

Article

Concordism and the Importance of Hybrid Models

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Abstract: Concordism functioned as the consensus view in Protestant circles until the rise of Darwinism. Darwinism upended evangelical beliefs about the relationship between the Bible and science, and concordism began to fall out of favor. Subsequently, theologians began formulating statements which collated doctrines and definitions in attempts to delineate boundaries for orthodox belief. Yet while definitions and doctrines are necessary for belief, they are not sufficient for fruitful discussion and discovery of how the early chapters of Genesis could accurately depict the Earth's early history. With this realization, scholars began developing "hybrid models" which proposed intertwined theological-scientific theories in hopes of explaining both the known scientific evidence as well as the import of Scripture. Thus, even as concordism was disdained by theologically liberal academics, hybrid models multiplied, responded to new evidence, and achieved varying levels of adoption. Analysis of older hybrid models (as well as the recent hybrid model proposed by William Lane Craig) results in insights applicable to models more broadly as well as concordism in particular.

Keywords: concordism; scientific models; evolution; creationism

1. Introduction: Defining Concordism, Describing Its Practice and Its Abandonment

Since contrary definitions of concordism abound, we shall begin with one from the *Dictionary of Christianity and Science*, a current authoritative source for evangelicals: "Concordism refers to the position that the teaching of the Bible on the natural world, properly interpreted, will agree with the teaching of science (when it properly understands the data), and may in fact supplement science . . . Because the concordist holds Scripture to be entirely truthful, there cannot be any ultimate contradiction between Scripture rightly interpreted and nature rightly interpreted" (Soden 2017). This definition reflects the longstanding Christian understanding of the relation of the Bible and creation as two readable harmonious books.¹ The article also notes that concordism dominated from the rise of modern science with Copernicanism until the nineteenth century. But without specifying what led to the decline of concordism, the article states an "alternative view" has arisen holding that Genesis in its ancient context affirms no position on modern science.

What brought about the change? Historians agree that the Darwinian revolution dramatically changed late nineteenth century intellectual perspectives, including theologians' attitudes toward concordism.² Theological liberals promptly identified religious doctrine, even revelation itself, as based on an evolving process rather than divinely inspired Scripture. Evangelicals recognized that the transmutation of species had become scientific consensus. Instead of seeking to undermine the theory, these theologians began highlighting Christianity's incompatibility with the materialistic implications of Darwinian evolution. Evangelical apologetics shifted from the design argument, its longstanding mainstay, to defending rather than assuming biblical inerrancy. Eventual reassessment and even the abandonment of concordism by many evangelicals stemmed from the Darwinian intellectual transformation (Roberts 1988; Livingstone 1984).

Evangelicals had previously practiced concordism as evidenced historically in a process we might call the conservatism principle. Theologians historically resisted the abandonment of traditional biblical interpretations when new scientific theories seemed to



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conflict. Only straightforward scientific evidence, accepted after long periods of debate, led to cautious amendment of longstanding biblical interpretation. Even then, central Christian doctrines were not at stake. Somewhat surprisingly, conservative theologians never developed a standardized hermeneutic relating the Bible's authority to scientific discoveries (Lindberg 2003). But the key figure in the most famous science-theology conflict, Galileo, offered a proposal which presciently described the historical practice of concordism until the nineteenth century.

Galileo's approach employed two fundamental assumptions and two interpretive steps in resolving science-theology clashes. Assumption 1: Assume biblical inerrancy but never inerrant interpretation. He argued "that Holy Scripture can never lie, as long as its true meaning has been grasped" (Galilei 2008b). Galileo also stressed "though Scripture cannot err, nevertheless some of its interpreters and expositors can sometimes err in various ways" (Galilei 2008a).

Assumption 2: Nature and Scripture cannot disagree. As God is the author of both books, correct interpretations cannot conflict. Theology is the queen of the sciences because it deals with salvation, "which, surpassing all human reason, could not be discovered by scientific research or by any other means than through the mouth of the Holy Spirit himself" (Galilei 2008b). But in matters such as geometry, astronomy, music, and medicine, theologians are not more expert than specialists in those fields.

