ON THE FUTURE OF ADVENTISM: REASON OR DEBATE?

FERNANDO CANALE Andrews University Berrien Springs, Michigan

From Epistemology to Debate

Ervin Taylor, Professor Emeritus of Anthropology at California University, Riverside, opens his comments about my *Creation, Evolution, and Theology: The Role of Method in Theological Accommodation* with a summary statement: "This work presents a detailed philosophical and theological defense of traditional Seventh-day Adventist understandings of the opening chapters of Genesis." Unfortunately, by suggesting that the book's contents, approach, and intent belong to theological apologetics, Taylor chooses to ignore the clear epistemological purpose and content of my research regarding scientific and theological methodologies. Contrary to his contention, I have not written an apology of biblical creationism or Adventist tradition.

Epistemology seeks to understand the foundations, conditions, and limitations from which each opposing view builds its arguments and teachings. As a philosophical discipline, it studies the conditions of the possibilities of any rational discourse, including philosophical, scientific, and theological. Modern epistemology, for example, understands that scientific statements are never absolute,⁵ and postmodern epistemology has come to discover and

¹⁴Professor Taylor's principal interest involves the application of radiocarbon (14C) and other Quaternary dating methods to provide temporal placement for archaeological materials. Over the last decade, his research has focused on the 14C dating of bone as specifically applied to the dating of New World human skeletal materials in the context of controversies concerning the character and timing of the peopling of the Western Hemisphere. He was involved in early applications of accelerator mass spectrometry (AMS) technology in 14C measurements of human bone" (<www.anthropology.ucr.edu/people/taylor.html>).

²Fernando Canale, Creation, Evolution, and Theology: The Role of Method in Theological Accommodation (Berrien Springs: Andrews University Lithotech, 2005).

³Ervin Taylor, "Review Article: Fernando Canale's Creation, Evolution, and Theology: The Role of Method in Theological Accommodation," AUSS 46 (2008): 83.

^{4,6}This study will attempt to present a brief discussion of the main structures and characteristics of science and theology in order to facilitate interdisciplinary dialogue and to help the church gain a realistic perspective of the present intellectual situation. Therefore, this book will not be an analysis of the teachings of evolution and creation, but rather the rational processes that led to their formulations. My goals are to examine how human beings arrive at conclusions and truth, and to examine in what way the Bible serves as the foundation of truth. This will be done by providing an introduction to the complex matrix of human rationality and the scientific method involved in the conception and formulation of theological and scientific teachings" (Canale, 4-5).

⁵Karl Popper states that "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

explain the limitations and hypothetical nature of rational/scientific thinking.⁶ Moreover, we should not forget that from the side of its teleological condition, evolutionary science is historical and therefore differs radically from the methods of empirical science. As a result, the conclusions of the empirical sciences are "theories corroborated by way of deduction and experiment." This example of the epistemological study of scientific methodology shows that, from a rational perspective, evolutionary history is not an absolute truth, but is, instead, the reconstruction of a past event that forever remains outside of our empirical experience. Thus from a rational viewpoint, evolution is only one possible way to interpret the origins of life on earth. The epistemological analysis neither proves nor disproves the theory of evolution. For these reasons, and many others detailed throughout the book, Taylor's affirmation that my views are an apology of "the traditional and officially sanctioned Seventh-day Adventist young-life creationism" is incorrect.

Taylor, who instead prefers to leave the evaluation of reason and methodology with their "complex and theological language" to others, chooses instead to debate selected points of my argument that he finds incompatible with his own theological convictions rather than engaging in

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" (The Logic of Scientific Discovery [London: Hutchinson, 1968], 111).

⁶In recent years, philosophers have come to understand the hypothetical nature of reason that is slowly replacing the classical and modernist view of absolute (mythological) reason. Richard Rorty, explains this change as a philosophical advance from epistemology to hermeneutics (Philosophy and the Mirror of Nature, 2d ed. [Princeton: Princeton University Press, 1979], 315-356). "Hypothetical" here means that reason's operation depends on optional presuppositions we use to interpret data and to arrive at conclusions by reasoning and inferences. For instance, Popper, 280, affirms the hypothetical nature of reason and method when he explains that "out of uninterpreted sense-experiences science cannot be distilled, no matter how industriously we gather and sort them. Bold ideas, unjustified anticipations, and speculative thought, are our only means for interpreting nature: our only organon, our only instrument for grasping her." Along the same lines, Whitehead believes that the development of "abstract theory precedes the understanding of fact" (The Function of Reason [Boston: Beacon, 1929], 73). Paul Feyerabend states: "The material which a scientist actually has at his disposal, his laws, his experimental results, his mathematical techniques, his epistemological prejudices, his attitude toward the absurd consequences of the theories which he accepts, is indeterminate in many ways, ambiguous, and never fully separated from the historical background. It is contaminated by principles which he does not know and which, if known, would be extremely hard to test. Questionable views on cognition, such as the view that our senses, used in normal circumstances, give reliable information about the world, may invalidate the observation language itself, constituting the observational terms as well as the distinction between veridical and illusory appearance" (Against Method, 3d ed. [London: Verso, 1993], 51).

