

# Genesis, Evil, and Modern Science

by William A. Dembski

## 1 The Attraction of a Young Earth

A tight link between the world's evil and human sin no longer appears plausible because natural history seems incapable of being squared with a traditional view of the Fall. Even though I accept standard astrophysical and geological dating (12 billion years for the universe, 4.5 billion years for the Earth), young-earth creationists deserve credit here. They see the crucial significance, theologically, of preserving the link between evil (both personal and natural) and human sin. That's why, when asked what's riding on a young earth, proponents of this position invariably cite Romans 5:12, which speaks of death as a consequence of human sin.<sup>1</sup>

To be sure, one can try to make an exegetical argument that Romans 5:12 is speaking strictly about human death. But young-earth creationists have an easier time of it, both exegetically and theologically, in interpreting this passage as speaking about all death and not just human death. A world in which natural evils such as death, predation, parasitism, disease, drought, famines, earthquakes, and hurricanes precede humans and thus appear causally disconnected from the Fall seems hard to square with a creation that, from the start, is created good. Without a young earth (i.e., an earth created in six 24-hour days and spanning a history of only a few thousand years), how can such natural evils be traced back to human sin?

Young-earth creationism presents a straightforward chronology that aligns the order of creation with a traditional conception of the Fall: God creates a perfect world, God places humans in that world, they sin, and the world goes haywire. In this chronology, theology and history march in sync with the first human sin predating and being causally responsible for natural as well as personal evil. Yet if the bulk of natural history predates humans by billions of years and if over the last 600 million years multicelled animals have been emerging, competing, fighting, preying, parasitizing, exterminating, and going extinct, then young-earth creationism's harmony of theology and history becomes insupportable. In that case, natural history as described by modern science appears irreconcilable with the order of creation as described by Genesis.

Creation, according to Genesis, is a progression of effected words spoken by God.<sup>2</sup> This progression has an inherent logic since for one word to take effect depends on others having taken effect (e.g., the creation of fish presupposes the creation of water). This logic is what is meant by

the order of creation (cf. the order of divine decrees in reformed theology). Accordingly, we can think of the order of creation as history from the vantage of divine intention and action. This top-down view of history regards creation as a drama produced, directed, and written by God and sees the logic of this history as the pattern of purposes that God intends for creation. History from such a divine perspective contrasts with our ordinary, bottom-up view of history, often referred to as natural history. Natural history confines history to space and time and sees the logic of history as determined by physical causality.

This distinction between the order of creation and natural history is a special case of a deeper distinction regarding the nature of time. In English, we have just one word for time. But the Greek of the New Testament had two: *chronos* and *kairos*. According to the standard lexicon of New Testament Greek by Arndt and Gingrich, *chronos* denotes mere duration whereas *kairos* denotes time in combination with purpose (especially divine purpose). Thus, in defining *kairos*, Arndt and Gingrich offer such definitions as "a welcome time," "the right, proper, favorable time," and "the time of crisis."<sup>3</sup> The special role of *kairos* in fulfilling divine purposes is reflected in the liturgy of the Eastern Orthodox Church, which begins with the deacon calling to the congregation, "It is time [*kairos*] for the Lord to act," signifying that in worship temporality and eternity intersect.<sup>4</sup>

Paul Tillich made much of the distinction between *chronos* and *kairos* in his theology. In his lectures on the history of Christian thought, he remarked,

[*Kairos* describes] the feeling that the time [is] ripe, mature, prepared. It is a Greek word which, again, witnesses to the richness of the Greek language and the poverty of modern languages in comparison with it. We have only the one word "time." The Greeks had two words: *chronos* (still used in "chronology," "chronometer," etc.): it is clock time, time which is measured. Then there is the word *kairos*, which is not the quantitative time of the watch, but is the qualitative time of the occasion: the "right" time. "It is not yet *kairos*," the hour; the hour has not yet come. (Cf. in the Gospel stories....) There are things in which the right time, the *kairos*, has not yet come. *Kairos* is the time which indicates that something has happened which makes an action possible or impossible. We all have in our lives moments in which we feel that

<sup>1</sup>See, for instance, Henry Morris, *Scientific Creationism* (San Diego, Calif.: Creation-Life Publishers, 1974), 208, 211, 226, 229, 243, 245. Other scriptural passages that young-earth creationists cite to argue for death being a consequence of human sin include Rom. 6:23 and 1 Cor. 15:20–23.