Interpretive Step 1: Traditional biblical interpretations govern unproven science. Biblical statements pertaining to nature have authority over "any human works" supported by only "probable reasons" (Galilei 2008b). Such scientific theories, when apparently contrary to Holy Scripture, "must be considered indubitably false" if not demonstrably proven (Galilei 2008b). Galileo's position assumes that scientific theories can be errant interpretations of nature. Galileo's Interpretive Step 2: Proven scientific theory requires biblical reinterpretation. Obviously if God's two books, rightly interpreted, cannot contradict each other, and a debated scientific theory is eventually proven, the former biblical understanding is wrong.³

Galileo's approach describes the often-unrecognized practice of concordism from the outset of modern science (sixteenth century) until the late nineteenth century. Biblical inerrancy stood as the fundamental assumption even when influential scientific theories seemed to undermine Scripture. Biblical interpretation and scientific theories, however, even when difficult to reconcile, were viewed as allies. The arrival of Darwinism, however, presented a different challenge altogether for most evangelical theologians. Certain of its features were and still are theologically recalcitrant to many evangelicals. We shall return to address those features later. For now, it is sufficient to note that some evangelicals, having embraced contemporary evolutionary theory, have abandoned not only concordism but biblical inerrancy, too.

2. The Insufficiency of Definitions and Doctrinal Statements in the Concordism Debate

"The beginning of wisdom is the definition of terms."⁴ Culture wars can be ignited over who gets to define terms (e.g., "woman"). Terms such as evolution, creation, history, myth, and literal illustrate the need for careful definitions among Christians. Confusion in the concordism debate often results when a Christian leader defines it such that it does not correlate well with something like the "standard" definition above from the Dictionary of Christianity and Science. But necessary as starting points in the larger discussion, establishing definitions is not sufficient for the analysis of competing understandings of the Scripture/creation relationship.

Doctrinal statements have long served the vital role of setting theological boundaries. Confessional statements allow for more precise comparison of competing theologies and, as Philip Schaff noted, they contribute to clarity in polemics and irenics (Schaff 1877).⁵ Less comprehensive statements enlarge theological boundaries but may leave the boundaries blurred. For example, the Evangelical Theological Society's two sentence doctrinal basis

intentionally lacks detail to allow a variety of traditions which endorse biblical inerrancy. But just how inerrancy is understood by various ETS members is debatable.⁶

So, the more propositionally detailed, the more precise are doctrinal statements. For example, compare the Apostles' Creed with the Nicene with the Chalcedonian. On the other hand, the more detailed and analytic the doctrinal statement, the less accessible it is to non-theologians and the harder it is to see its obvious correlation with the Bible (again, cf. the Apostles' with the Nicene with the Chalcedonian creeds). Even necessary doctrinal statements are not sufficient for revealing the full implications of one's understanding of the Bible/science relationship.

3. The Necessity of "Hybrid" Models for the Scripture and Science Relationship

In his famous 1884 Baltimore Lectures on Molecular Dynamics and the Wave Theory of Light, Lord Kelvin maintained that "the test of 'Do we or do we not understand a particular subject in physics?' is 'Can we make a mechanical model of it?'" (Duhem 1996). Yet some early twentieth century philosophers of science thought scientific models not only subsidiary to theories, but that models are even dispensable altogether. Those philosophers noted that theories contain propositions whereas models do not. But today philosophers typically reject the notion that models have nothing to add to theories.⁷ A given theory might produce different models, revealing that the theory provides a less than complete understanding, and a model (e.g., the billiard ball model of a gas) might also provide insights which an abstract theory cannot.

Twentieth century theologians noticed the affinities between scientific and theological models.⁸ Theological models seek to flesh out the abstract descriptions of doctrines (e.g., Augustine's psychological model of the Trinity). Theological models also promote understanding of complex doctrines (e.g., the two minds Christological model) and allow scrutiny for biblical justification.

If we combine scientific and theological/biblical models, we then have what we might call hybrid models. Hybrids are especially complex because of the Church's longstanding approach to Scripture and creation as God's two books. Though different in purpose, both books must be read carefully because they are divine revelation. For this reason, when seemingly contradictory scientific theories are related to the Bible, hybrid models both multiply and are hotly debated. Yet, hybrids have traditionally helped sort through such challenges when definitions and doctrinal statements may not. Hybrids expose and flesh out the implications of particular understandings of the Bible in relation to controversial scientific theories.

