

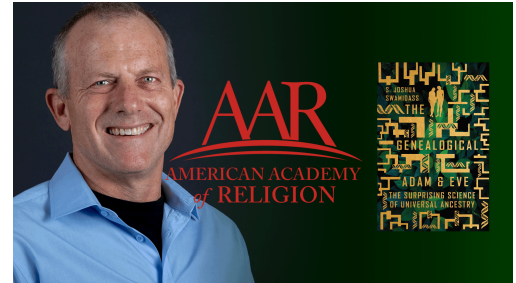


Four Questions for the Genealogical Adam and Eve

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Joshua Swamidass's *The Genealogical Adam and Eve* (GAE) has solved several conundrums for conservative biblical scholars and theologians who seek to integrate their work with evolutionary science. This paper assesses GAE's contributions and limitations using four questions.

Joshua Swamidass's motivation for writing *The Genealogical Adam and Eve*¹ seems to be summarized in this encounter from the book:

A pastor explains an honest reading of Genesis. His scientist friends object, sometimes incorrectly. The conversation ends. A fracture. (GAE, 215)²

This pastor—to use the vernacular—is smacked down by the scientist. Josh wants to avoid this. Why? Because, as a scientist, he finds it unnecessary. To render this fracture unnecessary is certainly a victory in some ways for the interchange of science and Christian belief. It also has its limits, and through a series of questions, I intend briefly to show how and why.

1. Does the Book Achieve Its Aim?

It seems to me the first task in responding to a book is *to ask its questions, to assess its aim, and to see if that is fulfilled*. As I do that, I am seeking to fulfill my task here as I understand it—to analyze GAE as a book primarily, and secondarily, to take in the papers in this session. I am not interacting therefore with additional criticisms that have arisen around and after the publication of GAE. (This will take some self-restraint, I admit, but I believe I am up to the task.)

One will have to observe that assumed in the reading of Genesis by the pastor above is a reasonably literalist hermeneutic, often called in the book the “traditional de novo account of Adam and Eve” (e.g., GAE, 5,8). Josh, of course, grew up in a literalist household (GAE, 7), and so this should not surprise us. Even if he does not personally advocate this position, he seeks to defend it for the purpose of healing the rupture and creating a “peaceful” approach to theology and science, for “inclusion, not exclusion.”³

Accordingly, if I'm reading GAE correctly, the core GAE Hypothesis can be found on page 10,

Entirely consistent with the genetic and archaeological evidence, it is possible that Adam was created out of dust, and Eve out of his rib, less than ten thousand years ago. Leaving the Garden, their offspring would have blended with those outside it, biologically identical neighbors from the surrounding area. In a few thousand years, they would become genealogical ancestors of everyone.⁴

The key here is the contribution of the distinction between *genealogical* and *genetic*, which I think is truly significant, and about which I'll say no more because I suspect all listening to this paper grasp the distinction. This is one of those insights that corresponds to the Bible's intent and makes me think “Why didn't someone say this so clearly earlier?”⁵

It also responds to skeptics, like Jerry Coyne, on integrating science with Christian theology (in fact, “integrationist” is a slur in Coyne's lexicon): “The de novo creation of Adam and Eve is not compatible with what scientists have found in God's creation” (GAE, 6). The GAE Hypothesis resolves this reading of the key biblical texts (and their related theological assertions), held by around four in ten white evangelicals, who answer, for example, that “humans have always existed in their present form.”⁶ Given the prevalence of this viewpoint in conversations I've had with various theologians—and particularly people in the pew and my own undergraduates at Chico State University (whether they hold to this or not)—I find this is no small accomplishment. And so, I often find myself recommending GAE to the group of conservatives Christians biblical scholars and theologians—and just garden-variety “Christians in the pew.”

2. What Kind of Literature are We Dealing With When We Read the Creation Stories?

Stepping out of the particulars of the Evangelical Philosophical Society and into the context of AAR broadly, I make my next point succinctly to save space. An inerrantist biblical hermeneutic⁷ is not

1. *The Genealogical Adam and Eve: The Surprising Science of Universal Ancestry* (Downers Grove, Illinois: InterVarsity Press, 2021). Hereafter, “GAE.”

