# THE GEOLOGIC COLUMN, THE CROSS, AND WORSHIP

The God of

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n the discussion of origins, we see the geologic column prompting an important question: Is the geologic column a record of divine creation or divine judgement? And how does the answer to that question impact our worship of the divine?

Stephen Jay Gould coined the term "deep time" to refer to the discovery of the geologic column and its representation of millions of years of life on earth. Did Christ, who created "all things" (John 1:3), use deep time to create? Or is the geologic column a rock record of divine judgment, revealing how Christ, saddened in view of human wickedness (Gen. 6:5–8; Ezek. 33:11; Mic. 7:18), sent the *mabbûl*, the global Genesis Flood over which He sat as king (Ps. 29:10; Gen. 6–9)?

Does your answer impact your view of God's worshipworthiness?

While some modern theologians, such as Longdon Gilkey, fault Genesis's *cosmogony*, or theory of the origin of the universe, as being mistaken or in error, others, such as John Walton, hold that biblical cosmogony was only meant to teach about God—theology and not science.<sup>2</sup> Gilkey insists that Genesis 1–11 must be translated into categories of myth or symbol.<sup>3</sup> Another theologian,

Rudolf Bultmann, a New Testament scholar, claims that no evil, personal Satan, or fallen angels exist.<sup>4</sup> The mythical nature of biblical eschatology leads him to also suggest that the faithful will not meet Christ in the air.<sup>5</sup>

Removing evil, as Bultman does, from the equation would mean that supernatural agencies of evil neither impact earthly animals, plants, and people, 6 nor wage war against Christ as has been described biblically and by Ellen G. White. The Scriptures teach that our world is a fallen planet, implying that it is now Christ's Creation Plan B, having been subjected to futility (Rom. 8:20–21), to three divine curses, one each upon the animal, vegetable, and mineral kingdoms. 8

Even within Adventism there are differences in opinion on how to view the geologic column. Jim Hayward has pointed out the need to distinguish between field data and worldview-informed interpretation of data. On this we concur. Plus, there is a need to treat our colleagues with whom we disagree kindly, as Hayward and Joe Galusha have demonstrated. But while we strongly agree on these two points, we suggest a contrastive approach on how to facilitate a dialog between "consensus" scientific conclusions on origins by the secular world and the origin

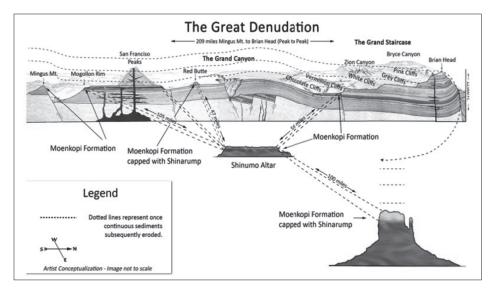


Fig. 1. Geologic cross-section map, used with permission of Zion National Park, with information added by Reed Richardi, team assistant. The map depicts the Grand Staircase, the Grand Canyon, and the Great Denudation. The viewer is looking westward, with the Grand Staircase to the right edge of the diagram. Note that no corresponding staircase appears on the left side, or to the south of the Grand Canyon.

statements of the Bible. While theological implications of data do not refute empirical data, they may prompt the reinterpretation of a standard scientific interpretation of the data, while still affirming the existence of the data itself.

### **Purpose**

In light of these perspectives, the purpose of this piece is to explore: 1) If the geologic column represents His deep-time handiwork, how the character of the Creator and His worship-worthiness may be impacted, as evaluated particularly in light of Calvary, which points to the remedy of natural evil;<sup>10</sup> 2) how Revelation 14:7 responds; and 3) how geomorphological data is consistent with what would be expected in the receding waters of a global Flood.

## The Deep-Time Rock Record and Christ's Character

The raw contents of the geologic column should not be overblown, ignored, or bowdlerized to obtain desired results. Four points about the column do need to be made as we begin our exploration.