4. An Analysis of Representative Historical and Contemporary Hybrid Models

To illustrate the construction of hybrid models, we shall examine several which highlight different aspects of model construction, their controversial nature, errors, and usefulness. The first two illustrate the eventual acceptance of debated scientific discoveries. Frequent adjustments of hybrid models are seen in these examples. And the second example illustrates how established but erroneous hybrid theories affect laypersons long they have been scholarly abandoned.

4.1. *Calculating the Water Volume of the Oceans: How Early Hybrid Models Attempted to Reconcile the Discovery with the Biblical Flood*

Once heliocentrism became especially controversial (sixteenth century), hybrid models multiplied. Even the Jesuits adopted the Tychonian helio-geocentric version (Cabal and Rasor 2017, pp. 27–49). The conservatism principle/concordism/two books approach was assumed by Western intellectuals with the rarest of exceptions. Many scholars began thinking about the history of the formation of the earth. During the seventeenth and eighteenth centuries, the most influential theory of the earth was diluvialism, explaining geological phenomena in view of the Flood (Cabal and Rasor 2017, pp. 99–120).

But in calculating the water volume of the oceans, scholars discovered the oceans did not contain enough water to cover all the mountains of the earth's current geography during the Flood. The earliest and most widely held hybrid theory suggested a subterranean reservoir of water was released during the flood. Thomas Burnet (1635–1715) argued for this model but eventually faced harsh criticism for suggesting the Flood account was not to be understood literally. John Woodward (1665–1728), accepting the subterranean reservoir hybrid theory, earned the title “Grand Protector of the Universal Deluge” for condemning Burnet's failure to maximize the Flood's earth shaping effects (Gohau 1990). Edmund Halley (1656–1742) modified the model by surmising a comet had once traveled perilously close to the earth, tilting it on its axis. But Halley's theory dropped the subterranean reservoir notion, suggesting instead that the tilting sloshed the oceans out of their basins over the continents. William Whiston (1667–1752) adopted Halley's comet model but coupled it with the original interior water model. He theorized that the earth's tilting on its axis produced the release of the deadly interior waters (Gohau 1990; Ellenberger 1999). Assessing these early hybrid models reveals adherence to concordism, because they believed the Bible was true even when a scientific discovery presented a challenge. The water issue still underlies various Flood hybrid theories to this day.⁹

4.2. Discovery of Differing Ancient Climates: A Hybrid Model Outlives Its Usefulness but Dies a Slow Death

William Buckland (1784–1856), was both a pioneering Oxford geologist and theologian. He practiced concordism and created hybrid models in relation to his geological discoveries.¹⁰ The study of volcanoes led him to abandon his earlier view that internal rock formations were Flood related. But he made a bold announcement in 1823 that he had discovered evidence of the universal Flood. Buckland identified recently discovered fossils in Kirkdale Cave (North Yorkshire, England) as hyena, elephant, and hippopotamus. He originally believed the Flood had swept them there. Eventual evidence, however, convinced him the animals had lived there before being destroyed by the Flood. His revised hybrid theory was an early version of paleoclimatology, that Great Britain had once featured a vastly different ecological system. But his model was quite controversial, especially with a small group called the Scriptural Geologists. They especially opposed Buckland and the majority of Christian geologists in the early nineteenth century for believing the previous century's evidence had revealed an old earth.

Eventually, however, even some of the Scriptural Geologists accepted the evidence for an earlier “warmer” England. Such evidence contributed to the hybrid model known as the vapor canopy theory. Henry Morris did not invent the model, but he greatly popularized it (Morris 1980). Genesis 1:6–7 is supposed to refer to a protective water vapor barrier over the earth, protecting it from the sun's radiation. This biblical interpretation explained the gigantism of certain fossil plants and animals, the longevity of antediluvian human life, the source of the Flood's rainwater, and more.

Eventually most young earth creationist leaders rightly realized the model was indefensible biblically and scientifically. Russell Humphreys (Humphreys 1994) wrote: “the idea of a canopy atop the atmosphere did not come down from Sinai with Moses, engraved by the finger of God on the back side of the stone tablets. Instead, it was a human interpretation of scripture which was, for a time, the best understanding we could come up with. I think that time has passed. In spite of the large emotional investment some of us may have put into the canopy model, I suggest that now is a good time to re-evaluate the model, to see if it is worth any further effort.”