2. Cf. GAE, 9.

3. See, GAE, 16. As I've read and re-read the GAE, I am not able to find Josh's position, although he certainly expresses affinities with the “traditional de novo position.” If it's the case that his position isn't clear—and I speak ready for correction—then why not?

4. This is expanded on pages 25-26, but I think this covers the core of the hypothesis.

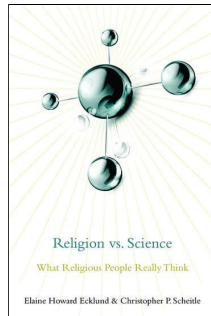
5. See, for example, GAE, 32-33.

6. Pew Research Center, “[For Darwin Day, 6 facts about the evolution debate.](#),” accessed November 30, 2020.

7. Notice that Josh's commitment to [Chicago Statements on Inerrancy](#) (GAE, 13 n.15).

the sum and consensus of those Christian scholars who attend AAR. More importantly, it is also not what I see in creedal Christianity—i.e., one that follows the Nicene Creed—present in Eastern Orthodoxy, Catholicism, Protestantism.

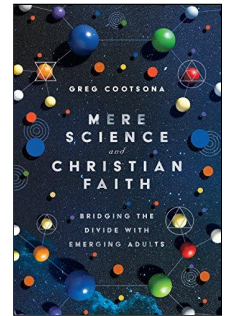
This is important because—to use the language from the book, the hermeneutic present in the GAE Hypothesis does not constitute the entire “tradition” because the Christian tradition has changed and added new voices in at least the last 200 years—and one could argue, even earlier than that. Put another way, the hermeneutical position the GAE Hypothesis seeks to defend, and its related theology, does not subsume “consensual Christianity” (Thomas Oden), “mere Christianity” (Richard Baxter, and C.S. Lewis), or what has been believed “everywhere, always, and by all” (Vincent of Lerins).⁸ This is not even the position of all evangelicals. Let’s grasp the scope numerically. In their social scientific research, Elaine Howard Ecklund and Christopher Scheitle have described the following: When asked to choose a statement that best described their beliefs on creationism, evolution, and God’s role, 39.8% of the U.S. Protestant evangelicals believes that “only one of the origin narratives is definitely true.”⁹ (Similarly, by many estimates, evangelicals are about one-third of the Christians in the U.S.¹⁰)



I find this important when we take in the scope of the problems that the GAE Hypothesis solves and for how many Christians. At the AAR, much of Christian biblical scholarship and theology in its engagement with science has moved on from an inerrantist hermeneutic as its sole, or even primary, focus.¹¹ I offer just one piece of evidence: I have served as one of the chairs of the Science, Technology, and Religion program unit at the AAR nationally and/or regionally for the

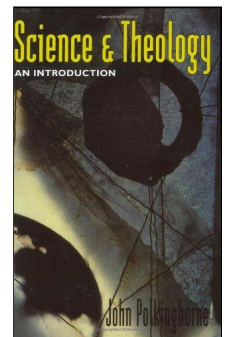
past five years, and the concern about how to support an inerrantist biblical approach with modern science has never once appeared out of the hundreds of papers I’ve heard and proposals I’ve read. How then do most Christians answer the question, “What kind of literature are we dealing with when we read the creation stories?” Minimally, in a way that doesn’t necessitate an historical Adam and Eve who lived 10,000 years ago.

In that light, I have outlined three essential positions on Adam and Eve and their historicity:¹² Position One rejects modern science and holds to a literalist approach to the Bible and upholds an historical Adam and Eve. Two, which includes the GAE Hypothesis, holds to mainstream modern science as well as an historical Adam and Eve. Three, like Francis Collins, Gerhard von Rad, James D. G. Dunn, Gregory Boyd (at least what he supports for others), and C.S. Lewis (and me) finds that the best way to integrate modern science and a robust biblical hermeneutic hold to typological, but not historical Adam and Eve. I don’t particularly care if Position Three is right, but I also don’t see a compelling reason yet to subscribe to Position Two, and thus the GAE hypothesis isn’t entirely relevant for many Christ-followers, which is why I wonder how far the GAE Hypothesis is moving the conservation and interchange of science and theology forward.