1. Extinctions in the Column. Does the God of deep time abandon lower creatures like pawns, roadkill on a developmental path toward desired animals, as Del Ratzsch has questioned?<sup>11</sup> God abandons no one (Deut. 31:6).

- 2. Diseased Fossils. Can disease form part of a deeptime Creation<sup>12</sup> in light of Christ's healing ministry (Isa. 61:1; Luke 4:18), that no animal groaned in Eden (Rom. 8:20–23)<sup>13</sup> and that sickness is absent in the new earth (Isa. 33:24; Rev. 21:3)?
- 3. *Predation*. Can cruel predators, preserved as fossils, represent the original will of God? In Eden, no land animal or bird was to serve as another animal's food, since they all consumed "green herbs" (Gen. 1:30). Here the question of overpopulation arises. We

believe the entrance of the sin problem prohibited God from revealing to us His method of addressing the serious question of overpopulation, which will be explained to our biological satisfaction in the new earth.

4. Meteor Impacts and Violent Twisting Strata. <sup>14</sup> Surely these phenomena do not represent a God of peace and order (Isa. 9:6; 1 Cor. 14:40).

# The Elephant in the Room

John Stuart Mill observes, "Killing, the most criminal act recognized by human laws, Nature does once to every being that lives," often in a cruel manner. Replace Mill's "Nature" with "God" and the deepest problem of this paper is evident. Does the God of long ages kill living things He creates? Since Christ creates and *upholds* creatures (Heb. 1:3; Col. 1:17), they should live indefinitely, but they die. Why? For lower life-forms to die in the deep-time model, Christ must originally and intentionally program these creatures to live, lose quality of life, and die, he fore sin on this earth, thereby becoming the Author of death, the very characteristic of the wicked one (Heb. 2:13; 1 John 3:12).

The Cross reveals the image of God as known to Himself, the basic criterion of His worship-worthiness, which He does not contradict. We assume within God, as known to Himself, there exists what we could describe as Can disease form part of a deep-time Creation in light of Christ's healing ministry (Isa. 61:1; Luke 4:18), that no animal groaned in Eden (Rom. 8:20–23) and that sickness is absent in the new earth (Isa. 33:24; Rev. 21:3)?

no darkness (evil) at all, but only light (truth and goodness). God is wholly good. <sup>18</sup> Motivated by unconditional love <sup>19</sup> for His creatures, and abhorrence of death, Christ perished to perish perishing, thereby guaranteeing that the originator of perishing would himself perish. <sup>20</sup> Does God create through death, the enemy He died to eradicate?

For theologian Thomas Torrance, the Cross shows that death, disease, and natural evil are "an outrage" against God's love.<sup>21</sup> Evil is not compatible with God,<sup>22</sup> the "Lamb who was slain" (Rev. 5:12), who grieves when a sparrow falls wounded to the ground (Matt. 10:29–31),<sup>23</sup> the lover of beauty,<sup>24</sup> who is "righteous in all His ways,

gracious in all His deeds" (Isa. 145:17).

Christ's love for lower animals is supremely exemplified after His crucifixion, when the sacrificial lamb escaped death, implying that Christ did not wish even one sacrificial lamb to die needlessly.<sup>25</sup>

Thus, the elephant in the room is the God of long ages creating through death. John Polkinghorne, theologian, raises the key question about this elephant: "Why, if the new creation is to be free from death and decay, God did not bring such a world into being from the start?" Polkinghorne, accepting Genesis 1–3, and Revelation 12:7–9 as myth, must claim that God created and tested free moral humans



Fig. 2. Team photo of the Chocolate Cliffs, the bottom cliff (riser) of the Grand Staircase. The capping stratum is the lighter Shinarump, which is conglomerate composed of pebbles and fossil pieces of broken tree limbs, suggestive of rapid, high energy, flood-stage deposition.