⁷Canale, 165.

8Taylor, 87.

conversation about the assumed epistemological foundations on which he builds his views.⁹

Besides, we need to bear in mind that Taylor's criticisms of "traditional" Adventism spring from his own modernist assumptions embraced in Adventist circles by self-denominated "Progressive Adventism." Madelynn Jones-Haldeman helps us to understand how far North American "progressive Adventism" has drifted away from the beliefs of worldwide Adventism. The "progressive Adventist" label

has been offered as a more helpful way to describe individuals or groups that welcome, foster and advance the current version of the 19th century Adventist "Present Truth" ethos. Most importantly, "progressive Adventist" stands in stark contrast to "fundamentalist Adventist," perhaps best exemplified in the stated beliefs of the Adventist Theological Society.

Progressive Adventism regrets the anti-intellectual, authoritarian and obscurant tendencies that characterize a significant segment of traditional, historic Adventism, along with the attempts at creating a creed out of the "27 Fundamental Doctrines." Depending on the interest and concerns of the individual member, progressive Adventism espouses open dialogue in a free press, academic freedom for its theologians and scientists, a redirection of resources away from a bloated ecclesiastical bureaucracy toward the local church, and an expectation that change in religious belief and practice may come if that is where the evidence persuasive to the individual believer leads.

It would be regrettable if any would propose that progressive Adventism should be associated with some specific set of propositional statements that purport to redefine, using contemporary vocabulary, some specific tradition of Christian or Adventist religiosity. Rather, I hope that progressive Adventism will be primarily associated with vision of a free and open servant church and the "priesthood of all believers." More importantly, it would be helpful if progressive Adventists would work for the day when the Adventist church will be mature enough to welcome and affirm the conservative, historic, traditional, evangelical, cultural, ecumenical, and progressive Adventists and members of the Friends of St. Thomas. ¹⁰

In light of these general considerations, I will now turn my attention to selected issues that reveal the trend of Progressive thought in Taylor's critique of my book.

The Influence of "Progressive" Adventist Thought on Taylor's Presuppositions

Taylor demonstrates his adherence to Progressive Adventist thought in a number of areas: the appropriateness of using the Great Controversy metanarrative from within a postmodern perspective; the role of the

⁹Taylor, 87ff.

¹⁰Madelynn Jones-Haldeman, "Progressive Adventism," Adventist Today, September 17, 2008, <atoday.com/magazine/2001/09/progressive-adventism>.

supernatural within the scientific method; geochronological dating; the role of ontological presuppositions in science; the origin of Scripture; and the role of Scripture in the interpretation of natural data. I will now briefly consider these issues.

Postmodernism and the Great Controversy Metanarrative

Taylor suggests that I use postmodern concepts selectively, noting that if I am truly arguing from a postmodern perspective my defense of "the validity of Ellen White's 'Great Controversy' metanarrative" is in direct conflict with the postmodern agenda because "postmodernists of almost every persuasion reject the meaningfulness and relevance of any grand metanarrative." He views this as a "serious problem" in regard to the consistency of my "apologetics." ¹²

This perspective, however, reveals a lack of familiarity with postmodernism. While postmodern thinkers do not care about the "meaningfulness and relevance" of metanarratives, they do not discard their existence or hermeneutical role. The postmodern objection is against the classical and modern claim that metanarratives are universal truths binding human reason and method. In other words, postmodern philosophy (i.e., ontology and epistemology) advances the notion that human reason cannot produce and legitimize a metanarrative that is binding for all persons and societies. Stanley J. Grentz notes that "The demise of the grand narrative means that we no longer search for the one system of myths that can unite human beings into one people or the globe into one 'world.' Although they have divested themselves of any metanarrative, postmoderns are still left with local narratives. Each of us experience the world within the contexts of the societies in which we live, and postmoderns continue to construct models (or 'paradigms') to illuminate their experience in such contexts." ¹³

Postmodernism, then, considers metanarratives, including science and philosophy, to be myths having only local authority. Thus it deals with metanarratives in the context of epistemology. Because reason cannot produce a universal explanation of all phenomena, metanarratives continue to exist, but they have only limited reach, resulting in a plurality of conflicting metanarratives.