Josh sometimes calls Position Three the “no-Adam” position. I must demur. In brief, even if there is no historical referent, there is still an Adam. Concepts, especially “types” in the Bible can have power without referring to historical events, Romans 5 notwithstanding. Put in another and to exemplify this assertion, John Polkinghorne—who holds degrees in both theology and science and who thus grasps the complexity of this question—looks at the particular aspect of original sin in light of what I’ve called Position Three, puts it this way:

At some stage, the lure of self and the lure of the divine came into competition and there was a turning away from the pole of the divine Other and a turning into the pole of the human ego. Our ancestors became, in Luther’s phrase, ‘curved in upon themselves.’ We are heirs of that culturally transmitted orientation. One does not need to suppose that this happened in a single decisive act; it would have been a stance that formed and reinforced itself through a succession of choices and actions. Death did not come into the world for the first time but rather mortality, the sad recognition of human finitude.¹³



8. In holding to a “consensual” or “mere” or “Nicene Creed” Christian faith, I therefore demur from seeing evangelicalism as its repository. John Calvin taught me that we are ceaseless idol makers, and Karl Barth had to break with his teachers over political theology. Some recent theological statements on U.S. politics from several leading evangelical leaders are defective at best and idolatrous at worst. Therefore, I am not convinced that our sole need is to integrate science with conservative, biblically inerrantist theology.

9. Ecklund & Scheitle, *Religion vs. Science: What Religious People Really Think* (Oxford: Oxford University Press, 2017), 77. On a related point, I wonder whether the GAE Hypothesis is wrapped up in the conflict thesis and actually doesn’t represent the consensus of the United States. Consider this insight also from Scheitle and Ecklund, “When it comes to social issues, two clearly opposite positions are usually pitted against one another (e.g., pro-choice versus pro-life, pro-gun versus antigun). This is often because those with the most extreme positions are usually the most invested in the issue and, as a result, are the most organized and vocal. Yet, in reality, public attitudes about these issues are rarely neatly dichotomized. Sure, there are people who are always, totally, and completely anti-[issue] or always, totally, and completely pro-[issue]. But when social scientists dig deeper, we almost always find that positions on an issue are much more varied and nuanced than it might appear from looking at picket signs. Evolution is no exception. Many religious individuals are not easily classified as simply young-earth creationists. Instead, as we uncover in our survey, their views on evolution and creation are complex.” (ibid., 143)

10. See “5 Facts about U.S. Evangelical Protestants,” accessed November 30, 2020. I arrive at one-third by dividing 75% of Americans who state they are Christian by 25% of the population’s identification as (white) evangelical. Because of concerns about inherent racism in evangelicalism, it’s worth adding that many Black Protestants—though they may agree with many evangelical theological tenets—do not affiliate with evangelicalism.

11. On a related note, Josh clearly states “I am not theologian” (GAE, 172), and I think we should take him at his word and applaud his conversation with theological and biblical scholars.

12. See *Mere Science and Christian Faith: Bridging the Divide with Emerging Adults* (Downers Grove, Illinois: IVP Books, 2018).

13. John C. Polkinghorne, *Science and Theology An Introduction* (Minneapolis: Fortress Press, 1988), 63-4.

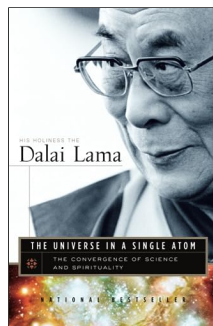
Josh has told me several times that he is not advocating a particular position on Adam and Eve. And although there are places in the book where he accepts Position Three as legitimate (GAE, 146—and which he marked in the copy he sent to me), Josh isn't always consistent about his assessment of this view. For example, he employs two, quite distinct uses of myth on page 17: "Some of us think evolution is a myth. Some of us think Adam and Eve are a myth." What Josh seems to be saying is, "Some think evolution is untrue," but is he also saying, "Some think Adam and Eve are a fiction" or "some think of Adam and Eve as stories"? For the latter, some like Polkinghorne and Lewis¹⁴ see myth as meaningful story, not as a falsity. Karl Barth similarly read the early chapters of Genesis as sagas or "historical sagas."¹⁵ This view takes Scripture "naturally" (to cite John Calvin's hermeneutic). For example, it's a sensible way to interpret talking serpents.¹⁶

What if we read the biblical texts as mythological in this sense? Suddenly, it's not that important. I find Position Two creating as many problems as it solves—or dissolves—for both science and Scripture.