Art Chadwick, vertebrate paleontologist, identified additional small fossil-wood pieces and sticks embedded into this same flat, relatively thin Shinarump stratum located in Canyon de Chelly, approximately 200 miles from the location pictured here. Such widespread, high-energy flood deposition is consistent with what would be expected to occur in the rising waters of the global Flood.

at a distance over millions of years through suffering,<sup>27</sup> then stepped into time to show that He suffers with us.<sup>28</sup> By contrast, Scripture teaches that God tested free moral beings in perfect environments,<sup>29</sup> invalidating claims to the contrary.

Finally, since Darwin assesses nature as "horridly cruel"<sup>30</sup> but blind to it, <sup>31</sup> how much more cruel for an "all seeing" God to create Darwin's nature! Evolutionist David Hull concurs. The "God implied by evolutionary theory" is "almost diabolical . . . not the sort of God to whom anyone would be inclined to pray."<sup>32</sup> Hull's God exhibits no image of the God of Calvary, <sup>33</sup> rather that of Christ's adversary. For all the above reasons, the Christ of

Scripture cannot be the God of the long-age model.

Since the God of Scripture alone is Creator (Isa. 44:6–8), the basic geologic column was either created by materialistic processes alone, or by Christ's judgment Flood.

Does Scripture imply the origin of that pesky column? We turn to God's final message to humanity for clarification.

### God Is Worthy of Worship: Revelation 14:7

The angel urges us to worship God. However, in the post-Darwinian era is He really worthy of worship? Christ anticipated, and skillfully addressed through His angel, the challenge to His worship-worthiness brought by the claim of the existence of a fossiliferous column. We have seen that *how* God created the column—briefly, or over

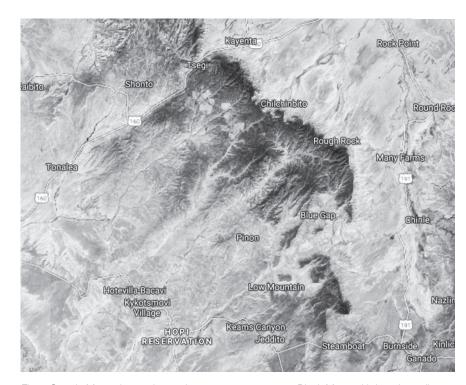


Fig.3. Google Maps view of the northeastern escarpment of Black Mesa with hanging valleys draining in parallel fashion to the southwest.

long ages—determines whether He is worthy or unworthy of worship.

The angel does not say, "worship your Maker"; that would not tell how God created. Instead, he says, "Worship him [tō, the (One)] that made heaven, and earth and the sea, and the fountains of waters" (Rev. 14:7, KJV). This reveals a merciful, temporal method of creating. How? The italicized words in Revelation 14:7 copy the same italicized words in Exodus 20:11, which reads: "For in six days the Lord [YHWH, Christ, 1 Cor. 10:4] made the heavens and the earth, the sea and all that is in them." Jon Paulien, the New Testament scholar, indicates that these italicized words constitute an allusion to the cosmogonic portion of the Sabbath commandment (Exod. 20:11). 34

By referring the divine "Him" of Revelation 14:7 to the Lord of Exodus 20:11, the allusion *equates* the "Him"

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The Hebrew Bible implies that the original creation was not local but, in effect, all earth encompassing, global in extent, as we say today. The Flood was an *undoing* of the original whole-world creation.

and the "Lord" who created in six days. Therefore, the "Him" of Revelation 14:7 created mercifully in six days, not cruelly over long ages! This is good news, showing that the God of Revelation 14:7 is worthy of worship due in part to His brief, merciful method of creating.<sup>35</sup>

What about the idea that the deep-time fossiliferous column disproves a recent creation? In *Exodus 20:11*, the words, "made the heavens and the earth, the sea," are followed by, "and all that is in them." However, in the judgment setting in *Revelation 14:7*, Christ's angel inserts, "fountains of waters" (a configuration found only in Revelation 14:7<sup>37</sup>) instead of the expected, "and all that is in them," for spiritual and earth history reasons expressed in the text.