Accordingly, I describe evolution and creation as alternative metanarratives, competing to interpret the history of our planet.¹⁴ At the end of the book

¹¹ Taylor, 88.

¹²Ibid.

¹³Stanley J. Grenz, A Primer on Postmodernism (Grand Rapids, MI: Eerdmans, 1996), 45-46.

¹⁴Canale, 75.

(chap. 12), I refer to the Great Controversy¹⁵ as a metanarrative. ¹⁶ However, I do not defend or present apologetic arguments for its validity over evolution. My explicit aim is to ascertain whether the Great Controversy and deeptime evolutionary history are compatible. The epistemological analysis of theological methodology described in earlier chapters shows why the classical and modern schools of theology can accommodate deep-time evolutionary history within their theological systems. For instance, Augustine, who was influential not only in the formation of Catholic theology, but also in the formation of Protestant and evangelical theologies, believed that God created through his timeless Word, "which is not related to the history of divine activities found in Gen 1-2. According to Aquinas, creation is the emanation from God of all being ('the world'), that 'took' place by divine timeless action, which, in turn, originated time without movement. This implies that God's creation 'took' place in the first instant when the whole world 'came' into existence. This instant, being the beginning of time, was real to the world but not to God. Because the Genesis account describes a temporal series of divine actions, it portrays divine creation through sensory figures designed to 'illustrate' the truth we reach by way of reasoning." Thus, I note a few paragraphs later, that

because the hermeneutical condition generally accepted in Christian theology places God and his actions in the spiritual nontemporal level of reality, classical and modern theological methods have room for scientific explanations of the natural historical order that run parallel to theological truths without contradiction because each explains a different parallel complementary perspective of reality. Not surprisingly, then Catholic and Protestant theologians, working from a theological methodology that defines its ontological hermeneutics from Greek ontological principles, will see the accommodation of Gen 1 to deep time and evolutionary theory as not affecting their theological beliefs. After all, Genesis achieves its explanation in the temporal order, which by the criteria of theological methodology belongs to the scientific rather than the theological field of investigation. Thus, within the classical and modern theological methods, the doctrine of evolution may be considered the true historical explanation of the way in which life on this planet originated, providing that one does not use it also as the explanation for the origin and dynamics of the spiritual side of

¹⁵ The theological change that took place in the first five years after the 1844 Great Disappointment implicitly changed the hermeneutical foundations Christian theologians had assumed thus far. Simply put, they implicitly assumed that God works his salvation within the spatiotemporal order of his creation through a historical process Adventists generally describe as the 'Great Controversy" (ibid., 137).

¹⁶By calling the Great Controversy a metanarrative, I assume the postmodern understanding, which means, from the rational perspective, that Adventists cannot claim the Great Controversy to be universal in application or to be absolute truth. They can do so only by faith.

¹⁷Ibid., 126.

¹⁸Ibid., 127-128.

As evolution and creation are possible interpretations of reality, theoretically Adventists could choose either. However, is evolution coherent with the Adventist system of beliefs? In order to choose between creation and evolution rationally, Adventists need to know if their theological system is compatible with deep-time evolutionary history. Because Adventist theology builds on the sola Scriptura principle (Adventist fundamental belief no. 1), and understands the history of God's acts of salvation to be the Great Controversy, it is necessary to ascertain whether deep-time evolutionary history is compatible with the biblical history of God's acts of salvation. In chapter 12, I show that they are incompatible:

Some assume that Adventist theology is compatible with deep time/ evolutionary history. For them, all it takes to harmonize evolution with Adventist/biblical theology is to interpret Genesis 1 theologically, that is, not literally. . . .

This view assumes that the deep time history of origins does not disturb the theological truths of Scripture, nor the Adventist theological system and fundamental beliefs. When it comes to the theological understanding of creation, "time is not of the essence."...