I have often surveyed my students to find many still believe the vapor canopy to be integral for a sound doctrine of creation. They are unaware that most young earth leaders have abandoned it and are having a tough time explicitly convincing followers to abandon the model.¹¹ The Kirkdale Cave example reveals the difficulty in understanding new scientific evidence, especially when it is not easy to see how it coheres with the Bible. In this case, the hybrid model changed regarding the scientific understanding of the evidence

(fossils were Flood-swept vs. a warmer paleoclimate produced the fossils). The biblical hybrid model of a vapor canopy remains resistant to popular abandonment.

4.3. Discovery of the Vast Number of Land Animal Fossils: Today's Most Influential Hybrid Model and the Problem of Representational/Realist Models

Roughly about the middle of the seventeenth century, the organic origin of fossils began to be accepted regularly. But the discovery of so many fossilized land species raised questions as to how they could all fit on the Ark. In response, the nineteenth century Scriptural Geologists offered several young earth hybrid models. One proposed that God only commanded Noah to receive local animals onto the Ark and the rest perished. Some suggested reptiles (or their eggs) floated on trees outside the Ark. One model proposed that God recreated new species after the Flood (as evidenced by animals unique to specific continents); therefore, not all animals today have descended from those only on the Ark.¹²

By far the most widely known hybrid model of the Flood today is offered at the Ark Encounter of Answers in Genesis. The full-size wooden Ark in northern Kentucky is more than five hundred feet long. Surprisingly, its explanation for the land animal problem is to utilize a restricted version of evolutionary common descent.¹³ The Ark Encounter webpage asks: "Two of Every Species? Was every species on the Ark? No. Species is a term used in the modern classification system. The Bible uses the term 'kind.' The created kind was a much broader category than the modern term of classification, species" ("[How Many Animals](#)" n.d.). Here is not the place to discuss the popular young earth creationist theory termed baraminology upon which the species vs. "kind" distinction is based.¹⁴ Instead, the concern here has to do with the Ark Encounter presenting itself as if its major details are the established hybrid model (even in the young earth community).¹⁵ As a representational model it misleads on this point and several others.

Representational models¹⁶ such as the Ark Encounter present a special problem to non-specialists. Whereas specialists (in this case, scientists or biblical scholars) realize the model invites critique, the same is not true for the non-specialist. Science students themselves struggle with sorting multiple models of the same phenomenon/theory. In some cases, students consider more than half of the models equally plausible. Such students become frustrated with the inability to discern the "right" model and are unable to describe how to falsify any of the models, "the hallmark of a scientific question" (Ruebush et al. 2009). How much more acute is the problem for layfolk thinking the Ark Encounter is the only faithful biblical model.¹⁷ Most are likely unaware that some of its major details are highly debatable.

For example, Andrew Snelling, Director of Research at Answers in Genesis, holds a very different view of ancient human/dinosaur interaction. Though agreeing that humans and dinosaurs must have lived at the same time, "they didn't live spatially together in the pre-Flood world." His reasoning is based on the "spatial separation of the fossil remains" of humans and dinosaurs. Thus, his model suggests dinosaurs and humans lived on separate island continents in the pre-flood world (Snelling 2009a). Yet perhaps the most noteworthy aspect of the hybrid model on display at the AiG Creation Museum and its Ark Encounter is that it portrays dinosaurs living together with humans. Most visitors to these exhibits do not realize that since no human and dinosaur fossils have ever been discovered in the same strata, AiG's lead scientist does not believe they lived in proximity.

Non-informed visitors to the Ark Encounter will likely perceive the exhibit to represent a biblically faithful witness against evolution.¹⁸ Yet, few will be aware of a critically important problem surrounding AiG's understanding of the subject. As mentioned above, AiG solves the old problem of getting all the land species on the Ark by restricting them to "kinds," not species. They argue perhaps there were less than 7000 animals on the Ark to satisfy the Bible's teaching on the subject. The notion requires "hyperevolutionary" speciation rates beyond imagination (Duff 2019). One former young earth creationist notes that "for the most part, radical creationists are quite comfortable with the fact of evolution. In fact, some believe in the power of evolution to an extent that would make Richard Dawkins blush . . . Radical creationists have entertained every taxonomic level short of

the kingdom as marking the approximate limits of evolvability for the various ‘kinds’ of organisms” (Peters 2009).¹⁹