3. What Does the Book Not Prove?

From a philosophical perspective, this book does not prove that science *leads* to GAE Hypothesis. Instead, Josh asserts that it "de-weaponizes the ecclesial conversation on human origins" (GAE, 160) and is "entirely consistent with the scientific evidence" (cf. 201). An analogy came to mind when I pondered the phrase "entirely consistent," which, like all analogies seeks to make one simple point. What do we understand by the phrase "entirely consistent"? That's the phrase on which I'm focusing, and it begins with an admission: I have and do watch Rambo and James Bond films. I am reminded of Rambo in battle or various scenes Bond films—where bullets shooting from machine guns, but neither John Rambo nor James Bond get hit. This *could happen*—it is not inconsistent with the laws of nature—but it's not entirely plausible. Can we say that Bond or Rambo isn't hit is "entirely consistent" with science?

Or put another way, there is no scientific discovery that makes the position on Adam and Eve that the GAE Hypothesis particularly compelling. Although some hoped that this might emerge from the Mitochondrial Eve, that doesn't fulfill that function. Consider this by antithesis: Before the 20th century—almost all cosmologists came to the conclusion that science led to a "steady state" theory. When Einstein, Lemaitre, and Hubble came along—despite protestations by Hoyle—Big Bang shifted science toward a beginning point. I, for one,



do not think that the Big Bang proves *creatio ex nihilo*, but do note that all physics we know breaks down in the first seconds of $t=0$. Still, consider—through the clarity of antithesis—what the Tibetan Buddhist leader the Dalai Lama has written,

From the Buddhist perspective, the idea that there is a single definite beginning is highly problematic. If there were such an absolute beginning, logically speaking, this leaves only two options. One is theism, which proposes that the universe is created by an intelligence that is totally transcendent, and therefore outside the laws of cause and effect. The second option is that the universe came into being from no cause at all. Buddhism rejects both these options. If the universe is created by a prior intelligence, the questions of the ontological status of such an intelligence and what kind of reality it is remain.¹⁷

There's nothing like this in science that *leads* to the GAE Hypothesis. But the victory is partial. Even if the GAE does not prove that universally solve the relationship between human origins and evolutionary science, it does offer a way for some conservative Christian scholars¹⁸ to find that they can accept mainstream science and not lose Adam and Eve. This is an achievement.

4. What Would Have to Change with Science to Make the Hypothesis Invalid?

This question poses the topic of whether the GAE Hypothesis is vulnerable to the assertion that it's *ad hoc*.¹⁹ The empirical data always underdetermines a conclusion—whether it be philosophical, theological, or scientific. One can hold that it is true that the GAE Hypothesis is logically consistent with the empirical data that God created Adam and Eve out of dust 10,000 years ago. It is also logically possible that God created the universe five minutes ago with false memories implanted in our brains. Philosophically speaking—as others have noted when I've glowingly described GAE—it is not dissimilar from a book given to me by a young earth creationist that states that God planted fossils to test us.

I don't find that the work in GAE represents the cutting edge of the philosophy of science, which I'll just assert here because of space, the *Inference to the Best Explanation*, particularly as presented by Peter Lipton.²⁰ Yes, the GAE Hypothesis "could have been" (GAE, 201), but is the GAE the best explanation of the data we have from

17. Dalai Lama, *The Universe in a Single Atom: The Convergence of Science and Spirituality* (New York: Harmony, 2006), 82.