Those who assume that biblical creation and deep time/evolutionary history are compatible forget that in biblical thinking, time is of the essence. According to Scripture, God acts historically in human time and space. The truth of biblical religion is historical. If time is of the essence, deep time/evolutionary history conflicts with the closely-knit historical system of biblical theology. Biblical theology cannot fit the evolutionary version of historical development without losing its essence and truth. God's works in history cannot follow evolutionary patterns. God's history cannot become evolutionary history.¹⁹

Nevertheless, as a living, social entity, Adventism can still choose to adapt its doctrines to accommodate evolution. However, because Adventist theology and identity still stem from the Great Controversy understanding of reality as depicted in Scripture, such a choice would require a wholesale reinterpretation of Adventist doctrines and practice. Taylor seems to agree. Even so, I am not defending Adventism. I am just analyzing epistemologically how we reach conclusions in science and in theology. In the future, Adventists may decide in favor of evolution; however, neither reason nor evidence compels them to do so. The Adventist understanding of biblical theology initiated by the pioneers stands not only on solid biblical, but also on sound rational and methodological grounds.

The Role of the Supernatural within the Scientific Method

Taylor's assertion that "the 'supernatural' was defined as outside of its [scientific method's] purview" is an example of how the classical and modern

¹⁹Ibid., 146.

schools of theology can accommodate deep-time evolutionary history within their theological systems.²⁰ On this basis, then, Taylor, with the scientific community, can say that supernatural revelation on nature should play no role in scientific method. Complementarily, for centuries theologians have argued that the "supernatural" content of biblical revelation lay outside the realm of nature. Assuming this interpretation of supernatural reality, biblical revelation cannot interfere with the space-temporal realm of scientific investigations. This compartmentalization leads to complementary perspectives of reality, or perhaps to echo Stephen J. Gould, "the Principle of NOMA, or Non-Overlapping Magisteria," in which the two magisteria of science and religion "do not overlap, nor do they encompass all inquiry. . . . To cite the old clichés, science gets the age of rocks, and religion the rock of ages; science studies how the heavens go, religion how to go to heaven."21 Thus, Taylor correctly points out that scientists hold a variety of religious beliefs. Individually, they may, or may not reject God and Scripture. However, personal religious convictions are unrelated to the methodological issues I am addressing in the book.

Geochronological Dating

Taylor claims that I am "profoundly misinformed concerning the relationship between evolutionary biology and geochronology."22 He concludes, "it is simply factually incorrect to state, as Canale does, that geochronology is structured 'by assuming biological evolution." ²³ Unfortunately, he takes my words out of their interdisciplinary epistemological context and casts them within an imagined geochronology context. Consider the entire sentence: "The study of evolution assumes the history of evolution reconstructed by paleontologists by drawing inferences from the fossil record, whose chronology is drawn by assuming biological evolution."24 Clearly, I do not affirm that contemporary geochronology depends upon biological evolution.²⁵ Instead, in the context of describing the interdisciplinary relations that exist between paleontology and biology (not in the context of calculating geochronology data through the atomic clock), I show that paleontologists "draw" [not calculate] evolutionary history by assuming biological evolution." In short, I suggest that paleontology as a discipline assumes the mechanism of evolution from biology. Thus I speak of biology as an assumption of paleontological history, and not as an assumption of geochronology as Taylor incorrectly suggests.

```
<sup>20</sup>Taylor, 88.
```

²¹Stephen J. Gould, Rocks of Ages: Science and Religion in the Fullness of Life (New York: Ballantine, 1999), 5, 6.

²²Taylor, 88.

²³Ibid., 89.

²⁴Canale, 68.

²⁵Ibid., 88.

Taylor affirms correctly that the core data of contemporary geochronology derives not from evolutionary biology, but from other related sciences. ²⁶ I agree. The geochronological methods of dating used by paleontologists do not assume biological evolution. However, to argue that chronological dating methodology is free from hermeneutical presuppositions contradicts the basic epistemological understanding since Kant. ²⁷ Based on the hypothetical structure of reason and the conditionality of the scientific method previously described, I expect that geochronological procedures also depend on assumptions. At this time, I cannot describe them because as far as I know no one has considered their existence and roles. Consequently, there is a need for an epistemological analysis of the conditions of geochronological methodologies:

