After Adam: Reading Genesis in an Age of Evolutionary Science

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Recent research in molecular biology, primatology, sociobiology, and phylogenetics indicates that the species Homo sapiens cannot be traced back to a single pair of individuals, and that the earliest human beings did not come on the scene in anything like paradisal physical or moral conditions. It is therefore difficult to read Genesis 1–3 as a factual account of human origins. In current Christian thinking about Adam and Eve, several scenarios are on offer. The most compelling one regards Adam and Eve as strictly literary figures — characters in a divinely inspired story about the imagined past that intends to teach theological, not historical, truths about God, creation, and humanity.

Taking a nonconcordist approach, this article examines Adam and Eve as symbolic-literary figures from the perspective of mainstream biblical scholarship, with attention both to the text of Genesis and ancient Near Eastern parallels. Along the way, it explains why most interpreters do not find the doctrines of the Fall and original sin in the text of Genesis 2–3, but only in later Christian readings of it. This article also examines briefly Paul's appeal to Adam as a type of Christ. Although a historical Adam and Eve have been very important in the Christian tradition, they are not central to biblical theology as such. The doctrines of the Fall and original sin may be reaffirmed without a historical Adam and Eve, but invite reformulation given the overwhelming evidence for an evolving creation.

odern science has amply demonstrated that phenomena such as predation, death, and the extinction of species have been intrinsic and even necessary aspects of life on earth for billions of years, long before the arrival of Homo sapiens. For this reason, many Bible-believing Christians have long found it difficult to read Genesis 1-3 as a factual account of human origins. The status of Adam and Eve, in particular, has become a keen topic of interest in Christian circles over the last several years. Much of this interest has been sparked by a variety of studies that call into question (in effect, if not intent) the historicity of the Bible's first couple. The ever-growing hominid fossil record unmistakably shows that human beings did not appear suddenly but evolved

gradually over the course of six million years.¹ Further, anthropologically sensitive studies of Genesis have observed that the biblical Adam and Eve and their early offspring are portrayed as figures living in the Neolithic period, around 9,000 to 7,000 BCE, which is some 30,000 years *later* than the earliest archaeological evidence for religious behavior and culture among humans.²

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More recently, research in molecular biology indicates that the genetic diversity of the present human population cannot possibly be traced back to a single couple living in Mesopotamia a few thousand years ago. The best mathematical models suggest, rather, that the ancestors of all modern *Homo sapiens* were a population of about 10,000 interbreeding individuals who were members of a much larger population living in Africa around 150,000 years ago.³ This genetic evidence corroborates the fossil evidence for the date and location of the earliest anatomically modern human beings.

One needed clarification of the molecular evidence concerns the early human whom geneticists have nicknamed "Mitochondrial Eve." The popular press has misled some into thinking that scientists have discovered evidence for the very first female human, and many Christians have taken this announcement to support the biblical portrait of monogenism.⁴ Mitochondrial Eve, though, is not the founding mother of the human race but only the matrilineal carrier of an ancestral mitochondrial DNA (mtDNA) molecule that gave rise to all mtDNA in women today. The human mitochondrial genome is tiny compared to our nuclear/chromosomal genome (less than 1% its size), and is passed down only through females. Variations in chromosomal DNA today indicate that Mitochondrial Eve was only one member of a large breeding population. Thousands of other men and women were her contemporaries, and they no doubt contributed other parts of our full genetic makeup.⁵ The same is true, mutatis mutandis, of the so-called Y-chromosomal Adam, the patrilineal common ancestor for all Y chromosomes in men living today, who lived around 60,000 years ago, that is, some 100,000 years after Mitochondial Eve.6

Recent studies in primatology, sociobiology, and phylogenetics are also pertinent to the historicity of Adam and Eve and to the Christian doctrines of the Fall and original sin. Here a range of evidence establishes that virtually all of the acts considered "sinful" in humans are part of the natural repertoire of behavior among animals—especially primates, but also birds, insects, and other species—behaviors including deception, bullying, theft, rape, murder, infanticide, and warfare, to name but a few.⁷ The shared patterns of behavior, both "selfish" and

"altruistic," are homologous and owe at least in part to the common genetic heritage of all creatures, stretching back to the very beginning of life. Though not completely determined by genes, animal and human behaviors are strongly influenced by them. The source of the human inclination toward self-aggrandizement, then, is to be found in animal nature itself. Far from infecting the rest of the animal creation with selfish behaviors, we humans inherited these tendencies from our animal past.

Together, these newer lines of research join other, well-established ones in making it hard to imagine that the earliest human beings appeared on the scene in anything like paradisal physical or moral conditions. They would instead have had to struggle to sustain themselves, and to do so, they would have possessed strong tendencies toward the same types of behavior common to all animals. Only over time would they have developed a sufficient spiritual awareness to sense that many selfish behaviors are contrary to God's will, and the moral imperative to transcend those behaviors.

How do the biblical Adam and Eve fare in all this? If they were not actual persons, then what becomes of the Bible's teaching about sin and death entering the world through their transgression? If there was no singular sinful act, and if biological death as such is not divine punishment for sin, then what happens to the doctrine of the Fall? And if there was no fall from a primordial state of moral innocence and physical perfection, then what becomes of original sin and of the need for redemption in Christ?

Broadly speaking, there are three possible responses to the apparent erosion of biblical truth by modern science: (1) dispute the science, (2) finesse one's interpretation of Scripture to accord with the science, or (3) assign the Bible and science to two separate spheres of authoritative discourse. Strategies 2 and 3 have enabled most Christians to accept scientific ideas that were once thought to undermine biblical truth, especially a heliocentric solar system and an old earth. By contrast, among fundamentalists and evangelicals, the theory of evolution still meets with a great deal of hesitance and suspicion, if not downright hostility. This is especially so in the matter of hominid evolution, which, for many, seems to diminish the status of human beings as bearers of the divine image.8

In current Christian thinking about Adam and Eve, five basic scenarios are on offer. (1) The traditional view, still held today by young-earth creationists, is that Adam and Eve are recent ancestors of the human race—actual persons specially created by God about 10,000 years ago. (2) Another view, held by old-earth creationists, posits that God created humans around 150,000 years ago but then selected a pair of them about 10,000 years ago to represent all of humanity; this would make Adam and Eve recent representatives. (3) A third view sees Adam and Eve as *ancient ancestors* – a pair of evolved hominids whom God selected and miraculously modified into the first Homo sapiens about 150,000 years ago. (4) A variant of this scenario envisions Adam and Eve as ancient representatives: God revealed himself to a large group of early humans around 150,000 years ago, and the biblical Adam and Eve are symbolic of this group. (5) Over against these four scenarios stands the view of the majority of contemporary biblical scholars, theologians, and Christians working in the sciences, a view that is largely unknown in evangelical circles: Adam and Eve are strictly literary figures-characters in a divinely inspired story about the imagined past that intends to teach primarily theological, not historical, truths about God, creation, and humanity.

The attractiveness of this last position is twofold: it does not contradict modern science (as the first scenario does), and it does not read into the biblical text anachronistic notions that would have been inconceivable to the ancient author(s) and audience(s) of Genesis (as the second, third, and fourth concordist scenarios do). In this article, I explore Adam and Eve as symbolic-literary figures from the perspective of mainstream biblical scholarship. Along the way, I explain why most interpreters do not find the doctrines of the Fall and original sin in the text of Genesis 2-3 but only in later Christian readings of it. The final section of my article briefly examines Paul's appeal to Adam as a type of Christ. In the conclusion I propose that, although a historical Adam and Eve have been very important in the Christian tradition, they are not central to biblical theology as such. I also join many theologians in maintaining that the doctrines of the Fall and original sin should be reaffirmed but reformulated in the light of evolutionary science.

Recognizing Adam and Eve as Strictly Literary Figures

For the most part, biblical scholars have arrived at their current understanding of the Adam and Eve narrative independently of developments in modern science. The consensus view has the advantage of being compatible with the findings of science without relying on a concordist strategy of interpretation dictated by consideration of science.

The Literary Genre of Genesis 1–11

The most general reason why biblical scholars recognize Adam and Eve as strictly literary figures has to do with the genre of the narratives in chapters 1-11 of Genesis. The vast majority of interpreters take the narratives in these chapters as story, not history, because their portrait of protohistory from creation to flood to Babel looks very stylized-with sequences, events, and characters that look more symbolic than "real" events and characters in "normal" history. All of the episodes are to a great extent etiological, designed to explain the origins or cause of aspects of human life in the world—marriage, sexual desire, and patriarchy; toil in agricultural labor; pain in childbirth; the beginnings of material culture and civilization; diversity in language; and so forth. The stories in these chapters are somewhat different from ancient Near Eastern myths. For example, they do not collapse a timeless past into the present as myths usually do but place primal events within a temporal framework. Nevertheless, they do draw their raw materials from myths, and they function in large measure as myths do: to explain humanity's current condition and to articulate a particular conception of the world and of the divine-human relationship.