So, AiG practices concordism, but the Ark Encounter’s ultra-realist hybrid model presents special problems for non-specialists. And AiG’s doctrine of biblical inerrancy is deeply concerning with its revision to include the young age of the earth, Flood geology, and more. This eccentric and divisive approach excludes most framers of the Chicago Statement on Biblical Inerrancy, members of the Evangelical Theological Society, and even some leading young earth creationists (Ham 2013, 2015).²⁰

4.4. *Evangelical Evolution: A Question-Raising Hybrid Proposing New Answers*

William Lane Craig’s *In Quest of the Historical Adam* represents an especially important development in the trending evangelical adoption of human evolutionary theory (Craig 2021). Craig’s role as a generational evangelical philosopher is well established. Thus, the influence of this book in evangelical circles will be substantial. A brief look at his definitions, doctrines and potential hybrid model may help grasp some of the implications of his proposal.

Craig regards as “one of the worst forms of concordism” any attempt to employ “contemporary science to guide one’s interpretation of the text” (Craig 2021, p. 16). He describes the appeal of the approach as “the sirens of concordism” (Craig 2021, p. 18). His preferred version of concordism is “to integrate the independently discovered findings of contemporary science and biblical theology into a synoptic worldview” (Craig 2021, p. 16). His independence approach is quite different from the Dictionary of Christianity and Science definition as well as the approach which dominated until Darwin.

Craig’s quest for the historical Adam is not due to theological significance. “It is . . . dubious that the doctrine of original sin is essential to the Christian faith” (Craig 2021, p. 5). Craig finds our proclivity to sin as sufficiently explained by our selfish evolutionary animal nature and the corrupt environment of our raising (Craig 2021, p. 231). Instead, Craig’s quest for Adam has to do with biblical inspiration. Since Paul, under divine inspiration, teaches an historical Adam, the doctrine of inspiration would have to be revised were it not so. Similarly, Craig notes that Jesus believed in an historical Adam, and Jesus’ omniscience guarantees its truth. The denial of this would be “to destroy orthodox Christian faith” (Craig 2021, p. 8).

To avoid, then, the type of concordism which allows Bible/science interplay, Craig first sets out to determine the genre of Gen 1–11 before examining the relevant science. He desires “to understand the text as the original author and his audience would have understood it,” but fears “the terrifying possibility that the young earth creationist” interpretation is correct (Craig 2021, p. 16). He hopes his genre study will reveal Gen 1–11 does not support that type of literal interpretation.

Craig concludes the genre of Gen 1–11 is “mytho-history.” In brief, by myth he does not mean falsehood. One of his most controversial proposals is that Gen 1–11 is recognized as myth due to its “fantastic elements . . . which, if taken literally, are so extraordinary as to be palpably false” (Craig 2021, pp. 104–5). Craig notes he is not rejecting the miraculous, but instead the “palpably false” elements such as a walking/talking serpent, vegetarianism, trees of life/good and evil, the rivers of Eden, cherubim, long lifespans, the Flood, the Table of Nations, the Tower of Babel, and the “most fantastic element,” the young age of the earth (Craig 2021, p. 13). Craig describes God’s anthropomorphic portrayal in Gen chapters 2–3 “as a humanoid deity worthy of polytheistic myths” (Craig 2021, p. 102). Yet one of Craig’s “family resemblances among myths” is they “are objects of belief by members of the society that embraces them” (Craig 2021, p. 45). Even if some of the original audience believe the myths true, this does not mean “the truth of the accepted myths is somehow expected or intended” (Craig 2021, p. 158). And though Craig reckons Gen 1–11 to be mytho-history, he concludes it is “probably futile to try to discern to what extent the narratives are to be taken literally, what parts are historical and what parts are not” (Craig 2021, p. 201).

Craig devotes the last third of the book to the scientific evidence for Adam and its empirical equivalent, “namely, when did human beings first appear in the evolutionary process ... The historical Adam may then be located around that time” (Craig 2021, p. 245). Craig identifies *Homo heidelbergensis* as that time when humans emerge either gradually from a multispecies event or a single species mutational event, or perhaps combining something from both. Craig argues for a genealogical single couple (not sole genetic progenitorship) before 550kya. “The radical transition effected in the founding pair that lifted them to the human level plausibly involved both biological and spiritual renovation, perhaps divinely caused” (Craig 2021, p. 376). Craig thinks a *de novo* creation of Adam unlikely due to our genetic similarity to chimps or the prospect of “considerable interbreeding with nonhumans” (Craig 2021, p. 376n.20).

