" as an immortal substance (entity), and heaven as having neither space or time. Christian theology builds its Epistemology and theology assuming that these views are universally and absolutely true.

Yet, a preliminary examination of Scripture indicates that biblical ontological concepts depart radically from the traditional ontology on which classical Christian theology builds. The basic difference appears at the most foundational level of reality.¹⁸ Biblical authors do not conceive ultimate reality as timeless or spaceless but rather as historical, temporal, and spatial. Human reality is not a timeless soul but an historical spatial human entity. Cosmology originates with God's six days creative process. Moreover, nature is not a hierarchy of fixed unmovable species but a complex temporal and spatial process of natural and spiritual entities created by God in time. Consequently, in the understanding of reality as a whole, Metaphysics becomes an all-inclusive metanarrative Adventists identify as the Great Controversy.

The existence of ontological and epistemological ideas in Scripture makes an Adventist Epistemology possible. The task is immense. We have to start from scratch. The method to follow in developing the ontological and epistemological teachings of Scripture will not be only descriptive as in exegesis, but also constructive, as in Systematic Theology. The goal will be the biblical understanding of the subject-object-relationship; the interpretation of scientific and theological methodologies; and the disciplinary structure and method of all the sciences in the University. This will provide the necessary intellectual ground on which Adventist research and intellectual thinking could find its inner harmony.

General and Regional Epistemologies

How should a Biblical understanding of Epistemology relate to the scholarly research and teaching that go on in Adventist universities? To answer this question we need to distinguish between the general and regional fields of epistemological studies. General Epistemology studies the all-inclusive nature and conditions of the subject-object event of knowledge. Regional Epistemology, studies the general objectives, methods, and hermeneutical conditions

¹⁸ General Ontology studies the most foundational notion of reality as the concept of "Being." For ontologists, "Being" is the most general and all-inclusive concept that human minds can fathom. In more simple terms we can say that ontology studies the meaning of the word "is."

at work in each scholarly discipline. Usually philosophers develop interpretations of General Epistemology, and scientists familiar with the history of philosophy and science develop Regional Epistemologies.

Since all sciences assume the same general cognitive operations, they implicitly or explicitly assume an interpretation of General Epistemology. Moreover, since General Epistemology assumes interpretations of all-embracing ontological issues, the Regional Epistemological studies of each particular science builds its own method and research program explicitly or implicitly assuming some views on them (such as Being, anthropology, cosmology, and metaphysics (the one and the many)).

Choosing between Epistemological views.

Because knowledge is interpretation, philosophers have interpreted these issues in various ways. Hence, all scientists and theologians should become aware of the ideas they assume and the available alternatives. After due research and reflection on these issues, scientists and theologians should explicitly choose the interpretation of the ontological and epistemological issues assumed in their methodologies.

However, as mentioned earlier, most scientists and theologians are unaware of the epistemological and ontological concepts they received via informal and formal education. Yet, the tacit and uncritically accepted ideas we receive by belonging to a community play a leading role in our thinking, research, and teaching. Epistemological analysis can help us to dig up and analyze the presuppositions we inherited from tradition. Yet, it cannot help us to decide what epistemological views to choose for our own thinking and research.

At the foundation of scientific thinking lies a fateful decision we can make only by faith. Which school of thought should Adventist follow? For Adventist scientists and theologians, the choice becomes more complex. Besides the various epistemological and ontological traditions, they can also choose to follow the biblical ontological and epistemological vision. Since the grounding scientific choice stands on faith, choosing to follow biblical ontology and epistemological views is as rational as choosing to follow the conventional wisdom of the scientific community.

Since no one has developed the Biblical view on epistemological and ontological issues intellectually, one wonders how Adventist scientists and theologians could avoid adopting conventional epistemological ideas. Clearly, adopting a non-biblical epistemology transgresses the first Fundamental Belief of Adventism by rejecting the *sola Scriptura* principle on which Adventism stands. Thus, the Adventist scholarly world needs to choose a biblical epistemological foundation, develop it to answer the questions raised by General and Regional Epistemologies, and use it in their research and teaching.

The Sciences and Theology in Adventism

How should sciences and theology relate to each other in the Adventist university? Presently, Adventists scientists and theologians draw their “epistemological tacit assumptions” by default from current scholarship consensus. Yet, if all scientific and theological disciplines in the Adventist University consciously choose to use the macro-hermeneutical principles springing from Biblical Epistemology, a strong basis for a constructive interdisciplinary dialogue between all sciences and theology will transform the Adventist University into a leader in the scholarly world and a sharp tool for the unity and mission of the church.

How would this project work? First, it requires Adventism to develop the general notions of Biblical Ontology and Epistemology scholarly.¹⁹ Second, as the adoption of all Epistemologies it involves a choice of faith; In Adventism, faith in the *sola, tota, and prima Scriptura* principle. When the General principles of Biblical Epistemology are scholarly constructed all scientific and theological disciplines will use these principles as guiding hermeneutical assumptions to determine their own regional epistemologies, specifically, their disciplinary objective and methodology.

