

Evolution, Original Sin, and the Fall

with Helen De Cruz and Johan De Smedt, "Introduction to the Symposium on Evolution, Original Sin, and the Fall"; Paul A. Macdonald, Jr., "In Defense of Aquinas's Adam: Original Justice, the Fall, and Evolution"; Julie Loveland Swanstrom, "Aquinas on Sin, Essence, and Change: Applying the Reasoning on Women to Evolution in Aquinas"; Hans Madueme, "The Theological Problem with Evolution"; Austin M. Freeman, "The Author of the Epic: Tolkien, Evolution, and God's Story"; and Jack Mulder, Jr., "Original Sin, Racism, and Epistemologies of Ignorance."

THE THEOLOGICAL PROBLEM WITH EVOLUTION

by Hans Madueme

Abstract. This article explores hamartiological questions at the interface of evolutionary biology and theology. Such questions include the problem of evil, the possibility of a historical fall, and the meaning of human sinfulness in light of biology. First, I examine some of the leading accounts of animal theodicy, including John Schneider's aesthetic theodicy, Christopher Southgate's compound theodicy, and Joshua Moritz's free creatures' defense. Second, I review several non-lapsarian accounts of how sin originated within the human story (e.g., Robert Russell's concept of entropy as the physical origin of sin). Then third, I discuss noteworthy attempts to revise the doctrine of original sin in light of evolutionary psychology. Although the quest for a post-Darwinian doctrine of sin has prompted fascinating areas of research, I conclude that an evolutionary hamartiology remains a remarkably difficult project.

Keywords: conflict thesis; doctrine of sin; evolution; original sin; problem of evil; the fall; theodicy

In his book *The Evolution of Adam*, Peter Enns suggests that evangelical and fundamentalist traditions are acutely threatened by the science of evolutionary biology. Near the end of his argument, Enns writes: "The root of the conflict for many Christians is not scientific or even theological, but group identity and fear of losing what it offers" (Enns 2012, 145). In conservative—that is, *theologically* conservative—communities, evolutionary theory generates fear and hostility by threatening their specific understanding of biblical authority. According to Enns, too much is at stake for them. Preserving group identity is paramount.

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My own tradition is the Presbyterian Church in America (PCA) and it is theologically conservative in the manner Enns decries. Like others in my denomination, I worry that conflict persists between Christian theology and mainstream expressions of evolutionary theory. Enns is doubtless right that protecting group identity is a real dynamic in communities like the PCA, but I suspect he is misreading its significance. This desire to maintain boundary markers is typically a symptom of deeper *dogmatic* concerns. In what follows, I shall sketch out the dogmatic concerns that render standard evolution implausible from an Augustinian and Reformed perspective.

In the science-and-theology discipline, my Augustinian-Reformed position is a minority report that lacks plausibility in our post-Darwinian intellectual context. On my account, the events surrounding Adam and Eve in Genesis 1–3 are historical and had grave consequences for the fate of humanity (and the rest of the created order). The notion that the early chapters of Genesis describe historical events is integral to my understanding of the fall and original sin (see Madueme 2020). Furthermore, the number of different proposals to bridge the gap between Christian theology and evolutionary biology keeps growing apace (see, e.g., Houck 2020). My own confessional Presbyterian tradition historically has had a diversity of opinions on such matters (see, e.g., Livingstone 1987; Roberts 1988; Gundlach 2013), some of which would take issue with aspects of my own account. Nevertheless, a minority report deserves a hearing once in a while, and I happen to believe this one is true. But even if I am hopelessly mistaken, hearing views that we disagree with is an intrinsically valuable exercise.

This article, then, reflects on the question: *Can we revise the doctrine of sin in light of evolution without violating the biblical story?* I first examine some of the leading attempts to justify God in light of nonhuman evolutionary suffering, that is, animal theodicy. I then review several non-lapsarian accounts of how sin originated within the human story. Furthermore, I discuss efforts to revise the doctrine of original sin using insights from evolutionary psychology, among other disciplines. Although these proposals for a post-Darwinian evolutionary hamartiology are intriguing areas of research, I argue that they bring serious defects into the architecture of theology. I conclude that an evolutionary hamartiology remains a remarkably difficult project. (Caveat lector: since I will be surveying many positions in the literature, and space is tight, my essay is more panoramic than granular. I am scanning the forest, not harvesting trees.)

EVOLUTION AND THE PROBLEM OF EVIL

The goodness of God is difficult to reconcile with animal pain and the horrifying levels of suffering and death, the anguish of it all, so much, and so relentless. Biological evolution is impossible without the death of

organisms. As John Schneider explains, “We now know that 99.5 percent of all species that ever walked the earth are gone, most often in a violently horrific, cataclysmic fashion, many of them without leaving so much as a genetic legacy to generations yet to come” (2020, 3). He goes on to say that, “if the God of theism did create species, it was by an extraordinarily inefficient, wasteful, and brutal means. Is it not rather the best part of rationality to see the thesis of natural selection as almost inherently atheistic?” (2020, 4). Darwin himself wrote, “What a book a devil’s chaplain might write on the clumsy, wasteful, blundering, low and horribly cruel works of nature!” (1903, 94).