Importantly, neither "trees" nor "humans," for example, are inserted. Why? Reference only to the "fountains of waters" recalls the previous divine-judgment Flood, when the "fountains of the deep" burst open.<sup>38</sup> Readers who are reminded that the God of Creation is



Fig. 4. Google Maps image documents a fully formed Black Mesa hanging valley beginning abruptly at the cliff's vertical edge.

also a God of Judgment should be encouraged to accept the Creator's pre-advent judgment message for their salvation. If God created all things, he is able to judge them and to recreate them. If he did not, there is no universal basis for accountability or hope. Therefore, the understanding of God as creator is foundational to the hope of Christian eschatology.<sup>39</sup>

Reference to a mythical Flood cannot establish the Lord as a God of judgment. Its recall for this purpose means this Flood was historically true! This invites us to factor a global flood into the model of earth history in response to the worship challenge of a deep-time column.

A global flood deposits basic portions of the column sequentially, which has the effect of suggesting that the deep time column is real. However, a global flood deposits basic portions of the geologic column sequentially, and rapidly, over a period of more than a year, and thus does not undermine the biblical account that Christ employed a brief, six-day, merciful method of creating, demonstrating that He is worthy of worship. Here, we gently differ with Jack Hoehn, who has written that the angel of Revelation 14 mentions nothing about the days or methods of creation, only the fact of creation.<sup>40</sup>

Regarding the biblical Flood, Charles Lyell declared, "We should not expect to find any monuments of that catastrophe." Had he known about and had access to the detailed geomorphological information regarding the landforms in places such as Southern Utah and northern Arizona perhaps the evidence might have encouraged him to alter his dictum. Now we turn to geomorphological field data that may be interpreted as evidences of a few "monuments of that catastrophe."

# Geomorphology and the Flood

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From a position combining scientific thinking with the biblical account of the Flood, these sculpted landforms represent formidable "monuments" of that Catastrophe.

in extent, as we say today.<sup>42</sup> The Flood was an *undoing* of the original whole-world creation. *Undoing* a global creation with water requires a global Flood.<sup>43</sup>

Although academic skepticism against a global flood remains, the stigma for invoking hypotheses involving flood processes unobserved today is dissipating, thankfully, due to the discoveries of megaflooding on Earth and Mars.<sup>44</sup>

Michael Lamb, Caltech geomorphologist, indicates that identifying distinctive morphologies of a landform can suggest its formation. For instance, he identified rim scour on a Snake River cove, suggesting it was not made by slow undercutting seepage, but by overland megaflooding from the breaching of ancient Lake Bonneville, Utah. 45

Leonard Brand has turned to the Grand Staircase and its missing stairs to make a case for scientific thinking from a Biblical worldview.<sup>46</sup> How were the five massive stairstep cliffs of the Grand Staircase in southern Utah formed (Fig. 1)? Figure 2 displays the bottom stair, the

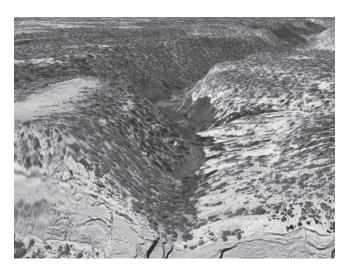


Fig. 5. Close-up of Fig. 4, showing how a vertical cliff underlies the bottom of the hanging valley, which underscores the "beheaded" nature of the hanging valley, and the massive amount of catastrophic overland flooding necessary to sculpt these hanging valleys and to cut the vertical escarpment.

Chocolate Cliffs capped by the Shinarump.

If the Grand Staircase were formed by river action, a valley, narrow or wide, would be formed, with cliffs or banks on both sides of the valley. However, this distinctive morphological configuration is not displayed by the Grand Staircase. Only northern cliffs exist. No matching southern cliffs are present (Fig.1).