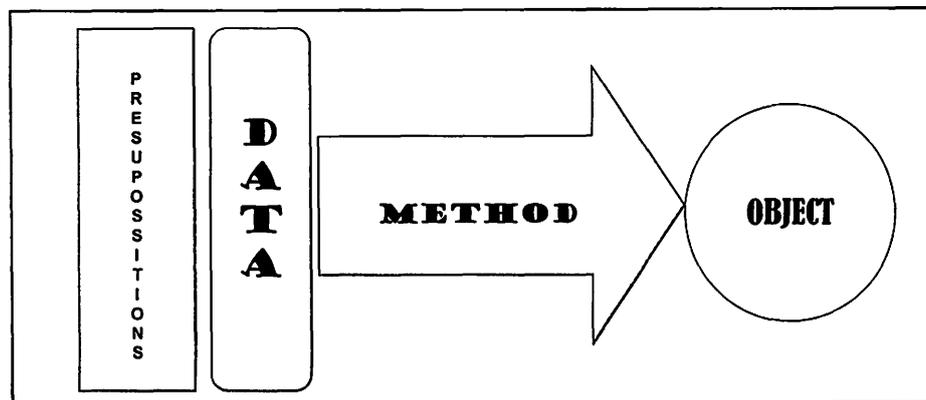


Illustration 3: The Structure of Method

Epistemological analysis reveals that, considered in general, method is an activity that assumes three principles that conditions its shape, procedure, nature, limitations, and outcomes (see illustration 3). They are the material, teleological, and hermeneutical conditions. The material condition refers to the choice of data (information). The teleological condition involves the choice of goal or purpose method seeks to achieve. The Hermeneutical conditions include the general faith conditions methodological procedures require to interpret the data and achieve its goal. Current leading scholarship in the sciences and theology draw its macro hermeneutical presuppositions from human interpretation of the ontological conditions of Epistemology (the One [God], the world, and human nature).

As an example, empirical sciences understand “the one” is part of nature (its inner energy?), the world as the evolving universe, and the human spirit as material (there is no human soul). These contrast with the ontological conditions of Biblical Epistemology. As a highly simplified introductory description, we can say that “the one” is the Biblical God (as contrasted with the God of Theism and Deism) “The many” is the created universe and life on earth God created in seven literal days and providentially administers as the Great Controversy between Christ and Satan. The human nature is the incarnated holistic spirit human beings are.²⁰

How do human Epistemologies influence the sciences and their dialogue with theology? Starting from the upper left corner in Illustration 4, we see that the default epistemological principles

¹⁹ Yet, these disciplines do not exist. For an introduction to the task ahead, see. Fernando Canale, "From Vision to System: Finishing the Task of Adventist Theology: Part 3 Sanctuary and Hermeneutics," *Journal of the Adventist Theological Society* 17, no. 2 (2006).

²⁰ In the field of theology, scholars assume the timeless interpretation of God’s and human ontologies derived from Greek philosophical interpretation, and evolution as the cosmological principle.

Adventist scholars and theologians absorb from their respective scientific communities originate from human interpretation of the natural world. Currently, naturalism (God is not in the picture) and evolutionary cosmology have become the macro hermeneutical principles of epistemology. Because of their all-inclusiveness, all scientific and theological disciplines assume them. Because the sciences and theology take for granted the same interpretation of the general Epistemological principles they can work harmoniously in constructive interdisciplinary research. Thus, in the left corner at the bottom of Illustration 4, we see theology receiving its epistemological principles from human philosophy; and, in the bottom right corner, we see the same principles applied to the sciences. Roman Catholic, Protestant, and Evangelical denominations do theology and relate to science in this way.