These challenges predate Darwin. Anyone who accepts animal death before the fall swims in the same lake. Nonetheless, the problem looms large with an evolutionary understanding of creation in which God designed animal suffering and death over millions of years. Schneider draws on Job, among other sources, to develop an *aesthetic* theodicy. On this model, God can defeat evolutionary evil “when it is integrated as a constitutive part of a valuable composite whole that not only outweighs the evil, but could not be as valuable as it is *without* the evil. In that instance, the evil remains evil in its own right, but it is defeated, since it is made to be a good-making, nonregrettable part of the whole” (Schneider 2020, 7). God is morally justified to authorize the evil suffered by animals as long as he defeats it in the end. Schneider envisions an eschatology in which God resurrects all animals to everlasting life.

The problem with Schneider’s evolutionary theodicy—a problem that haunts all non-lapsarian theodicies—is that it renders God the Author of evil. God *uses* evil for the greater good. The Lord, however, is the thrice holy God of Isaiah 6:3: “Holy, holy, holy is the Lord Almighty; the whole earth is full of his glory.” Scripture never presents God as the direct cause of evil in a way that impugns his character. To be sure, the biblical narrative often presents God as directly causing illness, pestilence, plagues, and death. However, such cases are always instances of divine *judgment*—judgment for personal transgression or for the transgression of Adam. Once the world is fallen, God uses evil to bring about good (Rom 8:28)—as he did in Christ’s resurrection—but the creature is always morally culpable for evil, never God. Evolutionary accounts without a fall imply that natural evil is part of the warp and woof of creation and not a judicial punishment. According to these accounts, God is blameworthy.

Against my lapsarian worries, however, some have objected that it seems monumentally unfair that Adam’s one transgression unleashed all the misery of natural (and moral) evil. The punishment does not fit the crime.¹ This reaction is understandable, although our intuitions are likely skewed. Adam’s sin and its aftermath disclose the deep solidarity binding God’s creatures together; thus, the fate of humanity—and indeed of the

cosmos—is inseparable from the first man’s destiny. The catastrophe of a fallen creation, itself a divine judgment, signals the enormity of sin and its cosmic dimensions (cf. Gen 3:17; Rom 8:18–22).²

Evolution also drives a wedge between creation and redemption (see Lloyd 1998, 156). On the one hand, God *as Creator* uses suffering, pain, and death to advance the evolutionary process and to bring his creatures into being. On the other hand, God *as Redeemer* vanquishes sin and death, restores nature, and eradicates animal suffering. God’s work of creation contradicts his work of redemption. This conclusion opens up a wide chasm between human nature and salvation, leaving the impression that grace is radically opposed to being human. Michael Lloyd perceptively writes, “If, theologically, we see creation and redemption pulling in different directions, then, pastorally, we shall ourselves be pulled in different directions. If, however, we see redemption as precisely *redemption* of the created order, then we shall see, and experience, redemption as becoming ourselves” (Lloyd 1998, 153). This wedge between creation and redemption is not rooted in divine incomprehensibility and our inability to grasp the full picture; that problem is epistemological and derives from the Creator-creature distinction. Rather, non-lapsarian evolutionary accounts that set creation and redemption in opposition raise a more ontological problem. The God of (evolutionary) creation seems fundamentally different from God as he reveals himself in redemption.

Some try to escape this tangled mess by redefining God’s attributes. Evolutionary evil is a nonissue if God cannot prevent all suffering and evil. Process theologians, for example, claim that every level of the cosmos has some degree of freedom to resist God. Earthquakes, tornadoes, violence, and death exist because of creaturely freedom, not divine sovereignty. As Jerry Korschmeier put it,

there is no detailed pre-ordained plan for our existence, because our response, and that of all God’s creatures, cannot be coerced or exactly predicted. ... [S]ince all creatures really have some measure of self-creativity, they have responded only imperfectly. They partially share with God the directions evolution has taken. God can only suggest the way evolution should go, and then must experience with creatures the results of the decisions that they make. (1998, 104)

Process theologians reject divine omnipotence. God lacks the power to prevent evil in the world (see, e.g., Hartshorne 1984). They resolve the theodicy problem by placing evil outside God’s control but thereby lose the orthodox conception of God. Such a move is a pyrrhic victory.