Ancient narratives do not typically announce their genre or pronounce on their own historicity. They are not accompanied by prefaces, publishers' blurbs, or dust jackets. And in the case of Genesis 1–11, we cannot really know very much about how the earliest Israelite-Jewish audiences received the material in these chapters. The reason for this is that the Adam and Eve story is not even mentioned in the Old Testament outside Genesis or in early Jewish literature before the second century BCE. The best we can do is pay close attention to clues within the text about how it should be taken, with a sidelong glance at similar texts that are roughly contemporaneous with it. Having done this for many years now,

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I have come to share the view that the narratives in Genesis 1–11 were probably written and read as both paradigmatic and protohistorical—imaginative portrayals of an actual epoch in a never-to-be-repeated past that also bears archetypal significance for the ongoing human situation.

How, though, are we to take them today? The very fact that these chapters deal with prehistoric times convinces most interpreters that they contain no history in the modern sense of that term. The author is too distant from the events for the narrative to be historical; the characters have symbolic names and act like stock figures; the episodes look prototypical; the events bear no relation to specific times or datable occurrences; and many details cannot be reconciled with findings in several branches of modern science. 10 In biblical scholarship, however, it is not so much the scientific discoveries of the last two hundred years that have prompted recognition of the story-character of Genesis 1-11 as the archaeological recovery of literary texts from the ancient Near East.¹¹

Genesis' Reliance on and Refutation of Mesopotamian Myths

When read in their wider literary context, the early chapters of Genesis appear to offer an inspired retelling of ancient Near Eastern traditions about cosmic, world, and human origins - by way of both adaptation and critique. 12 Over against older Mesopotamian myths, the creation accounts in Genesis 1 and 2 make several pointed theological assertions. These include the sovereignty of the one God, as opposed to the belligerent and capricious deities of other religions; the goodness but also finiteness of creation, in place of viewing elements of the cosmos such as the sun, moon, and stars as divine and hostilely disposed toward human beings; and the dignity of humanity as central to God's plan for creation, not an afterthought fashioned to relieve the gods of work. The stories in Genesis 3-11, too, are somewhat polemical in nature: instead of an optimistic tale of human progress, they tell of a steady decline in humanity's condition and relation to the divine, a sorry state that owes not to the whims of the gods or to the malevolent forces of the cosmos but to humanity's disobedience to the divine will.

In treating these matters, the author(s) of Genesis evidently found it desirable to borrow and transform sequences, themes, and motifs from pagan myths. Among the numerous specific details that Genesis 2–3 adapts from Mesopotamian stories are the following:

- a garden paradise of god(s) in the East (e.g., Enki and Ninhursag; Gilgamesh Epic)
- humans created out of clay to cultivate the land (e.g., Enki and Ninmah; Atrahasis Epic; Gilgamesh)
- creation through a process of trial and error (Gen. 2:18–22; Atrahasis)
- a "lady of life" or "lady of the rib" (the goddess Ninti in *Enki and Ninhursag*)
- acquiring wisdom as becoming like god(s) (Gilgamesh)
- an immortality-conferring plant and a serpent (Gilgamesh; Gilgamesh, Enkidu, and the Underworld)
- gods keeping immortality from humans (*Adapa*; *Atrahasis*; *Gilgamesh*)
- nakedness as a symbol of primitive life, clothing of civilized life (Gilgamesh)

The more noteworthy of these examples deserve further comment. The Garden of Eden is Genesis' rendition of a widespread motif in ancient Near Eastern literature. Perhaps the most oft-cited parallel is found in the Sumerian myth of *Enki and Ninhursag* (third millennium BCE), which features an island paradise called Dilmun, a land where predation and death were unknown:

The land Dilmun is pure,
the land Dilmun is clean;
The land Dilmun is clean,
the land Dilmun is most bright ...
In Dilmun, the raven utters no cries ...
The lion kills not,
the wolf snatches not the lamb,
Unknown is the kid-devouring wild dog ...
Its old woman (says):
"I am not an old woman,"
Its old man (says):
"I am not an old man."

The picture in Genesis 2 of Yahweh God improvising in finding an appropriate mate for the original human (2:18–22) has an interesting (albeit loose) parallel. The LORD God realizes that it is not good for the man to be alone, so he forms animals out of the ground. But because none of the animals proves a suitable partner for the man, the LORD makes a woman. The *Gilgamesh Epic* describes the creation of the primal man Enkidu in a similar way. ¹⁴ At first he lives in the wild and is more akin to the animals than to humans. He wears

no clothes but is covered with hair. He romps about and eats and drinks with the beasts. But the gods decide that Enkidu should become a competitor to the god-man Gilgamesh, whose oppressive conduct as the king of Uruk has provoked complaints to the gods. So the gods send a harlot named Shamhat (literally, "Joy Girl") to make a man out of Enkidu. His sexual intercourse with the woman over six days and seven nights has the effect of civilizing him. The woman teaches him to eat and drink like a human, and clothes him to complete his transformation. Even more striking is that, after Shamhat succeeds in her task, she says, "You are wise, Enkidu! You have become like a god!" This comment recalls the words of the serpent to the woman in Genesis 3, "You will become like God (or "gods"; Hebrew: 'ĕlōhîm), knowing good and evil" (3:5).

To take another example, the central theme in Genesis 3 of immortality being denied to human beings calls to mind the Myth of Adapa. This story from the third millennium BCE features Adapa (literally, "Man"), a first-generation human and priest of the god Ea in the city of Eridu. While fishing one day, Adapa is attacked by the south wind but manages to break its wing by uttering a curse. With no wind blowing for seven days, the rains cannot come to Eridu, and the city suffers from drought and disease. Anu, the high god of the divine assembly, responds to this crisis by summoning Adapa to heaven. But instead of punishing Adapa, Anu ends up offering him the bread and water of immortality, which will enable him to join the gods. However, on the advice of Ea, who had warned Adapa beforehand that he would be offered the bread and water of death, Adapa declines the offer and is sent back to Earth as a mortal. It is unclear in the story who is deceiving Adapa – Anu or Ea – or whether Anu has a change of heart and Ea simply misjudges Anu's

intentions. In any case, Adapa fails to attain immortality. Genesis replaces an obedient Adapa with a disobedient Adam, and for its trickster figure introduces a talking serpent. Table 1 summarizes the basic correspondences between the two primal men.¹⁵

The picture in Genesis 3 of immortality being sought but lost because of a serpent has an even closer parallel in Mesopotamian mythology. In the Gilgamesh Epic, the eponymous hero goes on a quest for immortality after the death of his competitorturned-friend Enkidu. Gilgamesh's journey takes him to Utnapishtim (literally, "He Found Life"), the survivor of the great flood whom the gods had specially granted eternal life.16 After hearing the story of the flood and failing a series of tests to see if he is worthy of immortality, Gilgamesh is given a consolation prize for his efforts: he is told of a youth-renewing plant in the waters of the great deep. Gilgamesh finds the plant and journeys home with it, but along the way he stops to refresh himself with a swim, leaving the plant on the ground. A snake, smelling the fragrance of the plant, steals it and casts off its skin as it departs.

In addition to these specific points of contact, the very outline of primeval antiquity in the early chapters of Genesis relies on older Mesopotamian tradition. This is best seen in a comparison of Genesis 2–8 with the Babylonian *Atrahasis Epic*, illustrated in Table 2.¹⁷

The crucial differences between *Atrahasis* and Genesis come in their respective portraits of the character and motives of the divine. The gods of Mesopotamia appear capricious and immoral (or at least amoral): they send the flood because humans are disturbing their rest with too much noise, and after the flood, they take steps to limit the overpopulation of humanity, decreeing singlehood for some women;

Table 1. Correspondences between Adapa and Adam		
Adapa	Adam	
Name means "man/human"	Name means "man/human"	
The special creation of the god Ea	The special creation of the god Yahweh	
Commanded about eating and not eating	Commanded about eating and not eating	
Misses out on the chance for immortality	Misses out on the chance for immortality	
Clothed by Anu with new garments	Clothed by Yahweh with garments of skin	
Returned from heaven to Eridu to die	Driven out of Eden to toil until he dies	

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infertility, miscarriage, and stillbirth for others. Yahweh in Genesis, by contrast, sends a flood to cleanse the earth of human wickedness, and after the flood the LORD renews the command that humanity "be fruitful and multiply and fill the earth." For all these differences in theological portraiture, however, the literary similarities are undeniable.

The parallels cited above should suffice to establish that virtually all of the narrative details in Genesis 2–8 are borrowed from Mesopotamian mythology but transformed to craft new stories with a decidedly different theology. (The tree of the knowledge of good and evil, unique to Genesis 2, is the only exception.) Stories of a primeval paradise and a primordial flood are not limited to Genesis and ancient Mesopotamian texts, a fact which has tempted some Bible readers to speculate that the parallels imply cross-cultural memories of actual primal

events. A better appraisal of the evidence, however, suggests that people in different cultures have dealt with similar existential issues (such as the toil involved in cultivating food) and experiences (such as devastating floods) in similar ways. The parallels are not historical but mythic, in the proper sociocultural sense of the term. And herein lies the crucial point for determining by literary means whether early Genesis is story or history: no one today takes *Gilgamesh*, *Atrahasis*, or *Adapa* as historical writings; therefore, since early Genesis shares the same literary genre as these older works—and even borrows details from them—it should not be taken as historical either.