<sup>2</sup>See William A. Dembski, *Intelligent Design: The Bridge Between Science and Theology* (Downers Grove, Ill.: InterVarsity, 1999), ch. 8, titled "The Act of Creation."

<sup>3</sup>William F. Arndt and F. Wilbur Gingrich, *A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, 2<sup>nd</sup> ed. (Chicago: University of Chicago Press, 1979), 394–395.

<sup>4</sup>See <http://www.holy-trinity.org/liturgics/sokolov-deacon.html> (last accessed May 11, 2006), which gives the notes to deacons of the Eastern Orthodox liturgy.

now is the right time for something: now I am mature enough for this, now everything around me is prepared for this, now I can make the decision, etc.: this is *kairos*. In this sense, Paul and the early Church spoke of the “right time,” for the coming of the Christ. The early Church, and Paul to a certain extent, tried to show why this time in which the Christ appeared was the right time, why it is the providential constellation of factors which makes His appearance possible.<sup>5</sup>

The distinction between *chronos* and *kairos* can be understood in light of the New Testament distinction between the visible realm (i.e., the physical world or *kosmos*) and the invisible realm (i.e., the heavenly world or *ouranos*).<sup>6</sup> Time operates differently in these two realms. According to the Apostle Paul, “the things which are seen are temporal; but the things which are not seen are eternal.” (2 Corinthians 4:18) The visible realm thus operates according to *chronos*, the simple passage of time. But the invisible realm, in which God resides, operates according to *kairos*, the ordering of reality according to divine purposes. Of the two forms of time, *kairos* is the more basic. *Chronos* is the time of physics, and physics has only been around as long as the cosmos. But *kairos* is God’s time, and God has been around forever. The *chronos-kairos* distinction underwrites such scriptural assertions as “One day is with the Lord as a thousand years, and a thousand years as one day.” (2 Peter 3:8) And yet, *chronos* and *kairos* are not utterly separate. When the visible and invisible realms intersect, *kairos* becomes evident within *chronos*. The creation of the world and the incarnation of the Second Person of the Trinity are the preeminent instances of this intersection.

Given that time means different things from an earthly and heavenly vantage, Genesis 1 confronts us with the problem of aligning natural history (*chronos*) with the order of creation (*kairos*). To this problem, young-earth creationism offers a straightforward solution: it identifies natural

history with the order of creation. This solution is, to be sure, theologically neat. Yet, in our current noetic environment, informed as it is by modern astrophysics and geology, the scientific community as a whole regards young-earth creationism as scientifically untenable. Some young-earth creationists will even concede this point, admitting that the preponderance of scientific evidence goes against their position. Nevertheless, they feel compelled to maintain their young-earth position because they see Scripture as requiring it. Their hope is that science in the future will vindicate their position.<sup>7</sup>

The majority of young-earth creationists, however, find fault with our current scientific understanding of the age of the Earth and universe, arguing that a young-earth position actually makes for better science.<sup>8</sup> I personally have found such arguments unconvincing. Consider, for instance, the Institute for Creation Research’s RATE project (RATE = Radioisotopes and the Age of the Earth). Donald DeYoung, in the last chapter of his recent book on the topic, outlines the “challenges” (his word) that remain. Here is one of several challenges that, to my mind, significantly undercuts the project:

*The acceleration of nuclear decay* [which is required for the RATE project to establish a young earth] gives rise to some basic unanswered questions. Why did it occur and what was the mechanism? Exactly when did the decay rates increase? Each of these questions has both scientific and theological components. There is also a serious concern for the protection of plant, animal, and human life from increased nuclear radiation during the Genesis flood event. Further insight is needed on these issues.<sup>9</sup>

If the science is against a young earth, the history of biblical interpretation is not. Indeed, young-earth creationism was overwhelmingly the position of the Church from the Church Fathers through the Reformers. Even Origen and Augustine, who saw the order of creation as diverging from natural history (and thus were sensitive to the *kairos-chronos* distinction) held to a recent earth.<sup>10</sup> Notwithstand-

<sup>5</sup>Available online at

<http://www.religion-online.org/showchapter.asp?title=2310&C=2308> (last accessed May 11, 2006). See also the opening of Tillich’s *A History of Christian Thought* (New York: Touchstone, 1972) as well as volume 3 of his *Systematic Theology* (Chicago: University of Chicago Press, 1967).