Less controversially, one might deny that animals are morally innocent. Evolution only needs a theodicy if millions of creatures suffer and die *through no fault of their own*. Cognitive ethologists and evolutionary biologists suggest that animals experience a level of consciousness, choice,

and intentions (see, e.g., Bekoff, Allen, and Burghardt 2002). Nonhuman animals can resist God's will, which implies that moral evil *already* existed before humans enter the scene. They were morally culpable for their free choices and are responsible for evolutionary suffering. Joshua Moritz defends this view as a "*free creatures defense* to the problem of evolutionary evil" (2014, 373).³ Although these are fascinating ideas, the scientific evidence is slender. In any case, this speculative thesis is hard to square with Paul's inspired claim in Rom 5:12, namely, that sin entered the world *through Adam*. In the mental world of Scripture, sin does not arise from animal misdemeanors. Moritz appeals to the serpent in Genesis 3 as evidence of animals behaving badly, but his interpretation reads too much into that episode—the canonical significance of the serpent is surely diabolical not ethological.

Others have appealed to a *free-process defense*, a variant of the free-will defense. As John Polkinghorne writes, "God allows the physical world to be itself, not in Manichaeic opposition to him, but in that independence that is Love's gift of freedom to the one beloved" (2005, 77). Since God has given the universe ontological autonomy, natural evil is the product of chance and necessity. Natural evil is the price the universe pays for liberty. Polkinghorne explains, God "is not the puppetmaster of either men *or matter*" (2005, 78).⁴ This hypothesis is kinsman to the "only way" theodicy, to wit, evolutionary evil was the *only way* for God to create the rich cosmos we live in. The goods of evolution outweigh the necessary harms. Christopher Southgate writes:

I acknowledge the pain, suffering, death, and extinction that are intrinsic to a creation evolving according to Darwinian principles. Moreover, I hold to the (unprovable) assumption that an evolving creation was the only way in which God could give rise to the sort of beauty, diversity, sentience, and sophistication of creatures that the biosphere now contains. As shorthand I call this the 'only way' argument. (2008, 16)⁵

This argument is perplexing. Why cannot an omnipotent God create a world without evolutionary evil? (see, e.g., Francescotti 2013, 121–25). If God was unable to secure such a world at the beginning, why think suffering and death will cease in the new heaven and new earth (Rev 21:4)? Southgate's proposal leaves creation and eschatology at cross-purposes—and, worse yet, since evil is intrinsic to creation, "only way" theodicies implicate God in evil.⁶ If evolutionary evil is necessary for divine creation, then God would never have created in the first place *unless* he had morally sufficient reasons to do so. Possible contenders for such morally sufficient reasons include Michael Murray's argument that nomic regularity, which gives rise to evil, is a necessary antecedent condition for the evolution of human free will (Murray 2008, 130–192). Another example would be Friedrich Schleiermacher's thesis that evil is the inevitable byproduct of

a good creation (see Pedersen 2020). However, such instrumentalist proposals clash with deep canonical intuitions, for it is hard not to conclude that seeing evil as *necessary* to creation vitiates God's holy character. If the goodness of creation implies the goodness of the Creator, then presumably the moral ambiguity of creation likewise implies the Creator's moral ambiguity.

Still others have given up on finding the answer in mundane history. They appeal instead to a primordial angelic fall as the origin of evolutionary evil. Natural evils like animal predation, disease, and death are allegedly symptoms of angelic rebellion in the heavenly realms.⁷ The fall of Satan and his minions triggered disaster for the material world. Thomas Chalmers (1780–1847) and C. I. Scofield (1843–1921) speculated that an angelic fall ruined an earlier creation when it activated millions of years of pre-Adamic animal suffering and death. These events happened, so they claim, in the timeframe (the “gap”) between Gen 1:1 and 1:2 (Chalmers 1848; Scofield 1909).

In reply, Scripture does not explicitly teach the fall of angels as *originating* natural evil (though, arguably, the doctrine may be consistent with it). The position preserves the origin of evil as a historical event but pushes it further back, with the payoff of absolving God and not falling afoul of science.⁸ I affirm that demonic powers are enemies of God and his church and that Scripture frequently ascribes physical disease to demonic activity (e.g., Matt 9:32; 12:22; Mark 9:17–29; Luke 4:39; 13:11–13). Nevertheless, the premise of fallen angel theodicy—that demons were wreaking havoc throughout material creation over eons seems speculative and lacks strong exegetical support; for example, it is odd that Scripture calls creation “good” in Gen 1 (vv. 10, 12, 18, 21, and 25) when demonic powers had by then supposedly corrupted the entire creaturely order.⁹

Perhaps, animal suffering and death are not evil after all. Some scholars argue that pre-human animal suffering is *morally neutral* “[i]nsofar as [it is] the result of the natural working out of life's creative processes” (Johnson 2014, 185). In the light of Calvary, suffering and death through natural selection are seen as consonant with the suffering and death of Christ on the cross; evolutionary suffering follows a Christological pattern (Murphy 2003; Johnson 2014, 181–210). According to the “neo-Cartesian” position, animals lack consciousness and therefore have no mental capacities comparable to human beings.¹⁰ People who think that animals feel pain are merely anthropomorphizing because they love their pets! On this view, Western attitudes toward animal death and predation reflect modern sentimentalism. Evangelicals who share this neo-Cartesianism emphasize that Scripture presents animal predation as worthy of God's praise (e.g., Ps 104, 147; Job 38–41) (Blocher 2009, 165–68; Collins 2006, 162–66). In their view, only *human* not animal death was a consequence of Adam's fall (cf. Rom 5:12 and 1 Cor 15:21–22).