Acknowledging that the author(s) worked in this fashion should shape our view of the kind of divine inspiration these chapters manifest. Traditionally, Christian readers of Genesis have tended to receive

Table 2. Comparison and Contrast of Atrahasis Epic and Genesis 2–8			
Atrahasis	Genesis 2–8		
Agriculture by irrigation	Eden watered by irrigation		
Igigi gods are original laborers	Yahweh is original laborer (plants garden)		
Annunaki gods enjoy privileges of divine rank	Yahweh has a private garden with magic trees of life and wisdom		
Primeval humans (Lullû) created as laborers for gods modeled from clay + rebel god's blood implicitly immortal (no natural death)	Primeval human (ha-'ādām) created to care for Yahweh's garden • modeled from clay + divine breath • potentially immortal (tree of life)		
Institution of marriage	Institution of marriage		
Lullû (proto-humans) rebel against the divine sovereign	Ha-'ādām rebels against Yahweh		
Lullû punished: life diminished by plague, drought, and famine	Ha-'ādām punished: life diminished by exile from garden, denial of access to tree of life, and hard labor		
The god Enlil sends a flood to drown out humanity's noise and control over-population	Yahweh sends a flood to punish humanity's wickedness and cleanse the creation		
The god Enki tells Atrahasis to build an ark and so escape the flood	Yahweh tells Noah to build an ark and so escape the flood		
Atrahasis survives the flood and offers a sacrifice	Noah survives the flood and offers a sacrifice		
The gods smell the sacrifice and bless the survivors	Yahweh smells the sacrifice and blesses creation		
Enlil is reconciled to noisome humanity	Yahweh is reconciled to sinful humanity		
Limitations imposed on humans: <i>Lullû</i> become normal humans	Limitation of 120-year lifespan imposed on humans: ha-'ādām become normal humans		
Sign of divine goodwill: Nintu's fly necklace	Sign of divine goodwill: duration of seasons (and Yahweh's bow [9:12–17])		

these chapters as purveyors of propositional revelation, and to assume that the writer (usually identified as Moses) was conveying the substance of a vision or audition he had received, or else he was recording a very ancient oral tradition. However, it is more fitting and faithful to the text to think of God inspiring the writer's creative narrative imagination and using it as a vehicle of theological truth. ¹⁹ What we have in Genesis is not propositional revelation, but narrative theology. Like the parables of Jesus, though, the stories in early Genesis are no less divinely inspired for being stories.

The Presence of Two Creation Accounts

Apart from the ancient Near Eastern parallels, another compelling reason for not taking Genesis 2–3 as factual history (and Adam and Eve as actual persons) is that the book presents not one but two creation accounts. The first one runs from Gen. 1:1 to 2:3; the second one, from Gen. 2:4b to 2:25. The recognition of two distinct accounts here is not unique to modern scholarship but goes back to the first-century Jewish exegete Philo of Alexandria.²⁰ Interestingly, the fourth-century Syrian church father Ephrem speculated that the second account may originally have stood at the very beginning of Genesis, in an earlier edition of the book, before the later account in Genesis 1 was added.²¹ These ancient anticipations of modern scholarly views are worth noting, because they demonstrate that critical perspectives on the Bible did not suddenly emerge in the wake of Enlightenment skepticism, as evangelical scholars sometimes claim.²² In its present context, the second account complements the first one by offering a different perspective on creation with a different focus: anthropogony instead of cosmogony. Yet even in its complementarity, it still manifests several obvious contrasts with 1:1-2:3. As Table 3 illustrates, the two accounts differ in their portrait of the duration of creation; the precreation scenario; the sequence, contents, and method of the Creator's work; and the portrait of God and humanity.²³

For our present topic, the key point in Table 3 worth highlighting is that Genesis 1 portrays God creating an unspecified number of male and female human beings at the same time—after land animals, on day six of its seven-day schema. Genesis 2, by contrast, pictures Yahweh God creating one man, then animals, and then one woman—on the only day of creation it envisions. The traditional approach to

dealing with this difference is to read chapter 2 as if it is backtracking and elaborating on day six of chapter 1's account. But going this route requires a fair bit of interpretive gymnastics. For instance, the New International Version employs the English past perfect (or pluperfect) verb tense to render Hebrew verbs in the converted imperfect (past) tense. Thus in Gen. 2:8, the NIV says that God "had planted" the garden (implication: on day three, before the creation of man); and in Gen. 2:19, it reads, "the LORD God had formed out of the ground all the beasts of the field" (implication: earlier on day six, before the creation of humans). Both of these translations violate the clear sense of the immediate context in chapter 2. Genesis 2:5 states that before Yahweh God created the first man, "no plant of the field was yet (terem) in the earth, and no herb of the field had yet (terem) sprouted because the LORD God had not made it rain upon the earth." This statement makes the translation "had planted" in 2:8 dubious in the extreme. Even more obviously, translating "had formed" in 2:19 is nonsensical when one reads verses 18 and 19 together: "Then the LORD God said, 'It is not good that the man should be alone; I will make a helper for him. So out of the ground the LORD God formed [not had formed!] a helper as his partner."

Even if one were to accept the NIV's translational sleights of hand in 2:8 and 2:19, the many differences listed in Table 3 would not disappear. And here is the heart of the matter: because Genesis has two creation accounts with so many discrepancies, neither of them can be taken to offer factual history. To take them as such would make them contradictory instead of complementary. But if we recognize that the early chapters of Genesis are not historical in our modern sense of the term, then we need not prefer one over the other, or concoct strained translations and harmonizations of them, but may appreciate the distinctive theological message of each.

Narrative Indicators in the Text of Genesis 2–3 Comparisons with Genesis 1 aside, there are several details in the text of Genesis 2–3 itself that support a symbolic rather than a historical reading.

• The presence of trees, rivers, gold, jewels, cherubim, and other accouterments links the Garden of Eden with the desert tabernacle and later Israelite sanctuaries, including the Jerusalem temple. Together they evoke the presence and life-giving power of God in a way that makes the garden

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- God's temple.²⁴ Because Genesis 2–3 in its present form is a relatively late text, its symbolism probably relies on traditions about the tabernacle and Temple found elsewhere in the Old Testament, rather than having influenced those traditions.
- The very names of the two human protagonists in the story, Adam ("human") and Eve ("living one"), are symbolic titles that indicate a representative role for the couple. The first man is called ha-'ādām, the generic Hebrew term for human being. The term is introduced in 2:7 with a pun based on a folk etymology: "then the LORD God formed the 'ādām from the dust of the 'adāmāh" the earthling from the earth or the human from the humus. In the Hebrew text, the word 'ādām does not start being used as a proper name until the genealogical note in 5:1–5, after which Adam is never mentioned again.²⁵
- The talking snake, who is also introduced with a Hebrew wordplay,²⁶ is a trickster figure of the sort familiar from both ancient and modern folklore. Only in later Jewish and Christian interpretation does it get identified with Satan.²⁷ On one level, the serpent represents disorder in God's well-
- ordered creation; it is a nonhuman creature "that the LORD God had made" (3:1), with a free will of its own. On another level, it may be taken as "an embodiment of the separated and beguiling voice of autonomous human reason speaking up against innocence and obedience."28 In ancient Near Eastern mythology, snakes were variously a symbol of life, wisdom, and chaos-precisely those themes seen in Genesis 3. The serpent does not spout outright lies, but it does utter misleading half-truths. The statement that it was "more crafty than any other wild animal" (3:1) is obviously not a herpetological observation but a folkloric trope. No more factual is the notion that snakes once walked upright and now eat dirt, a notion implied in the curse on the serpent in 3:14.
- The portrait of Yahweh God walking and talking in the garden is patently anthropomorphic, as is the picture of him creating a suitable mate for the man by a process of trial and error (2:18–22) and of his being alarmed at the prospect of the 'ādām eating of the tree of life (3:22)—as if the LORD had not foreseen the outcome of his creation.

Table 3. Two Distinct Accounts of Creation in Genesis			
	Genesis 1:1-2:3	Genesis 2:4b–25	
Duration of Creation	• six days	• one day implied (<i>b</i> ĕ <i>yôm</i> , 2:4b)	
Primordial Scenario	dark, watery chaos	desert-like oasis	
Sequence of Creation	 light (nonsolar) sky-dome (solid) dry land plants lights set in the sky-dome sea and sky creatures land animals humans 	 man garden with trees and river land animals and birds woman 	
Method of Creation	 God speaks, separates, names, and blesses 	 Yahweh God forms, breathes, plants, puts to sleep, builds 	
Portrait of God	transcendentsovereign over creationsome anthropomorphism	 immanent actively involved in creation lots of anthropomorphism	
Portrait of Humanity	 unspecified number of males and females created simultaneously royals created in divine image, given dominion over the earth 	 one 'ādām from the 'adāmāh; then one woman (îššāh) from the man (îš) in two separate acts servants made caretakers of a garden 	

The story of Cain and Abel in Genesis 4, which is closely linked with the Garden of Eden scene, also creates problems for those who want to take the early chapters of the book as factual history. After Yahweh curses Cain (the archetypal farmer who builds the first city, 4:2, 17) for the murder of his brother Abel (the prototypical pastoralist),²⁹ expelling him from the divine presence to be a "fugitive and wanderer on the earth" (4:12), Cain voices the fear that "anyone who meets me may kill me" (4:13). In the story, Yahweh is portrayed as presuming that Cain's fear is justified, so the LORD threatens a sevenfold vengeance on whoever kills him and gives him an identifying mark (4:15). Just two verses later, Cain is having relations with a wife (4:17). His son and grandsons also take wives for themselves. The crux here has long been puzzled over by Bible readers: according to the preceding and following context, there are no other men on Earth to murder Cain, no women to provide him or his male descendants with wives, and no population to build or support a city. "Literal" interpretations of this story fail to take it literally enough; they regard these details as gaps that must be filled. But filling the gaps can be done only by reading into the narrative-not out of itadditional sons and daughters of Adam and Eve born before Cain and Abel. Such desperate attempts to salvage the historicity of the story go against the plain sense of the text, whose details strongly hint that it is not reporting historical events but picturing paradigmatic ones.