Since 1905, technology measuring radioactivity was used to establish absolute time calculations in contrast with the old comparative methodology. These methods obviously are not theory—or presupposition—free. They operate within the general hermeneutical matrix that supports evolutionary theory. Deep-time measurement is a complex issue that needs to be investigated at the theoretical and procedural levels. Adventist thought has room for deep time due to the existence of the conflict between God and evil before creation week. Thus, Scripture allows for deep time in the material components of our planet but not in the life forms existing on it.²⁸

The Role of Ontological Presuppositions in Science

In an attempt to discredit the broadly accepted notion that scientists assume ideas that experimentation and observation cannot corroborate, Taylor states that "the core constituencies of the mainline modern scientific community express no views about the ontological nature of reality." According to him, ontology is a private matter to the individual scientist that does not affect scientific methodology: "Scientists in their personal lives can and do hold and express a whole range of views—from an absolute ontological atheism to membership and active participation in very traditional faith communities." This seems to confirm my view, in spite of Taylor's strong objections, 31 that

²⁶Ibid., 88-89.

²⁷For further discussion on the role of presuppositions on methodology, see Hans-Georg Gadamer, *Truth and Method*, 2d rev. ed., ed. Joel Weinsheimer and Donald G. Marshall (NY: Continuum, 2005).

²⁸Canale, 67-68.

²⁹Taylor, 89.

³⁰Ibid., 89.

³¹ Ibid.

"scientific methodology disregards the existence of God and His revelation in Scripture as fantasy."³²

However, epistemology presupposes that even scientists implicitly assume ontological ideas when they assert that nature, space, and time are real in the process of verification. In addition, evolution is a cosmology, which is itself a subdivision of ontology. Nor is ontology the only presupposition conditioning scientific methodology.³³ Concerning the philosophical presuppositions in the method of the empirical sciences, Mario Bunge correctly remarks that "philosophy may not be found in the finished scientific buildings (although this is controversial) but it is part of the scaffolding employed in their construction."³⁴

The Origin of Scripture

In regard to theological issues, Taylor is aware that if God communicated his thoughts directly to the biblical prophets, as Scripture claims, then the biblical theology of Adventism becomes rationally possible. However, he rejects what he assumes to be my position on the inspiration of Scripture as "highly questionable," associating it with fundamentalist evangelicalism. ³⁵ He, therefore, assumes I support the verbal theory of inspiration.

Because he assumes that I hold to the verbal theory of inspiration, Taylor suggests that I fail to understand Ellen White's view on inspiration. He states: "Canale is either not aware of or disagrees with the clear and unambiguous views of Ellen White that the 'Bible . . . is not God's mode of thought and expression. It is that of humanity. God, as a writer, is not represented . . . The Lord speaks to human beings in imperfect speech.' (Selected Messages, Vol. 1:21 [1890 ed.], 22 [1891 ed.])." Taylor correctly shows that White did not agree with the fundamentalist verbal theory of inspiration. She that explains, God used human rather than divine cognitive and linguistic modes. However, Taylor fails to mention that in the next page she taught that God communicated cognitively directly with the prophets and through their inspired written words in Scripture. According to White, "The divine mind

32Canale, 22.

³³Describing what he calls the pragmatics of scientific knowledge, Jean François Lyotard suggests that the truth in scientific statements depends on metaphysical rules. For instance speaking on verification and truth, Lyotard proposes that what a scientist says is true is true because he proves that it is. Yet, he asks "what truth is there that my proof is true?" (Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge*, trans. Geoff Bennington and Brian Massumi (Minneapolis, MN: University of Minnesota Press, 1979), 24. To solve this problem scientists assume that "the same referent cannot supply a plurality of contradictory or inconsistent proofs" (ibid.).

³⁴Mario Bunge, Scientific Research I: The Search for System (Berlin: Springer-Verlag, 1967), 291.

³⁵Taylor, 89.

³⁶Ibid.

and will is combined with the human mind and will; thus the utterances of the man are the word of God."³⁷

I think Adventism must move beyond the verbal theory. Taylor is apparently unaware that I have explicitly rejected the verbal inspiration theory upon which evangelical fundamentalism stands and have, instead, developed the "historical cognitive model" of the revelation-inspiration of Scripture.³⁸ Central to my understanding of revelation-inspiration is the fact that the mode³⁹ of God's communication of Scripture should not be confused with the content of divine revelation.