This striking, *incomplete* overall morphology of the region suggests that the Grand Staircase was formed by "a massive catastrophic flow of water across the southwestern United States."<sup>47</sup>

This hypothesis is strengthened by the fact that the cliffs of the Grand Staircase (~10,000 feet thick) once extended over the Grand Canyon (Fig.1). Minimally, 40,000 cubic miles of these rock strata have since been eroded away by "The Great Denudation," leaving the Grand Staircase behind as an erosional remnant.<sup>48</sup>

In comparison, the approximately 1,000 cubic miles of the Grand Canyon render the Canyon only *a little ditch*. Ariel Roth, former director of the Geoscience Research Institute, suggests that the receding waters of the Flood best explain the "Great Denudation."<sup>49</sup>

Our next illustration comes from the lengthy, major hanging valleys (or beheaded valleys) that appear on the top of Black Mesa, in northeastern Arizona, and drain across the mesa in parallel fashion in a southwesterly direction for over 60 kilometers (37 miles) (Fig. 3). They begin abruptly at the top cliff edge of the northwest escarpment of Black Mesa (Fig. 4 and Fig. 5). A view of the hanging valleys from the valley floor is shown in Figure 6.

The hanging valleys were established when Black Mesa extended farther to the east, before Chinle Valley was eroded. We propose that following the formation of the hanging valleys by massive overland flooding moving to the southwest, additional catastrophic flooding, perhaps channelized flow moving to the north, removed the former



Fig. 6. Additional images by Brand of hanging valleys on Black Mesa, looking upward from the floor of Chinle Valley.

extension of Black Mesa, leaving the hanging valleys as erosional remnants of the original drainage pattern.<sup>50</sup>

The catastrophic erosional processes evident in the Grand Staircase and the Hanging Valleys on Black Mesa are consistent with what would occur in the runoff phase of the Flood.

From a position combining scientific thinking with the biblical account of the Flood, these sculpted landforms represent formidable "monuments" of that Catastrophe.<sup>51</sup>

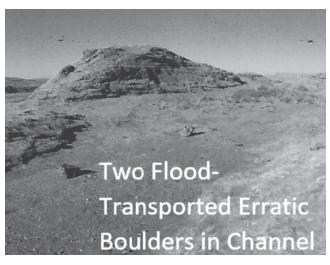
# Discussion

We began by asking, if Christ were linked to the deep-time geologic column as its Creator, how might its contents impact His character and worship-worthiness in light of the Cross and other Scriptures describing His character? We offer seven conclusions:



- Were Christ to create over long ages, as a "necessary" best method of choice, involving extinction, predation, and disease, Darwin's "horridly cruel" assessment of nature would apply, rendering the Creator unworthy of praise.
- The gravest implication of the developmental model is that God creates through death, its Author prior to sin on this earth, a serial Slayer of species, revealing this Creator contradicting His revealed nature.
- For the deep-time God to create a future world free of death, sickness, and pain but not to do so at the start, constitutes indefensible, ungodly omission.
- Christ died in part to abolish death, establishing that He would never create through death.
- Since neither the God of Scripture, the only God available, nor materialistic evolution alone, created the deep-time geologic column, God's Flood must be responsible for the basic column.
- Revelation 14:7 endorses God's brief creation and global Flood, which show the deep-time column never existed, making a brief creation possible, underscoring the goodness of Christ and His worshipworthiness.
- Geomorphology is yielding field data suggestive of megaflood erosional processes consistent with what would be expected in the receding waters of the Global Flood.

In sum, the God of the geologic column is the Lamb that was slain, thereby eternally worship-worthy (Rev. 5:12–13). Because He recently created original life-forms on earth mercifully, over six days, later flood-depositing



of the basic column renders possible a recent creation, showing the central importance of these two events for worship. The findings also provide a better account, geomorphologically, for the formation of the landforms studied than offered by the deep-time model.