Meeting an Objection

A common objection to viewing Adam and Eve as strictly literary characters comes from those who point to the genealogy from Adam to Noah in Genesis 5. Now, it is certainly true that in this chapter Adam is pictured as a real, particular individual, and like other figures in the list he is assigned a lifespan. But there is a massive consensus among Old Testament scholars and Assyriologists that the genealogies in the early chapters of Genesis (4, 5, 10, and 11) are no more historical than the narratives they intersperse.³⁰ Protohistorical genealogies (the Sumerian and Lagash king lists, for example) were a popular and largely fictional literary device in the ancient Near East for asserting a people's cultural importance or a dynasty's political legitimacy. In this context, the imagining of lengthy lifespans for early humans was commonly used to suggest the superiority of primeval times over the present.

The genealogies in Genesis 5 and 10, with ten generations between Adam and Noah balanced by ten generations between Noah and Abram, are literary-theological assemblages displaying the Israelitepriestly ideal of a perfectly ordered creation. The one in Genesis 5 is actually based on the one in Genesis 4 and borrows its particular form from Mesopotamian king lists. Further, the ages given for the antediluvian people named in Genesis 5 are not randomly distributed, as we would expect in a list of real people, but neatly contrived according to a precise numerical scheme, a base-60 or sexagesimal system of Babylonian origin.³¹ So Genesis 5 mimics not only the form but also the numerology of the fictional lists of Mesopotamia. Its "competitive genealogizing" is a strategy for claiming an ancient pedigree for the Hebrew people over against the pretensions of Mesopotamian culture.

The branched or segmented genealogy of Noah's three sons in Genesis 10—an ethnographic "family tree" often called the Table of Nations—is full of anachronisms: many of the ethnic and national entities it lists, seventy in all, do not even fit the primeval epoch being pictured in the surrounding narratives, but reflect the geopolitical map of the first millennium BCE as the Israelites viewed it. Genesis also reflects the naïveté of ancient ethnographies, that the origins of cities, nations, and peoples could be traced to named individuals. None of these observations serves to discredit the Bible but only to clarify the nature of the passages in question. The ancient biblical authors did not miswrite these genealogies; we moderns have simply misread them.³²

Taking Genesis 2–3 on Its Own Terms

Given that Genesis 2–3 provides the biblical basis for the Christian understanding of how sin and death entered the world, it is somewhat surprising how little of our classic doctrines of the Fall and original sin finds direct support in the text. They are rooted more in interpretations of Genesis – principally those of Paul and, in the West, of Augustine – than in Genesis itself. This is not to say that the doctrines are "wrong" or that they should be dispensed with; it is only to acknowledge whence they take their real point of departure. In Christian theology, doctrines are based on particular interpretations of passages in the Bible, and often these interpretations were first crafted as alternatives to rival Christian readings of

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the same passages. Only seldom do doctrinal formulations offer a simple restatement or mere paraphrase of Scripture. Instead, they usually synthesize discrete passages scattered across the canon, attempt to harmonize discordant voices in the biblical witness, and privilege some scriptural voices over others, extrapolating from them and applying them to issues that were not necessarily on the agenda of the biblical authors themselves. The discussion in this section, then, is not intended to dismiss the classic Augustinian and Reformation doctrines of the Fall and original sin, but only to examine Genesis 2–3 in its own context, an exercise otherwise known under the negative-sounding label "historical criticism."

To begin with, read on its own, Genesis does not teach that the first human beings were created immortal and that death entered the world only after and as a consequence of their transgression. In Gen. 3:22-23 we read, "Then the LORD God said, 'See, the 'ādām has become like one of us, knowing good and evil; and now, lest he reach out his hand and take also from the tree of life and live forever' - therefore the LORD God sent him forth from the garden of Eden." Here mortality is regarded as part of humanity's original created nature. Indeed, the story presumes that the man and woman were created mortal; otherwise, the tree of life would be superfluous and God's panic pointless. In 2:17 the LORD tells the 'ādām that he will die "on the day" he eats of the tree of the knowledge of good and evil; the man, though, does not die immediately but lives to the ripe old age of 930 (5:5). This does not make God a liar anymore than it makes the serpent a truth-teller. Yahweh's warning looks more like an unfulfilled threat—something every parent can relate to. If it is not an idle threat, then physical death as such cannot be meant. What the man and woman experience on the day of their eating the fruit is not physical death but a kind of living deathan estrangement from God, the garden, and each other that brings with it the painful consciousness of their own mortality and its eventual outcome.

Significantly, when God pronounces judgment on the man in 3:17–19, he does not list death as a punishment. The punishment lies rather in the area of work, not work in itself (after all, tending the garden was a kind of work), but the fuss and frustration of having to eke out an existence by tilling a cursed ground. The point of 3:19 ("By the sweat of your face you shall eat bread until you return to the ground, for out of it you were taken; you are dust, and to dust

you shall return") is not that the man will die but that he will have to toil away *until* he dies. Death is not the punishment but "only the mode in which the final stage of the punishment works out." Their expulsion from the garden denies the man and woman access to the tree of life, which would have granted them immortality. According to Genesis, then, human death was a natural part of God's created world, not part of the fallout of a fall.

What of animal death in the beginning? Genesis 1:30 envisions a primeval vegetarianism, with plants as the sole source of food for both animals and humans. After the flood, as a concession to the evil inclination of the human heart (8:21), God allows meat-eating for humanity (9:2-3, with no mention of animal carnivorousness), the only restriction being meat with the lifeblood still in it (9:4-6). All this is probably best understood as an idealizing extrapolation of how things must have been in the beginning. If that conclusion smacks of special pleading, consider that other passages in Scripture mention animal predation as an unobjectionable aspect of creation. Thus Psalm 104: "The lions roar for their prey, seeking their food from God" (104:21, NRSV). Similarly Job 38, where God says to the protagonist: "Can you hunt the prey for the lion, or satisfy the appetite of the young lions, when they crouch in their dens, or lie in wait in their covert? Who provides for the raven its prey, when its young ones cry to God, and wander about for lack of food?" (38:39-41). True, both of these passages are speaking of God's providential care for creation in its present state, but there is no hint in them that animal predation owes to any fall from a deathless beginning.

Another point worth noting is that *Genesis itself* does not picture the first humans being created in a state of spiritual maturity and moral perfection. The moral integrity of Adam and Eve is a prominent theme in the Latin church fathers' and the Reformers' reading of Genesis but not in the Orthodox tradition.³⁴ Some of the Greek fathers writing before Augustine took Adam and Eve as childlike figures who partook of the forbidden fruit too early, when they were not yet mature enough to be eased by God into the necessary knowledge (experience) of good and evil. Theophilus of Antioch, for instance, commented, "Adam, being yet an infant in age, was on this account as yet unable to receive knowledge worthily." In a similar vein, Irenaeus of Lyons remarked, "The

man was a young child, not yet having a perfect deliberation."35 These and other second-century apologists saw that Genesis 2-3 can be read on a certain level as a coming-of-age story, a "falling up" that was also a falling out with and falling away from God. The man and woman's lack of shame at being naked implies a self-forgetfulness typical not only of animals but of children. Also typical of children is the special attraction of the forbidden. The woman quickly gives in to the insinuations of the serpent, and the man even more quickly joins her in eating of the forbidden fruit. In short, what Genesis describes is a "process, whose starting point is not perfection but nascence."36 The first couple's humanity was not given to them complete but was a work in progress. God created them neither mortal nor immortal, neither good nor bad (morally speaking), but neutral and free.

Perhaps most surprising for Christians accustomed to reading the text with Augustinian lenses, Genesis 3, read in its immediate context, does not depict the man and woman's transgression as an act that infected all subsequent humanity. The narrative does not envision either a fall or original sin as traditionally conceived, but as only the first instance of the common human tendency toward self-assertion, present from the very beginning.³⁷ There is no indication in the biblical text that the first couple passed on to their descendants either their guilt or a newly acquired inclination to sin. In Genesis, Adam and Eve's sin is neither the greatest sin nor the cause of all future humanity's sins but only the first in a series of sins. In chapters 4 through 11, we get a succession of tales which illustrate a remark attributed to the LORD in Gen. 8:21, that "the inclination of the human heart is evil from youth." Thus we have Cain's murder of his brother, Lamech's blood lust, the flood generation's wickedness, and the Babel builders' hubris. Seen against these atrocities, the man and woman's transgression is certainly not trivial, but it is not particularly heinous either.