The neo-Cartesian stance is hard to disprove since we have no access to the internal experience of animals (Murray 2008, 41–72). Nevertheless, it is difficult to deny the reality of animal agony, pain, and suffering. As Robert Wennberg quipped, “it seems as difficult to believe that animals do not feel pain as it does to believe that plants or rocks do” (1991, 122). Hence the widespread intuition that people who torture animals for fun are morally disordered. Our best scientific evidence, while not definitive, indicates that animals experience pain and suffering (see, e.g., Sneddon et al. 2014). Furthermore, Scripture’s insistence that we should care for animals seems to imply that animals can suffer (e.g., Luke 14:5, Deut 25:4, Prov 12:10); eschatological clues also suggest that animal suffering is morally consequential, for animal predation and violence seem to be absent in the new heaven and new earth (e.g., Ezek 34:25, 28; Isa 11:6–9).¹¹

ADAM’S FALL AND HUMAN DEATH

According to the traditional Christian account, the human race traces its ancestry back to Adam and Eve. Their first sin ruptured our relationship with God, introducing sin and death into the human experience. In the Augustinian tradition, pre-Fall Adam and Eve were sinless (and immortal) and they lived in a pristine world. Their sin was a fall from a great height.¹² In the Eastern tradition, represented by Irenaeus, original humanity was imperfect. Adam was an “infant,” a small child, so that “it was necessary that he should grow, and so come to (his) perfection” (1920, 81). God’s intention from the beginning was for humanity to mature into perfection in Christ.¹³ Despite these important differences, Augustine and Irenaeus agree on the basic shape of the story: original creation was good, Adam and Eve were originally sinless, they gave rise to the entire human race, and their fall introduced sin into the human experience.¹⁴ The two church fathers sing the same dirge.¹⁵

Human origins according to modern biology has a different tune. The first human beings emerged by evolution from earlier ancestors, not special creation. Universal common descent implies that all organisms, including trees, bees, and Swedes derive from the same ancestor. Genetic science suggests that the human population has never dropped below a few thousand individuals (see, e.g., Mezzavilla and Ghirrotto 2015). “Adam” and “Eve” are not historical. The fall never happened. Sinful human actions causally trace their origin, and are identical phenomenologically, to the nonsinful actions of animal forebears; the base impulses and appetites inherited from our ancestors have always been part of the evolutionary story (e.g., Domning and Hellwig 2006, 108).¹⁶

Is the Bible, then, a trove of pious mistakes? Did early Christians misunderstand the sacred text? Historical-critical Bible scholars disavow the structural coherence of the early chapters of Genesis, suggesting that Gen

1–11 are disparate texts merged together from separate historical periods. These quasi-fictional narratives are not historically referential.¹⁷ Others situate those narratives in their ancient Near Eastern contexts; they were written, so the argument goes, to address ancient existential concerns, not to resolve modern scientific questions (see Walton 2015).¹⁸

Absent a historical fall, how then did sin originate? According to one scenario, sin grows out of the freedom that emerges from evolutionary complexity. As Gregory Peterson puts it, “It is only because of our considerable sophistication that we do it [falling] in the first place, and it is because of our psychological sophistication that such falling seems to be *an inevitable consequence of human freedom*” (2003, 179).¹⁹ A “fall” into moral evil is inevitable if God is to create free, self-conscious humans. There was no other way. Taking it further back, Robert Russell invokes the concept of *entropy* in physics, the “background, predisposition, or precursor to what emerges in us as sin” (Russell 2006, 32). Somewhere in our evolutionary past, moral behavior became a new, emergent property. The human fall into sin is continuous with “precursor capacities” in our animal ancestors, capacities rooted in fundamental physical processes (Russell 2006, 30).²⁰ Sin has always been part of the human story.

Such models abandon any discrete historical origin to sin and raise questions about the authority of holy writ. The historicity of the first couple and the lapsarian events in Eden are well attested in Jesus and the wider canonical witness. Non-lapsarian theologies threaten the redemptive-historical connection between Adam and Christ (see Rom 5:12–21 and 1 Cor 15:21–22).²¹ (There are, of course, more options than Adam-*or*-evolution; it is not a zero-sum game. Several proposals try to preserve a historical Adam and fall within an evolutionary setting, see Alexander 2014, 252–304.) Adam fell *in history* and through him we became sinners; Christ came as savior *in history* and through him we have justification. As Emil Brunner remarked, “Apart from the doctrine of the Fall it is impossible to understand Sin as the presupposition of the New Testament message of Redemption. Only a *fallen* humanity needs a Redeemer” (1952, 90).²² Herman Bavinck agreed: “The two truths or facts by which all of Christian dogmatics is governed are (1) the fall of Adam and (2) the resurrection of Christ” (2006, 38). The difficulty with accepting the historicity of the fall is that it stands in sharp conflict with scientific research and a historical-critical reading of Genesis 1–3.