<sup>6</sup>Lee Irons and Meredith G. Kline, in their contribution to *The Genesis Debate*, essentially reinvent the *chronos-kairos* distinction, distinguishing a “lower-register” cosmology, which is the realm of the visible, from an “upper-register” cosmology, which is the realm of the invisible. As they put it: “The two-register cosmology of Scripture [consists] of the upper (invisible) and lower (visible) registers. . . . [The] two-register cosmology explains the significance of the nonliteral nature of the time indicators in Genesis 1 within the overall cosmological teaching of Scripture. . . . Although some critics might be tempted to dismiss two-register cosmology as a speculative construct, in reality the terms *upper register* and *lower register* are useful terms for the two realms that compose the created order. The upper register is the invisible dwelling place of God and His holy angels, that is, heaven. The lower register is called ‘earth,’ but includes the whole visible cosmos from the planet Earth to the star-studded sky (Col. 1:16).” See their essay “The Framework View” in David G. Hagopian, *The Genesis Debate: Three Views on the Days of Creation* (Mission Viejo, Calif.: Crux Press, 2001), 236–237.

<sup>7</sup>See the essay titled “Young Earth Creationism” by Paul Nelson and John Mark Reynolds in J. P. Moreland and John Mark Reynolds, *Three Views on Creation and Evolution* (Grand Rapids, Mich.: Zondervan, 1999).

<sup>8</sup>Don DeYoung, *Thousands . . . Not Billions: Challenging an Icon of Evolution, Questioning the Age of the Earth* (Green Forest, Ariz.: Master Books, 2005).

<sup>9</sup>*Ibid.*, 180. Italics in the original. Compare Kurt Wise’s view of *catastrophic plate tectonics*, in which “new ocean floor was being created during the Flood at miles per hour with reversals occurring every couple of weeks.” Wise has yet to account for how such an acceleration of ordinary plate tectonic movement, in which the Earth’s crust moves in centimeters per year rather than in miles per hour, can avoid the destructive effects of the heat generated by such acceleration. See Wise, *Faith, Form and Time: What the Bible Teaches and Science Confirms about Creation and the Age of the Universe* (Nashville: Broadman & Holman, 2002), 193.

<sup>10</sup>Origen: “After these statements, Celsus, from a secret desire to cast discredit upon the Mosaic account of the creation, which teaches

ing, we have examples in the history of biblical interpretation where a view once universally held was eventually abandoned. For instance, at the time a young earth was unquestioned, the Church also taught that the Earth was stationary. Psalm 93 states that the Earth is established forever and cannot be moved. A face-value interpretation of Psalm 93 seems to require geocentrism. And yet, today's young-earth creationists accept the Copernican Revolution. Moreover, if face-value interpretation is the key to biblical hermeneutics,<sup>11</sup> what are we to make of the seventh day of creation, the day of God's rest? Was it also exactly twenty-four hours in length? Many biblical scholars think that we are still in the seventh day.<sup>12</sup>

This is well-worn ground, and young-earth creationists have answers to these questions, just as those who propose alternative interpretations of Genesis have rebuttals. As Christians we have an obligation, as the Apostle Paul put it, to "rightly divide" (i.e., interpret) the Scriptures. But what guides our interpretation of the Scriptures? Clearly, our knowledge of the world plays some role. Our knowledge of physics from the seventeenth century onwards has rendered geocentrism untenable. In trying to balance the science of the day with the interpretation of Scripture, I therefore

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that the world is not yet ten thousand years old, but very much under that, while concealing his wish, intimates his agreement with those who hold that the world is uncreated." *Contra Celsum (Against Celsum)* 1.19, *Ante-Nicene Fathers* 4, 404. Augustine: "They are deceived, too, by those highly mendacious documents which profess to give the history of many thousand years, though, reckoning by the sacred writings, we find that not 6000 years have yet passed." Augustine, "Of the Falseness of the History Which Allots Many Thousand Years to the World's Past," *De Civitate Dei (The City of God)*, xii, 10. Nonetheless, Origen questioned the order of days by asking how the sun and moon could be created on day four when light was created on day one and yet depends on such heavenly bodies for its existence. Likewise, Augustine, in his *Literal Commentary on Genesis*, speaks of a simultaneous creation. Neither theologian therefore held to young-earth creationism as this position is understood today, which requires a strict face-value interpretation of Genesis (six exact 24-hour days).