More than this, the Adam and Eve story does not have as its main themes sin and death but knowledge and immortality.³⁸ The "knowledge of good and evil" the couple gain by eating of the fruit is the experience of autonomous wisdom—deciding what is right without reference to the divine will, and having to face unforeseen but inevitable consequences. This knowledge distances them further from the animals and brings them precipitously close to the preroga-

tives of the divine. It also brings a shameful self-awareness, the burden of adult responsibility, and a world of pain they had not anticipated.³⁹ The tree of life is even more enigmatic than the tree of knowledge; the text provokes but does not bother to answer several questions: Why did the LORD God not forbid eating from *this* tree? Did the man and woman eat of it before their expulsion from the garden? If not, why? And why only *after* they have eaten of the other tree is God alarmed at the prospect of their eating from this one and becoming immortal? What, indeed, is the relation of the two trees?

These questions aside, it has often been noted that the term "sin" is not found in Genesis 3. The significance of this fact has been exaggerated—the couple do indeed sin by disobeying God's command. But another observation is more telling: not only are Adam and Eve nowhere referred to elsewhere in Hebrew Scripture, but the rest of the Old Testament (and the New Testament apart from Paul) assumes that sin is avoidable. This is true already in the story of Cain, for after God rejects his offering in favor of Abel's, the LORD says to Cain, "If you do well, will you not be accepted? And if you do not do well, sin is lurking at the door; its desire is for you, but you must master it" (4:7). For teaching about the Fall and original sin, then, we must wait for Paul and the church fathers.

Understanding Paul's Adam-Christ Typology

In the New Testament, Paul is the only writer to appeal to the story of Adam, Eve, and the serpent. Nowhere in the Gospels, the Acts of the Apostles, the General Epistles, or the book of Revelation is the story appropriated. Besides Paul, Luke is the only other New Testament writer even to mention Adam. He does so in a genealogy of seventy-eight names that traces Jesus' ancestry back to "Adam, son of God," implying a symbolically perfect seventy-seven generations (Luke 3:38). In the eyes of most New Testament scholars, Luke's genealogy does not lend itself to being taken as purely factual or historical since, like all ancient genealogies, it engages in artificial schematizing and numbered groupings. Contemporary commentators recognize that Luke's genealogy (and Matthew's very different one) does not rely on public or family records. It looks more like a literary-theological construct that serves to affirm the universality of the salvation which God inaugurated in Jesus at the climax of Israel's history.⁴¹

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A similar purpose is served in Luke's presentation of Paul's speech on the Areopagus in Athens, when the apostle tells his pagan listeners, "From one man (*henos*) he made every nation of humanity to dwell upon the entire face of the earth" (Acts 17:26).

The two relevant passages in Paul's epistles are Rom. 5:12-21 and 1 Cor. 15:21-22, 45-49. Romans 5:12 reads, "Therefore, just as sin entered the world through one man, and death through sin, so death spread to all because all sinned." 1 Corinthians 15:21-22 says, "For since death (came) through a human being, so also resurrection of the dead (has come) through a human being; for just as in Adam all die, so also in Christ all will be made alive." Evangelical interpreters tend to insist that since Christ was an actual historical person, then so must Adam be. Others disagree. In his commentary on Romans, the prominent New Testament scholar James Dunn offers a perspective that is more in touch with how typology can work:

It would not be true to say that Paul's theological point here depends on Adam's being a "historical" individual or on his disobedience being a historical event as such. Such an implication does not necessarily follow from the fact that a parallel is drawn with Christ's single act: an act in mythic history can be paralleled to an act in living history without the point of comparison being lost. So long as the story of Adam as the initiator of a sad tale of human failure was well known ... such a comparison was meaningful ... [T]he effect of the comparison between the two epochal figures, Adam and Christ, is not so much to historicize the individual Adam as to bring out the more than individual significance of the historic Christ.43

In formulating his typology, Paul's main interest is to depict Christ as a representative figure, one whose act affected not only himself but the entire human race. He brings in Adam less as a figure of history than as a type of Christ—a symbolic stand-in for fallen humanity. Paul, like Luke, no doubt regarded Adam as a historical person, but in his letters he assumes the historicity of Adam instead of asserting it, and in Romans 1–3 he can describe the problem and universality of sin at great length without any reference at all to Adam. This latter point, in particular, suggests that a historical Adam was not essential to his teaching. Paul had little reason *not* to regard Adam as a

historical figure, whereas today we have *many* reasons for recognizing him as a strictly literary one.

What does the apostle actually say about Adam's role in sin and death? If one examines carefully Paul's wording in Rom. 5:12, his use of prepositions is revealing. He says that sin entered the world through (not because of) Adam, and that death spread to all because (Greek: 'ep' hō) all sinned. Adam was the first sinner, but the responsibility for humanity's sin falls squarely on the human race as a whole, as in Rom. 1:18-3:20. Moreover, Paul never claims or even implies that human nature underwent a fundamental change with Adam's sin. For Paul, then, Adam's act affected the human race but did not infect it; he attributes to Adam less a causal role in the sin of all humanity than a temporal and representative one.45 Something similar to Paul's view was held by his near contemporary, the author of the Jewish apocalypse 2 Baruch: "Adam is therefore not the cause, except only for himself, but each of us has become our own Adam" (54:19; cf. 54:15; 4 Ezra 7:118). This was also the view of early Christian writers like Justin Martyr, who wrote that human beings, "having become like Adam and Eve, work out death for themselves ... and shall be judged and convicted as were Adam and Eve" (Dialogue with Trypho, 124).46 If this reading is right, then Paul is not really the initiator of the doctrine of original sin. That credit must go rather to Jerome, whose Latin translation of Rom. 5:12, which says that Adam was the one "in whom" (in quo) all humanity sinned, was taken up and interpreted by Augustine. 47

What *kind* of death does Paul think entered the world through Adam? In neither Romans 5 nor 1 Corinthians 15 is he thinking of death simply as the cessation of biological life, any more than he thinks that the resurrection of Christ and the eternal life made possible in him involve merely the revival of biological life. Since Paul goes on in Romans 5 (verse 21) to contrast death with eternal life, he is probably thinking in verse 12 not of physical death, but of spiritual death—the estrangement from God that results from sin. In Paul's thought, spiritual death and physical death are ultimately related: sin leads to spiritual death, and spiritual death finally includes biological death.⁴⁸

To judge from his surviving correspondence, Paul does not seem to have made Adam the object of much theological reflection. Nor did he make exegesis of Genesis 3 a centerpiece of his theological analysis of sin. Rather than reasoning forward in his theology from the plight of humanity to God's solution in Christ, Paul appears to have reasoned backwards "from solution to plight" — from Christ's saving work to the human race's need for redemption. 49 And "Rather than Adam being a model or image for humanity or even the first real human being, it is Christ who is both. Christ is the first true human being, and Christ is the image of God and the 'model' for Adam." 50

Rethinking the Fall and Original Sin

The story of Adam and Eve conveys divinely inspired theological truths about the nature of humanity and its relation to both God and the rest of creation. By no means is Genesis 2–3 irrelevant to real knowledge about the human race. On these two points all Christians can agree. Yet the question remains: how central are Adam and Eve to biblical theology, whether as historical or strictly literary figures, and how theologically necessary is their historicity for the doctrines of the Fall and original sin? At least in quantitative terms, they are not constitutive of the Bible's fundamental truth claims about sin and salvation. If they were, we should expect them to receive at least some attention in the Old Testament beyond Genesis 2-3, in the teaching of Jesus, and in the apostolic preaching about Christ presented in the book of Acts. But they do not. More pervasive in and essential to biblical teaching than Adam and Eve are Scripture's statements concerning the reality and effects of sin, the unity of the human race in the grip of sin, and the universal need for redemption from sin in Jesus Christ.

Can and should the Augustinian doctrines of the Fall and original sin be retained with conviction in the age of evolutionary science? I think the answer is yes, as long as we are willing to make some serious modifications to it. On the one hand, evolutionary biology can be seen to confirm those essential components of original sin that are among Augustine's most enduring theological intuitions: the inevitability of human sin and the inability of human beings to overcome their inherited tendency to sin. If anything, evolutionary biology reinforces Paul and Augustine's sense of how serious the human predicament is. And when assessed from a theological perspective, it substantiates another of their key in-

sights: the absolute necessity of God's supernatural grace in Christ, not only to forgive sin but also to transform sinful human beings into new creatures whose lives conform to the image of Christ.

On the other hand, evolutionary biology gives us a better explanation than Augustine did of why all humans are united in sin: not because we bear the guilt and fractured will of a single ancestral couple who fell from a state of original righteousness, but because we share a transtemporal and universal biological and cultural heritage that predisposes us to sin. If the above is true, then we must be willing to detach the doctrine of the Fall from the notion of a single primordial event that brought about a drastic transformation in the human condition. Realizing that Genesis itself does not picture such a catastrophic change should make the detachment less painful than it otherwise would be. We must also be willing to decouple original sin from the notion that all humans have descended from a single pair. This is not so radical a move when one considers that original sin does not absolutely require monogenism, even though classic formulations of the doctrine assume it.