Nonetheless, the inspired apostolic witness constrains me from resolving this conflict by rejecting a historical fall. St. Paul, after all, believed Adam was a historical individual based on his reading of Gen 2:24 (see, e.g., Eph 5:31; 1 Cor 6:16; cf. 1 Cor 15:45, 47; 1 Tim 2:13–15), and he also believed in the fall of Adam and Eve based on his reading of Genesis 3 (e.g., Rom 5:12–21; 1 Cor 15:21–22)—to wit, Paul agreed with the other apostles that the events surrounding Adam in Genesis 1 and

2 are straightforwardly historical (e.g., Luke 3:23–38; Acts 17:26). Jesus shares the same apostolic hermeneutic (e.g., Matt 19:4–5). Despite the conflict, then, a traditional Protestant doctrine of Scripture entails that the apostolic reading of Genesis should supersede our current scientific understanding of human origins.²³ The testimony of the apostles is epistemically binding by dint of their divine inspiration. In any case, once theology grants the reality of sin (and evil), it *must* confess a historical fall as the origin of the great rupture. Barring that, we have only two possibilities—either, God’s character is both good and evil, perhaps transcending those categories (i.e., monism); or, evil is an eternal principle alongside a good God (i.e., dualism). N. P. Williams made this point in his 1924 Bampton Lectures, arguing that “it is impossible to lift the Fall out of the time-series without falling either into Manicheism or unmoral monism. . . . ‘[T]he Fall,’ whatever else it may have been, must have been an event in time” (1927, xxxiii). Evil appeared in history, after Genesis 1 and 2.

Non-lapsarian accounts compensate by diverting theological energy to Christology and soteriology (see, e.g., Peters 2003, 90). Since the dogmatic pressure has to release somewhere, those two loci become overinflated. Having cut ties with the first Adam, they redirect emphasis to the last Adam. Protology and eschatology evince a similar pattern. If you play down the relevance of origins (protology), the weight shifts disproportionately to eschatology (see Lash 1985). Eden is no more, so we recast our gaze to the New Jerusalem. Eschatology is the new protology.

The plot thickens with the connection between Adam’s fall and human death. The traditional view is now widely contested. David Fergusson, for instance, takes Scripture to teach “that death as a return to the dust is the natural lot of human beings who organically came from the dust” (2014, 38). Original humanity was mortal, says John Walton. Since prelapsarian Adam was mortal, he regularly ate from the tree of life fending off death; after God banished him from Eden, he lost access to the tree, succumbed to his innate mortality and thus died (Gen 5:5) (Walton 2015, 73–74). This perspective fits hand in glove with an evolutionary creationism that normalizes death.

However, Scripture consistently presents human death as antithetical to God’s goodness. Human life is from God’s Spirit (Gen 2:7). Death is a judicial *curse* in Gen 3:17–19, that is, punitive not creative. Death is antithetical to creation, the absence of life, separation from God. Paul says the wages of sin is death (Rom 6:23), and that death is the last enemy (1 Cor 15:26). Throughout the OT witness, death is a malignant intruder into God’s good creation. Although Scripture sometimes depicts death as normal or even positive (e.g., Gen 25:8), such texts assume life east of Eden, *sub specie lapsus*. Paul can say, “For to me, to live is Christ and to die is *gain*” (Phil 1:21 NIV)—but that’s because the sting of death has been removed. As one theologian remarks, “The fact that death can be a source

of rejoicing for a believer does not make it something good, any more than rejoicing in suffering makes suffering good” (Lloyd 2009, 17). Isaiah promises us that the Eschaton will swallow up death forever (Isa 25:8). In the words of the Seer of Patmos, “He will wipe away every tear from their eyes; and there will no longer be any death; there will no longer be any mourning, or crying, or pain; the first things have passed away” (Rev 21:4 NIV).

Christology sharpens the dilemma. The physical death of Jesus is central to the atonement. He died for our sins according to the Scriptures (1 Cor 15:3), and we were reconciled to the Father by his physical body through death (Col 1:22). Jesus bore our sins on his body on the tree, “so that we might die to sins and live for righteousness; ‘by his wounds you have been healed’” (1 Pet 2:24 NIV). Death entered the world through the first Adam (Rom 5:12), but it was in dying—being obedient to death on a cross (Phil 2:8)—that the last Adam secured our justification, sanctification, and glorification. Sin is also bound up with the suffering and decay that herald physical death. The healing miracles of Christ reversed the effects of sin on human lives. Isaiah tells us that the death of Christ atoned for human suffering and disease (Isa 53:4; Matt 8:17). Reimagining death as part of original goodness resonates with the canons of science but it pays a steep price. It drives a wedge—again!—between Christ as Creator and Christ as Redeemer. Are we to believe that death was part of the Son’s original creation, only for him then to defeat it at the cross (1 Cor 15:55), that disease and death are natural processes, even though Jesus miraculously healed the sick and raised the dead throughout his earthly ministry?