And there is more to come on this topic. In his dissertation, Monte Fleming identifies further geomorphological projects. One would be to investigate a network of crossover bedrock channels having no established channel (anastomosing channels), suggestive of erosion by megaflooding, in Chinle Valley, northeastern Arizona.<sup>52</sup> These are only the beginning!

### **Endnotes**

- 1. Stephen Jay Gould, *Time's Arrow, Time's Cycle: Myth and Metaphor in the Discovery of Geological Time* (Cambridge, MA: Harvard University Press, 1987), 1–20.
- 2. Darwin came to see that the Old Testament presented a "manifestly false view of the world," and that it "was no more to be trusted than . . . the beliefs of any barbarian." Nora Barlow, ed., *The Autobiography of Charles Darwin 1809–1882* (London: Collins, 1958), 58; Langdon B. Gilkey, *Religion and the Scientific Future* (Macon, GA: Mercer University Press, 1970), 9; John H. Walton, *The Lost World of Genesis One: Ancient Cosmology and the Origins Debate* (Downers Grove, IL: InterVarsity Press, 2009).
- 3. For Gilkey's seminal piece on category translation see, Langdon B. Gilkey, "Cosmology, Ontology, and the Travail of Biblical Language," *Journal of Religion* 41, no. 3 (July 1961): 194–205.
- 4. Rudolf Bultmann, "New Testament and Mythology," in Kerygma and Myth, ed. Hans Werner Bartsch (London: S.P.C.K., 1956), 4–5.
- 5. Bultmann, "New Testament and Mythology," 4.
- 6. In the New Testament, demon possession is affirmed by Christ's actions (Matt. 8:28). For, "The reality of supernatural agencies of evil," see Ellen G. White, *Desire of Ages* (Mountain View, CA: Pacific Press, 1940), 678. God "never made a thorn, a thistle, or a tare. These are Satan's work, the result of degeneration." Ellen G. White, *Testimonies for the Church*, vol. 6 (Mountain View, CA: Pacific Press, 1948), 186.
- 7. An important festschrift in honor of Angel Rodriguez addresses the final disposition of evil in relation to theodicy and the Great Controversy. Gerhard Pfandl, ed., *The Great Controversy and the End of Evil* (Silver Spring, MD: Review and Herald, 2015).
- 8. In a forthcoming study on *ktisis* ("creation") in Romans 8:19, 20, Younker shows that this term refers to the entire creation—animals, plants, and humans.
- 9. James L. Hayward, *Dinosaurs, Volcanoes, and Holy Writ: A Boy-Turned-Scientist Journeys from Fundamentalism to Faith* (Eugene, Oregon: Resource Publications, 2020), 104. He also gives a laudable example of how we need to treat colleagues kindly with whom we may differ (60). Joe Galusha, Walla Walla College, also leads in exhibiting these needed qualities. See also Michael F. Younker, "The Theological Significance of the Relations of Freedom and Time in The Sciences and Humanities: An Evaluation of the Contributions of David Bohm and Pauli Pylkkö" (PhD diss., Andrews University, 2019), 108–146.
- 10. L. James Gibson and Zdravko Stefano, "Nature in the Light of the Cross," (sermon) apply the statement by Ellen White: "In the light shining from the cross we can rightly interpret nature's teachings." Ellen G. White, *Ministry of Healing* (Mountain View, CA: Pacific Press, 1948), 461; Ellen G. White, *Testimonies for the Church*, vol 8 (Mountain