It is important to underline that I am referring here to the mode of the revealed content and not to the content itself. Neither the truth of biblical content nor the divine origination of biblical content is contradictory to the affirmation of the human mode of cognition through which biblical revelation was generated. The mode of cognition involved in the epistemological origination of Scripture is not divine and thus absolutely perfect, but rather human, including all the limitations and imperfections of the human mode of cognition. "Because the historical-cognitive model acknowledges God's direct involvement in the generation of the contents of Scripture as a whole, the process of writing does not need to add, modify, or upgrade what has already been constituted through the process of revelation." ⁴⁰ Thus the text of Scripture is a trustworthy revelation of God's thoughts, actions, and words.

Taylor, however, by implying that God does not communicate directly with humanity in Scripture, seems to assume either the encounter theory of revelation and inspiration⁴¹ or the less-convincing thought inspiration theory.⁴² This confirms my view that "theologians who adhere to the 'thought'

³⁷Ellen White, Selected Messages, 3 vols., Christian Home Library (Washington: Review and Herald, 1958), 21.

³⁸See, Fernando Canale, The Cognitive Principle of Christian Theology: A Hermeneutical Study of the Revelation and Inspiration of the Bible (Berrien Springs: Andrews University Lithotech, 2005), 181-224; idem, "Revelation and Inspiration," in Understanding Scripture: An Adventist Approach, ed. George W. Reid (Silver Springs, MD: Biblical Research Institute, 2005); idem, "The Revelation and Inspiration of Scripture in Adventist Theology Part I," AUSS 45 (2007): 195-219.

³⁹Fernando Canale, Back to Revelation-Inspiration: Searching for the Cognitive Foundations of Christian Theology in a Postmodern World (Lanham, MD: University Press of America, 2001), 140.

40Ibid., 144.

⁴¹ "Briefly put, according to encounter theory, revelation is a divine-human encounter without the impartation of knowledge. Thus, the content of revelation is regarded no longer as knowledge *about* God, not even information *from* God, but God Himself? Consequently, not one word or thought that is found in Scripture comes from God. Encounter revelation is thus the opposite of verbal inspiration" (Canale, "The Revelation and Inspiration of Scripture in Adventist Theology, Part 1," 208).

⁴²According to thought inspiration, "In both revelation and inspiration, God operates on the thought and not on the words. Through revelation God generates ideas in the mind of the prophet, while through inspiration he assures the accuracy of the revealed ideas in the mind of the prophet. However, on the basis that 'one of the unknown factors in inspiration is the degree

or 'encounter' theories of revelation inspiration . . . will be more likely to contemplate a harmonization between the biblical doctrine of creation and the theory of evolution and to consider such a harmonization as a positive scientific advance that Adventist theology should recognize."⁴³

Because the basis of the historical-cognitive model is the trustworthiness of Scripture, Taylor's understanding of the origin of Scripture still contradicts my view. Our disagreement confirms the necessity and usefulness of the epistemological analysis of the theological methodology I describe in the book.

The Role of Scripture in the Interpretation of Natural Data

To Taylor, "the most glaring problematic aspect of this [Canale's] volume is the author's assumption that his interpretation of the data received from his reading of the Bible comes directly from God." I assume Taylor refers to my interpretation of Scripture's teachings on nature. This point obviously spins from our disagreement about the revelation and inspiration of Scripture. I feel the same about his uncritically assumed interpretation of Scripture.

From an epistemological perspective, Taylor's evaluation of my book stems from the cosmological presuppositions of theological methodology he chooses from current normal science cosmology. By doing so, he does not recognize the hypothetical nature of his scientific beliefs. He prefers to interpret Scripture from a dogmatic application of current scientific consensus on nature to Scripture's teachings on creation. This approach is more appropriate for believers than for scientists. His implicit epistemological position may account for his firm conviction that Scripture's views on nature can play no role in the interpretation of natural data. By viewing my book as apologetic, Taylor dismisses the foundational role presuppositions play in scientific and theological methods as part of my "heroic arguments, expressed in complex philosophical language" to defend the established position of the Adventist institution.

of the Holy Spirit's control over the minds of the Bible writers,' Heppenstall's position implied that divine inspiration does not reach to the words of Scripture. Consequently, he adheres to what we could call 'thought inerrancy.' Thus only the biblical thought, not the words, are inerrant. Conveniently, for the sake of an apologetics against the biblical and scientific criticisms of scriptural content, believers can argue that errors and inconsistencies are due to imperfect language, not to imperfect thought or truth" (ibid., 213).

⁴³Canale, Creation, Evolution, and Theology, 99.

⁴⁴Taylor, 89.