ORIGINAL SIN AND EVOLUTION

In the Augustinian doctrine of original sin, Adam’s descendants inherit his moral corruption and the guilt of his first sin. Human sinfulness is by inheritance, not merely imitation, as Pelagius had claimed. The Greek fathers, by contrast, avoided inherited guilt and instead emphasized mortality, corruption, and sickness (a tradition taken up by the Eastern Orthodox Church) (Meyendorff 1983, 143–46). Christians have expressed the doctrinal core of original sin in varied ways since the medieval, Reformation, and post-Reformation eras. However, the doctrine of original sin *as such* has sustained severe critique since the Enlightenment, and its intellectual credibility has suffered even further from research efforts in the biological disciplines.

Evolutionary psychology tends to reduce human behaviors to genetic adaptations that emerge from the evolutionary process. Some biologists present human vices like envy, genocide, and rape as evolutionary byproducts of natural selection (Dawkins 1977). Although some accounts of evolutionary psychology avoid a crass biological reductionism (see, e.g.,

Buller 2005), the interpretation of human nature seems to have taken a naturalistic turn across a range of scientific fields. In behavioral genetics, for example, patterns of behavior are often explained in terms of genetic and environmental factors (Rutter 2006).²⁴ Some studies in neuroscience blame psychopathic and antisocial behavior on impairments in the brain (see, e.g., Rafter 2008). Behaviors that earlier Christians construed as sinful are frequently reinterpreted as symptoms of biological disorder and, ultimately, the result of evolutionary development.

These intellectual shifts effectively recast biology as the new hamartiology (see Madueme 2014). According to this new picture, genetic forces are the ultimate cause of the human predisposition to sin. Common interpretations of sociobiology, evolutionary psychology, neuroscience, and behavioral genetics, conflate natural evil and moral evil. As Ted Peters contends, “By removing primary agency from the decisions of allegedly free human persons, what we previously thought was moral perversion becomes an expression of a more basic biological nature” (Peters 2008, 21). This hamartiology rests on a category mistake that reduces sin to nature or nurture (or both). Granted, ethologists and cognitive scientists offer scientific descriptions of organisms and their place within the environment; they avoid making value judgments and do not rely on theological notions of “sin.” However, naturalistic descriptions of human behavior inevitably have implications for any doctrine of sin. Evolutionary accounts of greed, envy, genocide, rape, and the like—when allied with a physicalist understanding of human persons—imply that the human inclination to sin “arose out of the animal nature itself” (Domning and Hellwig 2006, 108). But if sin arose out of the animal nature, it is not clear that I am responsible for my desires and actions in any morally meaningful sense. The causal chain of deterministic microphysical processes implied in physicalism falls short of the robust moral agency reflected in the biblical tradition (see, e.g., Madueme 2018).

Some theologians have taken this all in stride, conceding that sinfulness is rooted in biology and that our moral predispositions to vice (and virtue) are inherited from evolutionary ancestors (see Williams 2001; Domning and Hellwig 2006). Others reinterpret inherited sin as a blend of nature and nurture; our capacity to sin is caused by genetic disposition and social conditioning (see Cole-Turner 1994). Such accounts raise questions about the holiness of God. They imply that God created human beings with inbuilt *sinful* tendencies, not merely Adam and Eve’s unfallen-and-libertarian capacity to disobey God; once again, God’s creative and redemptive purposes are set over against each other—salvation and sanctification run counter to how God created humanity. The absence of a historical fall sets up a self-contradiction between creation and salvation. Some Christian evolutionists try to avoid these implications by limiting “sin” to willful disobedience, which allows them to acknowledge the

evolutionary predispositions in humanity without affirming their sinfulness—what counts as “sinful” is free and conscious disobedience of God (Edwards 1998). However, this solution merely pushes the dilemma back to free will and prompts the question, why do all human beings use their free will sinfully? Given the universality of sin—all human beings except Christ sin—the free will argument is explanatorily empty and biology seems to be the cause of sin after all.