- View, CA: Pacific Press, 1948), 324–325. The cross points to the remedy of natural evil, thus showing that these evils do not reflect the principles operating in the original creation.
- 11. Del Ratzsch, *The Battle of Beginnings: Why Neither Side Is Winning the Creation-Evolution Debate* (Downers Grove, IL: InterVarsity Press, 1996), 189. Ratzsch says he does not know the answer to the roadkill question.
- 12. Bruce M. Rothschild and Larry D. Martin, *Paleopathology: Disease in the Fossil Record* (Ann Arbor, MI: CRC Press, 1993), 303–306.
- 13. John C. Peckham, Theodicy of Love: Cosmic Conflict and the Problem of Evil (Grand Rapids, MI: Baker Academic, 2018), 114–118; see also note 6 for a forthcoming study by Randall Younker on ktisis; Denis O. Lamoureux, "Toward an Evangelical Evolutionary Theodicy," Theology and Science 18, no. 1 (2020): 12–30.
- 14. L. James Gibson, "A Catastrophe with an Impact," Origins 17, no. 1 (January 1, 1990): 38–47; David M. Raup, The Nemesis Affair: A Story of the Death of Dinosaurs and the Ways of Science (New York: W. W. Horton & Company, 1986); Smithsonian, Violent Earth: Volcanoes, Earthquakes, Hurricanes, Mudslides, Tsunamis (New York: DK Publishing, 2011).
- 15. John Stuart Mill, *Nature: The Utility of Religion and Theism* (London: Longmans, Green and Co., 1923), 28–29.
- 16. Jacques B. Doukhan, "Where Did Death Come From? A Study in the Genesis Creation Story," *Adventist Perspectives* 4, no. 1 (1990): 16–18.
- 17. Philip Clayton observes that the deep-time geologic column may render God less compassionate than we have thought. Philip Clayton, "Metaphysics Can Be a Harsh Mistress," *Center for Theology and the Natural Sciences Bulletin* 18, no. 1 (Winter 1998): 18.
- 18. 1 John 1:5.
- 19. Fritz Guy, "Interpreting Genesis One in the Twenty-First Century," *Spectrum* 31, no. 2 (Spring 2003): 12.
- 20. John 3:16; 2 Timothy 1:10; Hebrews 2:14.
- 21. Thomas Torrance, *Divine and Contingent Order* (Oxford: Oxford University Press, 1981), 139.
- 22. Daryll Ward, "Identity and Temporality: Exploring Perfection and Incarnation" (paper read at the Open and Relational Theologies Consultation, AAR, Chicago, IL, November 2008), 2, note 6.
- 23. White, Desire of Ages, 356.
- 24. See Jo Ann Davidson, *Toward a Theology of Beauty: A Biblical Perspective* (Lanham, MD: University Press of America, 2008); Tim Standish, "Design in Nature," *Adventist World*—NAD, July 2015: 29; Charles Kingsley, "Beauty Is the Handwriting of God" and "The National Gallery," in W. Harrison and Charles Kingsley, *Selections from Some of the Writings of the Rev. C. Kingsley, M.A.* (London: Strahan and Co., 1873), 362.
- 25. Matthew 27:50-51; White, Desire of Ages, 757.
- 26. John Polkinghorne, Science and Religion in Quest of Truth (New Haven, CT: Yale University Press, 2011), 106.
- Polkinghorne builds upon similar principles expressed by John Hick in Evil and the God of Love (New York: Palgrave MacMillan, 1966).
- 28. John Polkinghorne, Science and Religion, 106.
- 29. José M. Bertoluci, "The Son of the Morning and the Guardian Cherub in the Context of the Controversy between Good and Evil" (PhD diss., Andrews University, 1985).
- 30. Darwin to J. D. Hooker: "What a book a devil's chaplain might write on the clumsy, wasteful, blundering low and horridly cruel works of nature." Quoted in Richard Dawkins, *A Devil's Chaplain* (Boston: Houghton Mifflin Company, 2003), 8. Here Dawkins endorses evolution, but, laudably, explains why we must fight against its cruel method (8–13).
- 31. Dawkins, A Devil's Chaplain, 11.
- 32. David L. Hull, "The God of the Galápagos," Nature 352 (August