⁴⁵For a brief description of the nature of scientific dogmatism, see Canale, *Creation*, *Evolution*, *and Theology*, chap. 6.

⁴⁶Taylor, 90.

However, science has room for both evolutionary and creationist approaches. The information of Scripture does not provide creation scientists with data, but with a priori assumptions. If scientific tradition⁴⁷ and philosophical ideas⁴⁸ have helped scientists in their search for better explanations, there seems to be no epistemological barrier preventing scientists from also using biblical information as a priori presuppositions to interpret natural data and guide scientific research.

The main problem that "Progressive Adventism" seems to have with biblical creation and theology stems from its interpretation of the material condition of the theological method. Strongly objecting to the sola-tota-prima Scriptura principle⁴⁹ as a source of revelatory theological data necessarily implies embracing multiple sources⁵⁰ of revelatory data—a frontal rejection of the first fundamental belief of Seventh-day Adventism.

Science, Evolution, and Adventism

I will now clarify my view concerning the value of science for the development of the Adventist theological project. Because I disagree with the deep-time history of evolution, some may incorrectly surmise that I have a low esteem for science and scientists. Others may conclude that I see no room for contributions from science in the construction of the Adventist theological project. This is not the case.

I disagree with the theory of evolution on philosophical rather than on practical scientific grounds. According to the epistemological evaluation of the scientific method, there is no necessary reason to compel Adventist theologians to accept evolutionary deep-time history as the interpretation of the cosmological condition of the theological method. Besides, contemporary evolution has become a broad metaphysical principle, explaining not only the origin of life on earth, but also its meaning, including even the being and life of God (panentheism).

⁴⁸Thomas S. Kuhn notes that "It is, I think, particularly in periods of acknowledged crisis that scientists have turned to philosophical analysis as a device to unlock the riddles of their field" (*The Structure of Scientific Revolutions*, 2d ed. [Chicago: The University of Chicago Press, 1970], 88).

^{49cc}The sola Scriptura view maintains that Scripture alone can provide theological data. The prima Scriptura conviction maintains that Adventist theology should build its doctrines upon a plurality of sources, among which Scripture has the primary or normative role." "The tota Scriptura principle refers to the interpretation of all biblical contents and the inner logic from the biblically interpreted hermeneutical condition of theological method (sola Scriptura)" (Canale, Creation, Evolution, and Theology, 98, 99).

⁵⁰ Evangelical circles identify this plurality of sources as the Wesleyan Quadrilateral. Roman Catholic theology also accepts a plurality of theological sources" (ibid., 98).

⁴⁷Canale, Creation, Evolution, and Theology, 46.

However, as far as I know, in all other points Adventists have no major problems with science.⁵¹ Even some conclusions obvious to science such as the nonexistence of a timeless soul⁵² support a pillar of Adventist doctrine. In addition, biological microevolution helps Adventists to understand natural evil. Thus, the scholarly development of the Adventist theological project requires dialogue and input from all scientific disciplines. Yet, in Adventism, the Bible should dictate the interpretation of the macro-hermeneutical principles of scientific and theological method. This broad hermeneutical template should provide a sound basis for the Adventist research project, as well as mutual contributions and criticisms between scientific disciplines.

Conclusion

The future of Adventism depends on whether the church will be able to move from debating to thinking on scientific and theological methods and their conditions. At the beginning of the twenty-first century, Adventism is facing the intellectual forces of modernity that split most Christian denominations during the twentieth century. Will the church of the future embrace the multiple sources of theological principle and the modern, ecumenical version of Adventism boldly advanced by Taylor? Or will it decide to reject the multiple sources of theology and commit itself to the sola-tota-prima Scriptura principle, thereby finishing the theological revolution initiated by the early Adventist pioneers?

If Adventists want to complete the theological revolution initiated by the Protestant *sola Scriptura* principle and the theological project launched by early Adventist pioneers, they need to think outside the box by becoming philosophically and theologically creative in faithfulness to biblical thinking. Scripture is the untapped source of wisdom and power that through the Holy Spirit will unite the church and empower its mission.

⁵¹I have not discussed, either in my book or in my response to Taylor, the relation of Adventism to the humanities.

⁵²See, e.g., John Polkinghorne, *The God of Hope and the End of the World* (New Haven, CT: Yale University Press, 2002); Nancey Murphy, *Bodies and Souls; or Spirited Bodies?* (New York: Cambridge University Press, 2006).