CONCLUSION

I am keenly aware that the implicit hermeneutical judgments in this essay are out of fashion in many academic circles—judgments about the infallibility of Scripture, the propriety of interpreting Scripture as “propositional” in part, the historicity of events in Gen 1–11, and so on. Judgments on all of these questions vary greatly depending on one’s interpretative approach. The precise sense in which Scripture is God’s word, and what that does or does not imply, will remain contested until Jesus returns. Although I can hardly adjudicate such thorny matters here, I recognize that readers who see things differently will be less persuaded by my argument. Such disagreements, however, open up space for Christian dialogue across ideological divides.²⁵

At any rate, summing up, the hamartiological problem with evolution is this. Christian theology wants to keep faith with the apostolic tradition without denying doctrines like creation, the image of God, and common grace that are implicit in natural science at its best. Traditional conceptions of sin, however, risk pitting evolutionary science and theology against each other, two disciplines condemned to conflict, like Hagen and Hedin with their swords unsheathed waging a never-ending battle over forbidden love.²⁶ Evolutionary reinterpretations of sin threaten to dismantle the internal coherence of revealed truth and detach themselves from the early creeds and confessions. Ironically, the valiant theological attempts to abolish conflict with the scientific picture only end up multiplying the difficulties: slay one head, and three more rise up.²⁷

This dismal conclusion is partially offset by more hopeful signs on the intellectual horizon. Several recent proposals that show deeper awareness of the dogmatic challenges are trying to build bridges between evolutionary biology and the Christian doctrine of sin. For example, James K. A. Smith recognizes that God’s goodness and other core theological affirmations are at stake in the doctrine of the fall and offers a thought experiment that honors those affirmations *and* the witness of evolutionary biology (Smith 2017). Ian McFarland’s dogmatic account of original sin rejects a historical fall, for scientific reasons, but then creatively retrieves an Augustinian hamartiology in dialogue with Maximus the Confessor (McFarland 2010). Several essays in a multiple-views collection have tried to revise the

doctrines of the fall and original sin in light of evolution (Stump and Meister 2020); among them, Oliver Crisp's contribution develops a "moderate Reformed doctrine of original sin" that is intentionally open-textured and can thus accommodate several different evolutionary scenarios (see also Crisp 2015). Gijsbert van den Brink, hailing from the same Reformed tradition, recontextualizes the doctrines of the fall and original sin so that they avoid any significant conflict with the evolutionary origins of humanity (van den Brink 2012, 2018, 2020). More exegetically and with interdisciplinary mien, Henri Blocher's restatement of original sin models a subtle way of engaging the scientific disciplines while preserving essential features of the traditional doctrine (Blocher 1999, 2009).²⁸ In a series of wide-ranging essays, Ernst Conradie retrieves a broadly Augustinian doctrine of sin that is deeply conversant with an evolutionary understanding of history (see, e.g., Conradie 2017, 2018). Taking a methodological focus, Benno van den Toren distinguishes between *primary* "doctrines" and *secondary* "theological theories" in order to open up space between science and theology; evolutionary biology may prompt us to change our theoretical explanations of human unity in Adam without compromising the doctrine of original sin itself (van den Toren 2016a, 2016b).

Such constructive proposals gesture toward a more promising future for the doctrines of the fall and original sin in an evolutionary setting. Judging whether any of them will thread the needle successfully is beyond the scope of this essay, though obstacles remain and I confess to a lingering pessimism—Christian hamartiology, I have tried to argue, seems resilient to these revisionist strategies.²⁹ Part of the difficulty concerns the nature of doctrinal development. The natural sciences have driven—and continue to drive—doctrinal change within both Protestant and Roman Catholic theologies. On the one hand, science's ability to prompt development of doctrine is old news. Picking just two examples: the influence of Aristotelian science on medieval theology, and Copernican science correcting the geocentric theologians. On the other hand, evolutionary theory exerts widespread extra-textual pressure on dogmatic development, which then generates deep tension with divine revelation and catholic tradition.

Epistemology lies at the root of this conflict. Although I endorse John Hedley Brooke's magisterial takedown of the "conflict thesis"—that old canard peddled by John Draper, Andrew White, and their fellow hawkers—the conflict motif has a grain of truth. Modern science does not appeal to divine revelation or any other supernatural divine action. Scientific theories only invoke forces within the causal nexus of the physical world, data accessible to everyone.³⁰ Christian dogmatics, in contrast, accepts the deliverances of Scripture as true knowledge. In short, science and faith have contrasting epistemic norms, which opens the possibility of conflict between scientific investigation and special revelation.

Call this a *chastened* conflict thesis—not the warfare hyperbole of the nineteenth century. As Maurice Finocchiaro remarks, “The idea to which I am attributing considerable truth is a more nuanced and moderate thesis: that there is often actual conflict between science and religion, and almost always potential conflict between them” (2018, 43).³¹ This moderate thesis underlies the fraught relationship between evolution and the doctrine of sin. Untying the knot of evolutionary biology and hamartiology is difficult, yet the challenge deserves our best answers. This challenge bids intrepid souls to set sail in uncharted, turbulent waters, evading the Scylla of anti-science and the Charybdis of theological heresy, relentlessly pursuing that elusive prize, an enduring, intellectually satisfying, and biblical faith.³²