- 8, 1991): 486.
- 33. Thane Hutcherson Ury, "The Evolving Face of God as Creator: Early Nineteenth-Century Traditionalist and Accommodationist Theological Responses in British Religious Thought to Paleo-Natural Evil in the Fossil Record" (PhD diss., Andrews University, 2001).
- 34. Jon Paulien, "Revisiting the Sabbath in the Book of Revelation," *Journal of the Adventist Theological Society* 9, no. 1–2 (1998): 179–186.
- 35. John T. Baldwin, "Revelation 14:7: An Angel's Worldview" in *Creation, Catastrophe & Calvary: Why a Global Flood Is Vital to the Doctrine of Atonement*, ed. John T. Baldwin (Hagerstown, MD: Review and Herald, 2000), 19–39.
- 36. "Fountains" are rendered *pēgas* in Greek.
- 37. This deviation constitutes a hapax legomenon configuration.
- 38. Genesis 7:11. Here, "fountains" of the "great deep" (NKJV) are also *pēgai* in the LXX, the Greek Old Testament. For the role of allusions to the Genesis flood and their relationship to the end-time judgment in the argument of Revelation 11–21, see Richard Bauckham, *The Theology of the Book of Revelation* (Cambridge: Cambridge University Press, 1993), 51–53.
- 39. Bauckham, Theology of the Book of Revelation, 48. See also Félix H. Cortez, "Creation in Hebrews," Andrews University Seminary Studies 53 (2015): 316–318; Craig R. Koester, Revelation: A New Translation with Introduction and Commentary (New Haven: Yale University Press, 2014), 612–613; Gerhard May, Creatio Ex Nihilo: The Doctrine of "Creation out of nothing" in Early Christian Thought, trans. A. S. Worrall (London: T&T Clark International, 2004), 148–178.
- 40. Jack Hoehn, "Freeing the First Angel and Reopening the Doors of Adventism" *Adventist Today*, General Conference Special Issue, Summer 2015: 42.
- 41. Norman Cohn quotes Charles Lyell's famous dictum from *Principles of Geology* (1833–34) in his book *Noah's Flood: The Genesis Story in Western Thought* (New Haven: Yale University Press, 1996), 118.
- 42. Richard Davidson, "The Genesis Account of Origins," in Gerald A. Klingbeil, ed., He Spoke, and It Was: Divine Creation in the Old Testament, Creation Series Volume One (Nampa, ID: Pacific Press, 2015), 61–62; Gerhard von Rad, Genesis: A Commentary, rev. ed. (Philadelphia, PA: Westminster, 1972), 128; David Carr, "Genesis," in The Oxford Encyclopedia of the Books of the Bible, Vol. I, ed. Michael D. Coogan (New York: Oxford University Press, 2011), 317, 318; Tikva Frymer-Kensky, "Pollution, Purification, and Purgation in Biblical Israel" in The Word of the Lord Shall Go Forth: Essays in Honor of David Noel Freedman in Celebration of His Sixtieth Birthday, eds. Carol L. Meyers and M. O'Connor (Winona Lake, IN: Eisenbrauns, 1983), 410.
- 43. Randall W. Younker and Richard M. Davidson, "The Myth of The Solid Heavenly Dome: Another Look at The Hebrew," *Andrews University Seminary Studies (AUSS)* 49, no. 1 (2011); Davidson, *He Spake and It Was*, 25–38.
- 44. Victor R. Baker, "Overview of Megaflooding: Earth and Mars," in *Megaflooding on Earth and Mars*, ed. Devon M. Burr, Paul A. Carling, and Victor R. Baker (New York: Cambridge University Press, 2009), 1.
- 45. Michael Lamb, et al., "Amphitheater-headed Canyons Formed by Mega Flooding at Malad Gorge, Idaho," *Proceedings of the National Academy of Sciences of the United States of America* 111, no. 1 (January 7, 2014): 57–62.
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- 50. Brand, "The Grand Staircase," 22-24.
- 51. Cohn, Noah's Flood, 118.
- 52. Monte Fleming, "Geomorphology of the Potholes of Rock Window Mesa, Chinle Valley AZ" (PhD diss., Loma Linda University, 2018), 129–135. Text on images by team.



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