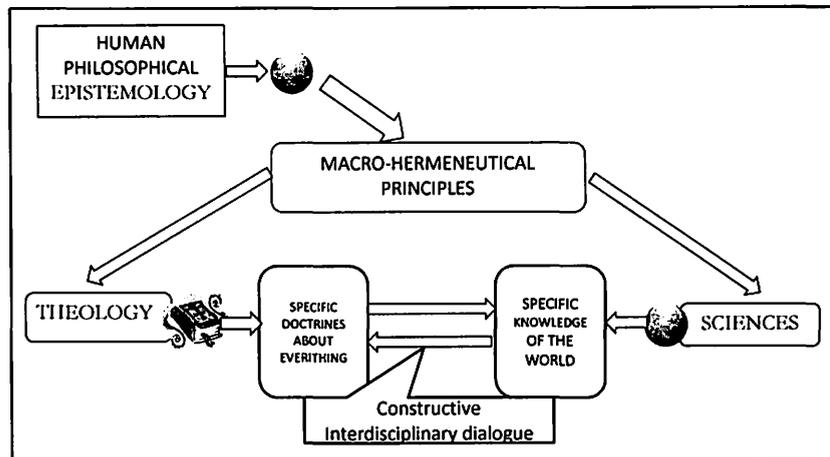


Illustration 4: Epistemological scientific consensus and the sciences

The problem with this way of doing science and theology is the total rejection of the *sola, tota,* and *prima Scriptura* principle. Adventist scholars who attempt to relate their biblical beliefs to the tacit human epistemological assumptions soon discover they do not fit within the current scientific consensus. In other words, they soon find out that their theological and scientific beliefs contradict each other. The normal tendency is to take both at face value as true, and harmonize them. Because the development of the epistemological base for the sciences and Christian tradition is better than in Adventist Theology, Adventist scientists and theologians tend to adapt their biblical beliefs to the teachings of science and culture. This intellectual shift has taken place during the last fifty years and has intensified since the turn of the century.

In Adventism, this is the modus operandi of self-denominated “Progressive Adventists.” They interpret Scripture and construct Adventist theology guided by Epistemological principles created by human thinkers contemplating the natural and historical worlds. Bible and Theology become adapted to evolutionary cosmology and contemporary culture. If the Church does not challenge this trend, Adventism will adopt the Protestant system of theology and join the ecumenical movement led by Rome. The church can reverse this trend by encouraging and financing the formulation of Biblical epistemological principles on which to build the Adventist university.

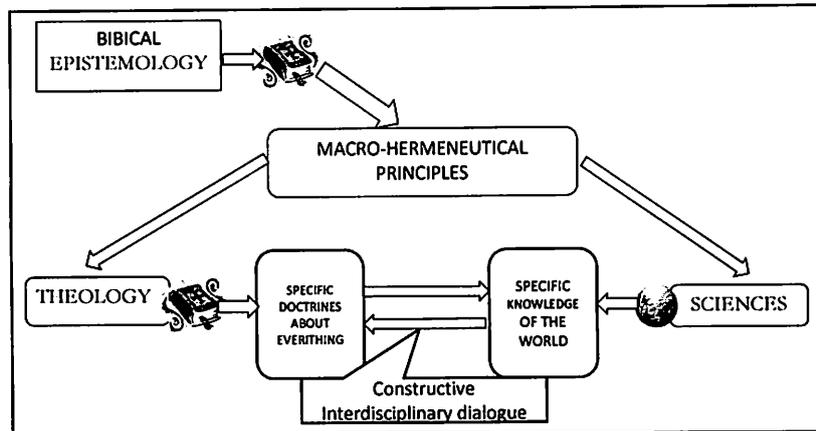


Illustration 5: Biblical Epistemology and the sciences

Illustration 5 helps us to see how Biblical Epistemology could become the intellectual basis for the Adventist university. In the upper left corner we see that Biblical epistemology produces the macro-hermeneutical principles that lead in the disciplinary formation and methodologies of both theological and scientific disciplines. God as revealed in Scripture replaces naturalism. Creation and the Great Controversy replace evolutionary history. The historical and holistic view of the human spirit replace the timeless soul.

Adventist scientists and theologians face a choice. They can continue to do their thinking from the human epistemological consensus of their respective scholarly communities or challenge them by accepting and applying Biblical epistemological principles.

Conclusion

Unseen and unsuspected, broad philosophical ideas about reality (God, the world, human beings, and knowledge) condition the views, conclusions, and teachings of all scientific and theological disciplines. In intuitive ways, early Adventists were aware of the hermeneutic role of philosophy and rejected it.

Conservative Adventists think they stay clear from the hermeneutic function of philosophical ideas by avoiding philosophical studies and focusing on biblical studies. Yet, Ellen White warned us that “the traditions of men, like floating germs, attach themselves to the truth of God, and men regard them as a part of the truth.”²¹ Consequently, as an increasing number of Adventists feel free to copy from Protestant theologies and ministries, philosophical interpretations of the macro-hermeneutical principles of epistemology bond to their theological views resulting in ministerial practices which find their way into the Adventist scholarly, educational, and pastoral communities. This process has generated a Modern version of Adventist theology, belief, and mission self designated as “Progressive Adventism.”

To break the disintegration of Adventist theological and scientific thinking we need not only to uphold the *sola, tota, and prima Scriptura* principle, but also to deconstruct critically all received traditions. Yet, because scientists and theologians need to use broad philosophical ideas to interpret their data and construct their teachings, Adventist scholarship needs to consider

²¹Ellen White, *Evangelism*, (Washington, D.C.: Review and Herald Publishing Association, 1970): 589.

seriously the need to develop the ontological and epistemological principles we find in Scripture into a working General Epistemology on which to develop the regional epistemologies of all scientific and theological disciplines.