18. Cf. the papers in the recent ETS session that agree with the GAE Hypothesis. Andrew Ter Ern Loke "Showing There is No Incompatibility Between Evolution and the Bible", *Peaceful Science* 2020. <https://doi.org/10.54739/rcx8>; Richard E. Averbeck "Reading Creation in the Bible in Light of Science Today", *Peaceful Science* 2020. <https://doi.org/10.54739/i6cd>; William Lane Craig "Preferring an Ancient Genealogical Adam and Eve", *Peaceful Science* 2020. <https://doi.org/10.54739/t9q9>; Kenneth D. Keathley "Antipodes and the Scandal of Particularity", *Peaceful Science* 2020. <https://doi.org/10.54739/g98q>

19. I didn't have time or space to enter into the discussion of the GAE Hypothesis is falsifiable. Josh spends several chapters in the early section of the book on proving that it is not falsified. And he does thorough work. As philosophers of science has shown, however, hypotheses that rely on non-falsifiability are vulnerable to ad hoc approaches. Cf. Imre Lakatos's critique of Popper, for example. See, Lakatos, "Falsification and the Methodology of Scientific Research Programmes," in *Criticism and the Growth of Knowledge*, ed. Imre Lakatos and Alan Musgrave (Cambridge: Cambridge University Press, 1970), 91–106.

14. E.g., *The Problem of Pain* (New York: Macmillan, 1962).

15. From the German word *sagein*, "to say." See Karl Barth, *Church Dogmatics III: The Doctrine of Creation, Part One*, trans. J. W. Edwards, O. Bussey, Harold Knight (Edinburgh: T&T Clark, 1958 [1945]).

16. As a ELCA pastor mentioned to me in a discussion of science and a literalist interpretation of Genesis 1–3, "How do we know which elements to take literally in these narratives?" Let's flip the script and think from the other side of the hermeneutical spectrum: I think this is why one of the most contested assertions from the conservative biblical scholars is the need that there is importance of people outside the Garden (e.g., GAE, 145)—here's where it runs into trouble.

both Scripture and science? I, for one, cannot conclude that the GAE Hypothesis is philosophically robust.

No More Questions

In this response to The Genealogical Adam and Eve, I am concerned that that I may have sounded largely “critical” in the popular, and not the scholarly, sense. My apologies if that’s the case. I learned when I studied at Heidelberg and Tübingen that Germans find it a compliment when you interrogate their work. (To offer no critiques is thus a slight.) And so, I offer this response as the sincerest form of compliment!

Put another way, Josh uses the word “traditional” to describe a way to understand the biblical texts and thus Adam and Eve. As I mentioned above, I see the Christian tradition in a different way from his book. In addition, as Alasdair MacIntyre has argued, a *living tradition* is “an historically extended, socially embodied argument, and an argument precisely in part about the goods which constitute

that tradition.”²¹ With MacIntyre in mind, I believe we are here—by virtue of Josh’s contribution—engaging in the Christian tradition.

I close with this story. I remember my first argument with Josh—at Catalina Island—where I had gathered the grantees for a project I was directing, Science and Theology for Emerging Adult Ministries.²² On a beautiful warm early fall evening, seated outside at dinner with Josh next to me, I made a rather wide assertion, “Modern evolutionary science invalidates an historical Adam and Eve.” Yikes! As you can imagine, we had quite a spirited debate!

I’ve learned a great deal since that evening. One is that my deepest hope in arguing over the Christian tradition is that we might make it more compelling for those outside who are intrigued by the unusually compelling Gospel message (as I was when I entered college). Maybe Josh and I just continuing the argument as we engage in Christian tradition of understanding the profound and important nature of Adam and Eve...in the MacIntyrean sense of the word.

20. Here I’m drawing on the work of Alister McGrath. See Peter Lipton’s brief articulation in the article of the same name, <https://www.people.hps.cam.ac.uk/index/lipton/inference>.

21. Alasdair MacIntyre, *After Virtue*, 2nd ed. (Notre Dame, IN: University of Notre Dame Press, 1981), 222. Cf. the website of the International Society for MacIntyrean Enquiry, <https://www.macintyreanenquiry.org>.

22. See <https://thesteamproject.org>.

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