NOTES

1. For a striking statement of this objection, see Adams (1988).
2. For one response to Marilyn Adams’s objections, see Rogers (2002).
3. See Nicola Hoggard Creegan’s observation: “if sinfulness at least in latent form begins with animals, then the traditional story of creation, fall, and redemption can no longer hold” (2013, 23).
4. Emphasis mine.
5. Similarly, Niels Gregersen writes that “It seems that death, pain and mental suffering are the price to be paid for living in a developing world with highly complex and intense forms of sentient life” (2001, 200).
6. For Southgate’s attempt to respond to these concerns, see Southgate (2018, 293–305).
7. For a defense, see Lloyd (2018, 262–79). Advocates for a cosmic fall, instigated by fallen angels, include C. S. Lewis, Hans Urs von Balthasar, Alvin Plantinga, T. F. Torrance, Gregory Boyd, Stephen Webb, and others.
8. Nicola Hoggard Creegan has similarly argued for a “modified dualism” wherein evolutionary evil is a symptom of a cosmic fall mysteriously caused by Satan and his cohorts (Creegan 2013, 127–37).
9. Thomas Oord tries to explain natural evil by appealing to the chaos (*têhôm*) in Genesis 1 (2009, 28–49).
10. For defenses of the neo-Cartesian position, see Harrison (1989) and Carruthers (1989). For critical responses, see *inter alia* Yarri (2005, 57–84) and Wennberg (1991, 121–22).
11. Although my argument implies that creation is fallen, I cannot engage critics here, for example, Garvey (2019).
12. But Augustine is not easily pigeon-holed—given his distinction between *posse non peccare* (in Eden) and *non posse peccare* (in the Eschaton), he conceded room for growth and development in pre-fall Adam.
13. See, for example, Irenaeus, *Against Heresies* (1957, 521–22). By “imperfection,” however, Irenaeus—who was diametrically opposed to the Gnosticism of his day—did *not* mean inherently sinful. On this point, see Farrow (1995).
14. Such facts deserve more notice from those who try to exploit Irenaeus as a bridge between theology and evolutionary theory.
15. I should note that my Augustinian-Reformed doctrine of sin is committed to the sinlessness of the prelapsarian state *without* Augustine’s ancillary claim of an original “perfection”—by those lights, my Augustinianism is equally Irenaean.
16. For example, see Audrey Chapman’s remark: “Genetic science, of course, obviates the biblical literalism that attributes human sin to the decision of Adam and Eve to eat of the tree of knowledge. . . . Moreover, evolutionary history also makes no room in its time scheme for an Eden story, that is, a point prior to which human nature was benign and after which it was fallen” (1999, 189).

17. For this typical application of historical criticism, see several essays in Stephen Barton and David Wilkinson (2009). For similar moves, see Lamoureux (2008).
18. These hermeneutical moves go back at least to Isaac La Peyrère (1596–1676), who argued that Adam and Eve were not the first human beings; he became one of the pioneers of historical criticism of the Bible (see Popkin 1987).
19. Emphasis mine. Similarly, see Polkinghorne (1991, 99–100).
20. For further exploration on the connections between entropy and evil, see Russell (2008, 226–48).
21. For a recent attempt to cut the Gordian knot, see Swamidass (2019).
22. Ironically, Brunner himself rejected a historical fall and tried to reinterpret it Christocentrically.
23. I recognize that many scholars reject the historicity of Genesis 1–11, especially in light of archaeology, paleoanthropology, paleodemography, and historical criticism of the earliest written sources; for those who accept that conclusion, my argument loses some of its force. I cannot possibly address all the relevant epistemic issues within the limits of this article, but see Collins (2011) for an analysis of these themes.
24. For balance, see Wasserman and Wachbroit (2001).
25. For example, see Keathley, Stump, and Aguirre (2017) and Wood and Falk (2019).
26. In a Scandinavian version of the Nordic myth, Hedin (aka Hetel) elopes with a beautiful woman while her father is away. Hagen (aka Högni), the enraged father and the king, tracks down Hedin and battles him to the death. But a mysterious magic wakes the dead every night so that their fight “is renewed daily and will go on till the Twilight of the Gods” (Sandbach 1903, 153).
27. That is, if none of these attempts at resolving the conflict has succeeded; and if they actually multiply the difficulties—as I have argued—it at least raises the possibility that the problem lies with science (or with standard interpretations of the scientific data) rather than with the doctrine of sin itself.
28. Admittedly, the state of the science that Blocher was interacting with has since moved on (for a recent dialogue with Blocher’s arguments, see Jaeger 2017).
29. For my constructive account that engages these and other recent proposals, see Madueme (forthcoming).
30. This methodological naturalism is the *modus operandi* for most practicing scientists (e.g., de Vries 1986). Some have argued, however, that a “mere theistic evolution” does not require methodological naturalism in scientific contexts. See Murray and Churchill (2020, esp. 22–24).
31. For a similar argument, see Dawes (2016).
32. I am grateful to Robert Erle Barham, Tim Morris, Michael Radmacher, Joshua Swamidass, Jitse van der Meer, John Wingard, and the anonymous reviewers for critical feedback on earlier versions of this article.

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