Nonevangelical theologians have been rethinking original sin in light of evolutionary biology for several decades now. In recent years, the proposals of scientist-theologians like Daryl Domning, Jerry Korsmeyer, and George Murphy have been especially helpful.⁵¹ They and others have proposed that original sin is a biologically inherited state, a byproduct of billions of years of evolution. Intrinsic to the process of evolution is the inclination toward self-preservation at the expense of other creatures. Yet selfish behavior did not become sin (culpable wrongdoing) in human beings until the evolution of their self-consciousness (and God-consciousness) allowed our remote ancestors to override their innate tendency to self-assertion by the exercise of their free will. The same is true of us today, as, at a certain age, we reach moral awareness. So understood, original sin is not the result of a single fall but of repeated falls in the life of every human being and of their cumulative, systemic effects in society and culture. And humanity's constant falling away is not a descent from some primordial state of integrity but a failure to live up to a divinely posed ideal. "For all have sinned and fall short of the glory of God" (Rom. 3:23).

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To put the issue in these terms is not to blame God for human sin. As Karl Giberson puts it,

By these lights, God did not "build" sin into the natural order. Rather, God endowed the natural order with the freedom to "become," and the result was an interesting, morally complex, spiritually rich, but ultimately selfish species we call *Homo sapiens*.⁵²

We must trust that God created the kind of world that he did because an evolutionary process involving selfishness, suffering, and death was the only way to bring about such creaturely values as novelty, complexity, and freedom. "For God has consigned all to disobedience so that he may show mercy to all. O the depth of the riches and wisdom and knowledge of God! How unsearchable are his judgments and how inscrutable his ways!" (Rom. 11:32–33).

Once the doctrine of original sin is reformulated, the doctrine of the atonement may likewise be deepened. But the new understanding of sin requires that we now favor theories of the atonement like the *Christus victor* model or the moral influence theory, instead of the theory of a ransom paid to the Devil or a satisfaction paid to God's honor. Better, to privilege Paul's soteriology, we must elevate the truth of a new humanity inaugurated in Jesus Christ, whom God sent into the world in suffering solidarity with a groaning creation—to be the vanguard of a new creation full of new creatures destined to be transformed and drawn up into the life and fellowship of the triune God (e.g., Rom. 8:18–32; 1 Cor. 15:28; 2 Cor. 3:18; 5:17; Eph. 1:10; 2:15; Col. 1:20).

For Christianity to remain intellectually credible and culturally relevant, it must be willing to revise – and thereby enrich-its formulation of classic doctrines if the secure findings of science call for revision. The task of Christian theology in every generation is not simply to repeat or paraphrase the tradition but to re-present it in fresh ways so that it can continue to speak meaningfully. Doctrines invite revisiting and possible reformulation when the church is confronted with new interpretations of Scripture and new understandings of the theological tradition, with new insights from the creation itself, and with new challenges from contemporary intellectual culture. For this very reason, the church needs more evangelical and Reformed scholars to enter the field of evolutionary theology, a field in which Roman Catholic and Anglican thinkers have

excelled.⁵³ And Catholics and Protestants alike would benefit from turning to the rich exegetical and theological resources of the Orthodox tradition, which provides ways of understanding Genesis and Paul from a non-Augustinian and non-Reformation perspective. I urge this not because I think Augustinian and Reformed theology are of no value, but because to read Scripture aright, we need all the help we can get.⁵⁴

Notes

¹For a brief review of the evidence, see Ralph F. Stearley, "Assessing Evidences for the Evolution of a Human Cognitive Platform for 'Soulish Behaviors,'" *Perspectives on Science and Christian Faith* 61, no. 3 (September 2009): 152–74, esp. 154–6. Probably the most authoritative recent synthesis of the evidence is the impressively illustrated volume by Donald Johanson and Blake Edgar, *From Lucy to Language*, rev. ed. (New York: Simon and Schuster, 2006). Even this work is now out-of-date, given the discovery in August 2009 by paleoanthropologist Lee Berger of two partial hominid skeletons (dubbed *Australopithecus sediba*) in South Africa dating to between 1.78 and 1.95 million years.

²See, for example, Davis Young, "The Antiquity of the Human Race Revisited," *Christian Scholar's Review* 24, no. 4 (May 1995): 380–96; James P. Hurd, "Hominids in the Garden?" in *Perspectives on an Evolving Creation*, ed. Keith B. Miller (Grand Rapids, MI: Eerdmans, 2003), 208–33.

³The landmark study here is Rebecca L. Cann, Mark Stoneking, and Allan C. Wilson, "Mitochondrial DNA and Human Evolution," *Nature* 325 (1987): 31–6. See further Allan C. Wilson and Rebecca L. Cann, "The Recent African Genesis of Humans," *Scientific American* 266 (April 1992): 68–73; S. Horai et al., "Recent African Origin of Modern Humans Revealed by Complete Sequences of Hominoid Mitochondrial DNAs," *Proceedings of the National Academy of Sciences of the USA* 92 (1995): 532–6; Max Ingman et al., "Mitochondrial Genome Variation and the Origin of Modern Humans," *Nature* 408 (2000): 708–13. For a review of the evidence and a theological assessment, see David Wilcox, "Finding Adam: The Genetics of Human Origins," in *Perspectives on an Evolving Creation*, ed. Miller, 234–53.

⁴For a sample of such misinformation on a popular Christian website, see www.gotquestions.org/Chromosomal-Adam-Mitochondial-Eve.html.

⁵See Francisco J. Ayala, "The Myth of Eve: Molecular Biology and Human Origins," *Science* 270 (1995): 1930–6. See also the essay by Dennis R. Venema in this issue of *PSCF*, in particular, his section on "What about Mitochondrial Eve and Y-Chromosomal Adam?" 175–6.

6See Peter A. Underhill et al., "Y-Chromosome Sequence Variation and the History of Human Populations," *Nature Genetics* 26, no. 3 (2000): 358–61; J. K. Pritchard et al., "Recent Common Ancestry of Human Y Chromosomes: Evidence from DNA Sequence Data," *Proceedings of the National Academy of Sciences of the USA* 97 (2000): 7360–5. For a popular but authoritative treatment, see Spencer Wells, *The Journey of Man: A Genetic Odyssey* (New York: Random House, 2004), chaps. 2–3 (pp. 14–60).

⁷Among the more notable studies in primatology are Sarah Hrdy, The Langurs of Abu: Female and Male Strategies of Reproduction (Cambridge, MA: Harvard University Press, 1977); Dian Fossey, Gorillas in the Mist (Boston, MA: Houghton Mifflin, 1983); Jane Goodall, The Chimpanzees of Gombe: Patterns of Behavior (Cambridge, MA: Harvard University Press, Belknap Press, 1986); Craig Packer, Into Africa (Chicago: University of Chicago Press, 1994); Frans de Waal, Chimpanzee Politics: Power and Sex among Apes (New York: Harper and Row, 1982); Frans de Waal, Good Natured: The Origins of Right and Wrong in Humans and Other Animals (Cambridge, MA: Harvard University Press, 1996). The most influential work in the field of sociobiology remains E. O. Wilson, Sociobiology: The New Synthesis, Twenty-Fifth Anniversary Edition (Cambridge, MA: Belknap Press, 2000). For important studies in recent phylogenetics, see A.-H. Salem et al., "Alu Elements and Hominid Phylogenetics," Proceedings of the National Academy of Sciences of the USA 100 (2003): 2787-91; M. Uddin et al., "Sister Groupings of Chimpanzees and Humans as Revealed by Genome-Wide Phylogenetic Analysis of Brain Gene Expression Profiles," Proceedings of the National Academy of Sciences of the USA 101 (2004): 2957-62. For a readable synthesis, see Daniel J. Fairbanks, Relics of Eden: The Powerful Evidence of Evolution in Human DNA (New York: Prometheus Books, 2007).

The trend in recent theology has been to understand the "image of God" in terms of *relationship* with God and fellow creatures and *stewardship* over creation, attributes that do not require a specially created species but that are fully compatible with one created by God through evolutionary means. See, e.g., Keith B. Miller, "Theological Implications of an Evolving Creation," *Perspectives on Science and Christian Faith* 45 (1993): 150–60; Graeme Finlay, "*Homo Divinus*: The Ape That Bears God's Image," *Science and Christian Belief* 15 (2003): 17–40; J. Wentzel van Huyssteen, *Alone in the World? Human Uniqueness in Science and Theology* (Grand Rapids, MI: Eerdmans, 2006).

⁹For discussion of the first three scenarios and the problems they raise, see Young, "Antiquity of the Human Race Revisited"; for discussion of all five, see Deborah B. Haarsma and Loren D. Haarsma, *Origins: A Reformed Look at Creation, Design, and Evolution* (Grand Rapids, MI: Faith Alive Christian Resources, 2007), 197, 215–32.

¹⁰To be specific: astronomy, atmospheric science, and evolutionary biology (Genesis 1); genetics, paleoanthropology, and cultural anthropology (Genesis 2–5); biogeography and geology (Genesis 6–9); paleoethnography and linguistics (Genesis 10–11).