So, Craig provides a hybrid model of Adam and Eve, synchronizing his theological understanding of the biblical/historical Adam with evolutionary theory.²¹ He envisions an initial population of approximately five thousand hominins who look like human beings but are animals without capacity for rational thought. God chooses two and renovates their brains and endows them with souls. “At some point they become aware of God’s moral requirements, which renders them responsible moral agents” (Craig 2021, p. 378). But misusing their free will, they commit “a (the original) sin” (Craig 2021, p. 379), thus becoming morally guilty and separated from God, but not alienated from God’s offer of forgiveness.

Evangelicals holding to *de novo* creation of Adam and Eve will rightly be concerned by Craig’s rather standard “fall upward” evolutionary-theological move. He argues that humans have an evolutionary propensity to selfishness which derives ultimately not from Adam but from the first living things on earth (Craig 2021, p. 231). Human proclivity to sin whether in Adam or humanity generally stems from living in a morally corrupt environment with “our self-seeking animal nature” (Craig 2021, p. 231) with its “natural biological tendency toward survival and hence selfishness” (Craig 2021, p. 232).²²

Regarding definitions, Craig not only defines concordism non-standardly, but one might wonder whether Craig interprets Gen 1–11 in view of modern science anyway. Does his fear of young earth literalism, or does contemporary evolutionary doctrine influence his mytho-historical conclusion? Craig offers neither definition nor discussion of biblical inspiration, which is surprising since it grounds the justification for his quest. He examines in depth the literary nature of Genesis 1–11. Why not at least a brief treatment of the nature of biblical inspiration? Craig engages all manner of historical biblical criticism. So, then why should we trust we have the words of Jesus? Or why not assume Paul simply erred?

The issue of inspiration for many of Craig’s traditional, theologically conservative followers is especially important in view of his mytho-history conclusion. Craig writes much on myth but little on history. His readers may rightly wonder how to interpret Gen 1–11 since he considers it at “some level historical,” but concludes it “probably futile to try to discern ... what parts are historical and what parts are not” (Craig 2021, p. 201). He does provide a list of central truths from Gen 1–11 which “come readily to mind” (Craig 2021, pp. 201–2), but neither cites nor exegetes texts from which the original audience would have learned them.

For Craig’s traditional followers, what might be said of how they will read the early chapters of Genesis? He writes that, although “the classification of Gen 1–11 as mytho-history is prone to misunderstanding, I do not think that we should revert to vague euphemisms that tend to conceal rather than elucidate the literary character of Gen 1–11. Scholars simply need to be careful to explain our meaning to laymen” (Craig 2021, p. 157). I suspect that might be more difficult than Craig supposes. Many might wonder how to interpret the texts at all. What is fantastic and what is historical? Are all anthropomorphisms to be regarded as fantastic? Is it now fact that the Fall mythically describes our experience of evolutionary descent? Perhaps some will wonder why biblical texts outside Genesis should not also be regarded as fantastic/mythical.

J. P. Moreland's cautionary counsel is pertinent. He writes that when leaders teach theistic evolution, Christians are robbed of confidence in the Bible. (Moreland 2017) He contends theistic evolution not only places "Christianity outside the plausibility structure," but also has made it much easier to revise other biblical teachings "when there is cultural pressure on us to do so." (Moreland 2017).

5. Conclusions

Concordism remains controversial due to continuing pressures on biblical interpretation from the evolutionary revolution. Debates about fossils, ice ages, continental drift, and expansion of the universe now seem trivial in comparison. But hybrid models of necessity will continue to spring from the two books understanding, even when some evangelicals revise or abandon the tradition.

Hybrids reveal attitudes toward science and scripture which definitions and doctrines might not. Easily identifiable errors in past models make current scholars understandably nervous to offer new ones. *But one obvious lesson should be that testable models protect both those offering them and their followers from conferring models with infallibility.*

If the evolutionary whirlwind has presented a stiff challenge to the two books tradition, it has obviously not ended the tradition for evangelicals. Whereas theological liberals feel no pressure to practice any version of concordism, evangelicals, by nature of their commitments to Christ and the Bible, will continue to present some version of hybrid models, even if restricted ones, until the day dawns.

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Notes

¹ On the use of the two books concept from the outset of the rise of modern science see (Howell 2002).

² What follows in the rest of this section is based on (Cabal and Rasor 2017, pp. 39–49, 79–81).