¹¹For an engaging account of one of the major discoveries, see David Damrosch, *The Buried Book: The Loss and Rediscovery of the Great Epic of Gilgamesh* (New York: Henry Holt, 2006).

12For an illuminating study, see Richard J. Clifford, Creation Accounts in the Near East and in the Bible (Washington, DC: Catholic Biblical Association, 1994). See also Richard S. Hess and David Toshio Tsumura, eds., "I Studied Inscriptions from before the Flood": Ancient Near Eastern, Literary, and Linguistic Approaches to Genesis 1–11 (Winona Lake, IN: Eisenbrauns, 1994); and Kenton L. Sparks, Ancient Texts for the Study of the Hebrew Bible: A Guide to the Background Literature (Peabody, MA: Hendrickson, 2005), chap. 10, esp. pp. 305–22.

On Genesis 1–11 as "ideology critique," see J. Richard Middleton, *The Liberating Image: The Imago Dei in Genesis 1* (Grand Rapids, MI: Brazos, 2005), 185–231.

¹³James B. Pritchard, ed., *Ancient Near Eastern Texts*, 3d ed. (Princeton, NJ: Princeton University Press, 1969), 38. See further Samuel Noah Kramer and John Maier, *Myths of Enki, the Crafty God* (Oxford: Oxford University Press, 1989), 12–13, 22–30.

Babylonian one dating to the early second millennium BCE and the fuller, standard version from the Assyrian library of Assurbanipal at Nineveh, dating to the first half of the seventh century BCE. A magnificent edition of the Akkadian text is now available: Andrew R. George, The Babylonian Gilgamesh Epic: Introduction, Critical Edition and Cuneiform Texts, 2 vols. (Oxford: Oxford University Press, 2003). Reliable English translations with introductions are also available in Andrew George, The Epic of Gilgamesh (London: Penguin Classics, 1999); Stephanie Dalley, Myths from Mesopotamia, 2d ed. (Oxford: Oxford World's Classics, 2000), 39–153; and Benjamin R. Foster, The Epic of Gilgamesh: A New Translation, Analogues, Criticism (New York: Norton, 2001).

¹⁵The fragmentary tablets of *Adapa* from Tell el-Amarna in Egypt date to the fourteenth century BCE; those from Asshur, to the seventh century. For the correspondences with Genesis 2–3, see Bernard F. Batto, *Slaying the Dragon: Mythmaking in the Biblical Tradition* (Louisville, KY: Westminster/John Knox, 1992), note 23 on pp. 194–5.

¹⁶In other Akkadian versions of the flood myth, the name of the hero is Atrahasis ("Super-wise"); in Sumerian versions of the story, it is Ziusudra ("Long-lived"), and in Hittite recensions, it is Ulu.

17Table 2 adapts the table in Batto, Slaying the Dragon, 51–2. The Old Babylonian version of the Atrahasis Epic dates to ca. 1700 BCE. See further, W. G. Lambert and A. R. Millard, Atra-hasis: The Babylonian Story of the Flood (reprint; Winona Lake, IN: Eisenbrauns, 1999); Tykva Frymer-Kinsky, "The Atrahasis Epic and Its Significance for Our Understanding of Genesis 1–9," Biblical Archaeologist 40 (1977): 147–55; Robert Oden Jr., "Divine Aspirations in Atrahasis and Genesis 1–11," Zeitschrift für die Neutestamentliche Wissenschaft 93 (1981): 197–216; David Toshio Tsumura, "Genesis and Ancient Near Eastern Stories of Creation and Flood: An Introduction," in "I Studied Inscriptions from before the Flood," 27–57.

¹⁸On this point, see Conrad Hyers, *The Meaning of Creation: Genesis and Modern Science* (Atlanta, GA: John Knox Press, 1984), 129. Hyers not only mentions the prevalence of flood stories in many cultures but also cites a striking parallel to Genesis 2–3 in the mythology of the Luba people of Africa: Mvidi Mukulu ("God") created a fruitful grove to meet the needs of the first human beings, demanding only that they not eat of the banana trees in the middle of the grove. But the humans went ahead and ate of the bananas and so were punished by Mvidi Mukulu, who decreed that they would have to work for their food and be buried in the earth.

¹⁹So, e.g., Gordon J. Wenham, *Genesis 1–15*, Word Biblical Commentary (Waco, TX: Word, 1987), 52–5; Peter Enns, *Inspiration and Incarnation: Evangelicals and the Problem of the Old Testament* (Grand Rapids, MI: Baker Academic, 2005), 23–70; and Kenton L. Sparks, *God's Word in Human Words*:

After Adam: Reading Genesis in an Age of Evolutionary Science

An Evangelical Appropriation of Critical Biblical Scholarship (Grand Rapids, MI: Baker, 2008), esp. 97–9, 172–8. This was also the view of the great Reformed theologian Karl Barth; see his Church Dogmatics, 4 vols. in 12, ed. G. W. Bromiley and T. F. Torrance, trans. G. T. Thomson et al. (Edinburgh: T&T Clark, 1936–1977), 3.1.83–92; for a discussion, see Garrett Green, "Myth, History, and Imagination: The Creation Narratives in Bible and Theology," Horizons in Biblical Theology 12 (1990): 19–38.

²⁰Philo, *De Opificio Mundi*, 134–5; cf. related passages in Philo's *Legum Allegoriarum* 1.31–2 and *Quaestiones et Solutiones in Genesim* 1.4. A Middle Platonist, Philo took the account in Genesis 1 to depict the creation of the realm of intelligible forms; and the one in Genesis 2, to portray the creation of the world of sense perception. See Thomas H. Tobin, *The Creation of Man: Philo and the History of Interpretation* (Washington, DC: Catholic Biblical Association of America, 1983); David T. Runia, *Philo of Alexandria. On the Creation of the Cosmos according to Moses: Introduction, Translation and Commentary* (Leiden: Brill, 2001).

²¹Ephrem, *Commentary on Genesis*; see Edward G. Mathews Jr. and Joseph P. Amar, trans., *St. Ephrem the Syrian: Selected Prose Works* in *Fathers of the Church* 91, ed. Kathleen McVey (Washington, DC: Catholic University of America Press, 1994), 69. Of course for Ephrem, Moses was the author and editor of Genesis.

²²Some other notable examples of ancient critical perspectives on the Bible: in the second century, the church father Origen of Alexandria recognized that not everything in the Gospel of John could be purely historical; in the third century, the Neoplatonist philosopher Porphyry discerned that the book of Daniel contains "prophecies" written after the fact; and in the twelfth century, the rabbinic scholar Abraham Ibn Ezra realized that anachronisms in the Pentateuch make Mosaic authorship of the entire Torah impossible, and that the book of Isaiah contains the oracles of more than one prophet from more than one time period. Representative of the lopsided view that historical criticism is necessarily bound up with a faulty Enlightenment epistemology are conservative Old Testament scholars like Kenneth Kitchen, V. Philips Long, and Iain Provan, and the philosopher Alvin Plantinga. For a trenchant critique, see Sparks, God's Word in Human Words, 140-4.

²³See further Daniel C. Harlow, "Creation according to Genesis: Literary Genre, Cultural Context, Theological Truth," *Christian Scholar's Review* 37, no. 2 (2008): 163–98, esp. 182–9.
²⁴So, e.g., Wenham, *Genesis* 1–15, 91.

²⁵Various modern English versions of the Bible have "Adam" instead of "the man" in Gen. 2:20b; 3:17, 21; 4:1, 25. Nevertheless, "the man" is the best translation contextually before 5:1–5, even when the (often faulty) vowel-pointing of the Masoretic Text suggests the proper name.

²⁶"And the man and his wife were both 'ărûmmîm (nude) ... and the serpent was more 'arûm (shrewd) than any other wild animal that the LORD God had made" (Gen. 2:25–3:1).

²⁷The earliest Jewish texts to make the identification, *Sirach* and *Jubilees*, date to the second century BCE. The *Wisdom of Solomon*, a Jewish work written in Greek at the turn of the era and now included along with *Sirach* in the Catholic canon and the Protestant Apocrypha, says that death entered the world "through the envy of the Devil" (Wis. 2:24). The

earliest Christian text to make the identification, allusively, is Rev. 12:9, "that ancient serpent, who is called the Devil and Satan." See further John R. Levison, *Portraits of Adam in Early Judaism: From Sirach to Second Baruch* (Sheffield, UK: Sheffield Academic Press, 1988).

²⁸Leon R. Kass, *The Beginning of Wisdom: Reading Genesis* (New York: Free Press, 2003), 82.

²⁹Cain's founding of the first city after murdering his brother Abel is paralleled in ancient Roman folklore in the story of Romulus founding the city of Rome after murdering his brother Remus.

³⁰For a reliable discussion, see Sparks, *God's Word in Human Words*, 69–72, 79–82, 216–8; Sparks, *Ancient Texts for the Study of the Hebrew Bible*, 344–60, esp. 357–9.