³ Regarding when a scientific theory is "demonstrated" has been far more controversial than Galileo could have imagined.

⁴ Though the aphorism is widely attributed to Socrates, no citation from Plato's dialogues has ever been produced to substantiate the claim.

⁵ Schaff elegantly noted that "Polemics looks to Irenics—the aim of war is peace."

⁶ "The Bible alone, and the Bible in its entirety, is the Word of God written and is therefore inerrant in the autographs. God is a Trinity, Father, Son, and Holy Spirit, each an uncreated person, one in essence, equal in power and glory." See ("ETS Constitution" n.d.). On the other hand, ETS has adopted bylaw 12 which refers to the Chicago Statement on Biblical Inerrancy as specifying "the intent and meaning of the reference to biblical inerrancy in the ETS Doctrinal Basis" See ("Bylaws" n.d.). One may debate whether those who sign the doctrinal basis are adequately made aware of the "intent and meaning" of the ETS Doctrinal Basis.

⁷ For an excellent overview of scientific models see (Frigg and Hartmann 2020).

⁸ For example, see (Ferre 1963).

⁹ e.g., Andrew Snelling of Answers in Genesis utilizes the model of "catastrophic plate tectonics" to explain many features of the Genesis Flood such as the forty days and nights of rain resulting not from clouds (or a vapor canopy) but from the earth's cleaving open and releasing heated jets of water shooting high into the atmosphere that condensed into rain. See (Snelling 2009b, vol. 2, pp. 471–73). The understanding of divine action in these models assumes divine providence directs scientifically observable natural processes. Catholic thinkers, on the other hand, eschewed physical explanations of the Flood and emphasized the miraculous so as to not repeat the mistakes of the Galileo affair. See (Ellenberger 1999, vol. 2, p. 141).

¹⁰ On this section see (Cabal and Rasor 2017, pp. 108, 114, 117, 154n29).

¹¹ For examples see especially the comments section of (Sarfati 2022). See also (Hodge 2009).

¹² See (Cabal and Rasor 2017, pp. 123–33).

- 13 Andrew Snelling (2009a, vol. 1, p. 132), Director of Research for Answers in Genesis, credits modern biology, specifically the past “hundred and fifty years of investigations in zoology and genetics,” for revealing “the amazing potentialities for diversification with which the Creator endowed the Genesis kinds.”
- 14 See (Cabal and Rasor 2017, pp. 137, 144, 146, 162–67).
- 15 On the serious concerns of some other young earth scholars regarding AiG’s model, see (Cabal and Rasor 2017, pp. 168–70).
- 16 As noted earlier, scientific models come in a variety of types, including representational models believed to be approximations of the truth like the Ark Encounter (as opposed to, say, exploratory models). In contrast, Reasons to Believe has long offered a testable model, realizing the need for correction as further truth comes to light. The history of (scientific/hybrid) modeling reveals the importance of this approach since our fallibility invariably results in distorted representations.
- 17 Visitors are told they are experiencing “Bible history at the life-size Noah’s Ark!” (“Ark Encounter” n.d.). One Trip Advisor reviewer wrote: “I must admit both my wife and I had tears in our eyes when we first gazed up at the structure, knowing that this was real” (“Ark Encounter Williamson” 2017).
- 18 For instance, with one’s paid admission they are entitled to lectures such as: “Creation vs. Evolution: Why it Matters with Dr. Terry Mortenson” see (Mortenson n.d.). On the misleading nature of AiG’s definitions and partial acceptance of *evolution*, see Cabal and Rasor 2017.
- 19 On AiG’s attempt to distance itself from whale evolution, see (Belknap 2019).
- 20 Young earth creationist Kurt Wise who endorses whale evolution is excluded in AiG’s view from a proper understanding of inerrancy. See (“Affirmations and Denials” n.d.). This material is also one of the appendixes in (Mortenson and Ury 2008).
- 21 One might wish Craig had also treated well-known problems with evolutionary theory such as how God might superintend evolution, or standard evolutionary explanations for human consciousness, morals, and religious beliefs.
- 22 Craig agrees with Daryl Domning that behaviors sinful for humans are not so for animals because they “did not acquire their sinful character until the evolution of human intelligence allowed them to be performed by morally responsible beings” (Craig 2021, pp. 378–79n.26), quoted from (Domning 2001).

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