³¹See the brief treatment in Harlow, "Creation according to Genesis," 192-6; for lengthier discussions, see Lloyd R. Bailey, *Genesis, Creation, and Creationism* (Mahwah, NJ: Paulist Press, 1993), 53-89; Dwight W. Young, "On the Application of Numbers from Babylonian Mathematics to the Biblical Life Spans and Epochs," *Zeitschrift für die Alttestamentliche Wissenschaft* 160 (1998): 33-61; Carol A. Hill, "Making Sense of the Numbers of Genesis," *Perspectives on Science and Christian Faith* 55, no. 4 (December 2003): 239-52.

³²As Sparks maintains, critical scholarship on these and other passages has "exposed more clearly the generic character of the Bible, revealing that many of Scripture's so-called errors are illusions created by our errant readings of Scripture. In this and in other respects, historical criticism has made the Bible's ancient discourse easier to understand. We could even say without blushing that historical criticism has performed invaluable theological services for the church" (Sparks, *God's Word in Human Words*, 230).

³³James Barr, *The Garden of Eden and the Hope of Immortality* (Minneapolis, MN: Fortress, 1993), 9. Similarly Terence E. Fretheim, *God and World in the Old Testament: A Relational Theology of Creation* (Nashville, TN: Abingdon, 2005), 76–7.

³⁴See Peter C. Bouteneff, *Beginnings: Ancient Christian Readings of the Biblical Creation Narratives* (Grand Rapids, MI: Baker Academic, 2006). Bouteneff studies pre-Augustinian readings from the Greek fathers.

³⁵Theophilus of Antioch, *To Autolycus*, 2.25; Irenaeus of Lyons, *Demonstration of the Apostolic Preaching*, 12, 14; cf. Irenaeus of Lyons, *Against the Heresies*, 4.38.1. Clement of Alexandria made similar observations. See the discussion in Bouteneff, *Beginnings*, 55–87.

³⁶Bouteneff, *Beginnings*, 6, emphasis his.

³⁷This point has been made more than once in commentaries on Genesis; see, for example, Walter Brueggemann, *Genesis* (Atlanta, GA: John Knox, 1982), 41; Claus Westermann, *Genesis 1–11*, trans. John Scullion (Minneapolis, MN: Fortress, 1984), 276; Wenham, *Genesis 1–15*, 90–1.

³⁸See Barr, *Garden of Eden*, esp. 1–20.

³⁹As Kass, Beginning of Wisdom, 94–5, observes,

The "punishment" for trying to rise above childishness and animality is to be forced to live like a human being ... human beings instead of self-sufficiency receive estrangement, dependence, division, and rule ... the so-called punishment is not really a newly instituted condition introduced by a willful God against the human grain. It is rather a making clear of just what it means to have chosen enlightenment

and freedom, just what it means to be a *rational* being. (Emphasis original)

⁴⁰Outside of Genesis 2–5, the only other Old Testament passage to mention Adam is the genealogical note in 1 Chron. 1:1, which depends on Genesis 5. The *place* name (not personal name) "Adam" appears in Joshua 3:16 and Hosea 6:7. Eve is never mentioned in the rest of the Old Testament.

⁴¹See Marshall D. Johnson, *The Purpose of the Biblical Genealogies with Special Reference to the Setting of the Genealogies of Jesus* (Cambridge: Cambridge University Press, 1969); Joseph A. Fitzmyer, *The Gospel according to Luke I–IX: Introduction, Translation, and Notes,* Anchor Bible (Garden City, NY: Doubleday, 1981), 488–505.

⁴²Also relevant (though less so because it does not set up a typology of Adam and Christ) is 1 Tim. 2:13–14, "For Adam was formed first, then Eve, and Adam was not deceived, but the woman was deceived and became a transgressor." Most New Testament scholars believe that 1 Timothy and the other Pastoral Epistles (2 Timothy and Titus) were not written by Paul but by one or more Pauline Christians of a later generation. Be that as it may, the passage appeals to Adam and Eve as figures well known from Genesis 2–3. This literary appeal to figures of tradition, though, cannot establish the historicity of Adam and Eve for us, even if the author probably regarded them as historical figures.

⁴³James D. G. Dunn, *Romans 1–8*, Word Biblical Commentary 38A (Dallas, TX: Word, 1988), 289.

⁴⁴For a good discussion of this point, see Robin Collins, "Evolution and Original Sin," in *Perspectives on an Evolving Creation*, ed. Miller, 475–82.

⁴⁵I think this is a valid statement even in the face of Rom. 5:19, "For just as through (*dia*) one man's disobedience the many were made (*katestathesin*) sinners, so through (*dia*) the one man's obedience the many will be made (*katastathesontai*) righteous." As Dunn comments on the verb *kathistemi*, "Although 'make' is the simplest translation, the causal connection indicated thereby is non-specific and can be very loose, so that the passive can function simply as equivalent to *ginomai* ['become']" (Dunn, *Romans* 1–8, 284).

⁴⁶So, as Bouteneff observes, "Although Adam may be the protosinner, Justin makes plain that subsequent sin is a matter entirely of human free choice, not of destiny or the influence of some bacillus of original sin" (Bouteneff, *Beginnings*, 62).

⁴⁷See further David Weaver, "From Paul to Augustine: Romans 5:12 in Early Christian Exegesis," St. Vladimir's Theological Quarterly 27 (1983): 187–206.

⁴⁸So, e.g., Douglas Moo, *The Epistle to the Romans* (Grand Rapids, MI: Eerdmans, 1996), 320.

⁴⁹This is one of the main points in the now classic study of E. P. Sanders, *Paul and Palestinian Judaism: A Comparison of Patterns of Religion* (Philadelphia, PA: Fortress, 1977).

⁵⁰Bouteneff, *Beginnings*, 45. For New Testament references to Christ as the image of God, see 2 Cor. 4:4; Col. 1:15; Heb. 1:4.

⁵¹Daryl P. Domning, with foreword and commentary by Monika K. Hellwig, *Original Selfishness: Original Sin and Evil in the Light of Evolution* (Aldershot, England: Ashgate, 2006); a précis may be found in Domning, "Evolution, Evil and Original Sin," *America* (November 12, 2001), available

online at www.americamagazine.org/content/article.cfm? article id=1205; Jerry D. Korsmeyer, Evolution and Eden: Balancing Original Sin and Contemporary Science (New York: Paulist Press, 1998); George L. Murphy, "Christology, Evolution, and the Cross," in Perspectives on an Evolving Creation, ed. Miller, 370-89; George L. Murphy, "Roads to Paradise and Perdition: Christ, Evolution, and Original Sin," Perspectives on Science and Christian Faith 58, no. 2 (June 2006): 109-18. See also the (regrettably strident) study of Patricia A. Williams, Doing without Adam and Eve: Sociobiology and Original Sin (Minneapolis, MN: Fortress, 2001). For webbased papers in dialogue, see "Evolution and Original Sin: A Weblog Series Published on 'An Evangelical Dialogue on Evolution," ed. Steve Martin, with contributions by George Murphy, Terry Gray, Denis Lamoureux, and David Congdon (www.scribd.com/doc/13459608/Evolution-and-Original-Sin). For a historical survey, see Tatha Wiley, Original Sin: Origins, Developments, Contemporary Meanings (New York: Paulist Press, 2002).

⁵²Karl W. Giberson, *Saving Darwin: How to Be a Christian and Believe in Evolution* (New York: HarperOne, 2008), 13.

53 Among prominent Catholic and Anglican scholars, the names Francisco Ayala, Denis Edwards, John Haught, Kenneth R. Miller, Arthur Peacocke, John Polkinghorne, and Christopher Southgate come to mind. A handful of otherwise good books on evolution by evangelical scientists have appeared in the past few years, but most of them hedge on the question of Adam and Eve and/or succumb to concordism. Representative of this tendency are Darrel R. Falk, Coming to Peace with Science: Bridging the Worlds between Faith and Biology (Downers Grove, IL: InterVarsity Press, 2004), 198-201, 218-21; Francis S. Collins, The Language of God: A Scientist Presents Evidence for Belief (New York: Free Press, 2006), 206-10; Deborah B. Haarsma and Loren D. Haarsma, Origins: A Reformed Look at Creation, Design, and Evolution (Grand Rapids, MI: Faith Alive Christian Resources, 2007), 215-30; and Denis Alexander, Creation or Evolution: Do We Have to Choose? (Oxford: Monarch Books, 2008), 237. A welcome exception is Denis O. Lamoureux, Evolutionary Creation: A Christian Approach to Evolution (Eugene, OR: Wipf and Stock, 2008); ____, I Love Jesus & I Accept Evolution (Eugene, OR: Wipf and Stock, 2009). Sadly, American Evangelicalism still has a tendency to devour its young, as the recent "release" of Peter Enns from Westminster Seminary and that of Bruce Waltke from Reformed Seminary show.

⁵⁴As a Christian in the Reformed tradition, I look to the *Heidelberg Catechism* and *Belgic Confession* for valuable guidance in grasping the essential truths of Scripture. Both of these documents forthrightly affirm an Augustinian-Calvinist understanding of the Fall and original sin, and both assume the historicity of Adam and Eve (esp. *Heidelberg Catechism*, Lord's Day 3; *Belgic Confession*, Articles 14, 15). In this article, my purpose has not been to undermine the Reformed confessions. Taking them seriously but not uncritically requires engagement with literary, historical, and scientific issues that were unknown to their framers.

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