<sup>11</sup>Clearly, face-value interpretation cannot be the key to biblical hermeneutics. Consider Matthew 18:8-9: "If thy hand or thy foot offend thee, cut them off, and cast them from thee: it is better for thee to enter into life halt or maimed, rather than having two hands or two feet to be cast into everlasting fire. And if thine eye offend thee, pluck it out, and cast it from thee: it is better for thee to enter into life with one eye, rather than having two eyes to be cast into hell fire." Anyone who interprets this passage at face-value is likely to be put in a straitjacket for one's own protection.

<sup>12</sup>For instance, Charles Aalders writes, "It would be difficult to conceive of this 'seventh day' as an ordinary 24-hour day, as many claim, or as a day from sunup to sundown. This immediately raises the problem of whether God's rest continued for only one 24-hour day. Certainly, we must consider the possibility that this rest of God still continues. For us humans a day of rest is always followed by another series of work days. But this is not the case with God's creation days. With Him we have six days of creation and then one day of rest. But His day of rest is then not followed by more days of creation work. Our attention should also be called to the omission of any reference to 'evening' and 'morning' with respect to this day of rest. In the light of what has been said above, this is understandable. This seventh day began with a morning but it had no evening because it still continues." G. Ch. Aalders, *Genesis*, vol. 1, trans. W. Heynen (Grand Rapids, Mich.: Zondervan, 1981), 75-76.

often come back to an observation of the nineteenth century Princeton theologian Charles Hodge. Early in his systematic theology, he noted that even though Scripture is true, our interpretations of it can be in error; as a consequence, it can be a trial for the Church when long-held interpretations are thrown into question. As he put it,

Christians have commonly believed that the earth has existed only a few thousands of years. If geologists finally prove that it has existed for myriads of ages, it will be found that the first chapter of Genesis is in full accord with the facts, and that the last results of science are embodied on the first page of the Bible. *It may cost the church a severe struggle to give up one interpretation and adopt another*, as it did in the seventeenth century [when the Copernican system displaced the Ptolemaic system of the universe], but no real evil need be apprehended. The Bible has stood, and still stands in the presence of the whole scientific world with its claims unshaken.<sup>13</sup>

Despite the Galileo episode, the Church in the end willingly relinquished geocentrism. Contrary to the widespread misconception that the Copernican revolution demoted us from a privileged place in the universe, the center of the universe was, in the Ptolemaic-Aristotelian cosmology that held sway prior to Copernicus, the place of least privilege. It was a place of corruption and mortality. For incorruption and immortality, one had to go beyond the Earth to the heavenly bodies, which moved around the Earth in unending circular orbits and were therefore regarded as the realm of eternity. At the outer reaches of heaven was the Empyrean, thought by the ancients to be a realm of pure fire or light and within medieval Christian theology to be the abode of God and the angels.<sup>14</sup>

Except for preserving the face-value interpretation of certain Old Testament passages (like Psalm 93), nothing much seems to have been riding theologically on preserving geocentrism as a proper interpretation of Scripture. The same cannot be said for a young earth. A young earth seems to be required to maintain a traditional understanding of the Fall. And yet a young earth clashes sharply with mainstream science. Christians therefore seem to be in a position of having to choose their poison. They can go with a young earth, thereby maintaining theological orthodoxy but committing scientific heresy; or they can go with an old earth, thereby committing theological heresy but maintaining scientific orthodoxy.

## 2 The Problem with Old-Earth Creationism

This clash of theological to scientific orthodoxy constitutes a false dilemma. Indeed, I will argue that one can be both theologically orthodox about the Fall and scientifically

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<sup>13</sup>Charles Hodge, *Systematic Theology*, vol. 1 (reprinted Grand Rapids, Mich.: Eerdmans, 1981), 171. Emphasis added.

<sup>14</sup>All of this is beautifully recounted in Gonzalez and Richards, *The Privileged Planet* in chapter 11 titled "The Revisionist History of the Copernican Revolution."

orthodox about the age of the Earth. Nonetheless, the actual arguments I've seen from old-earth creationists that attempt to preserve both theological and scientific orthodoxy have struck me as inadequate if by theological orthodoxy one means a traditional understanding of the Fall that traces all natural and personal evil in the world to human sin. Take Hugh Ross. Ross does not believe the Garden of Eden was free of death, decay, pain, and suffering. For him, there was never a perfect paradise. To justify this claim scripturally, Ross will cite Genesis 3:16, in which God informs Eve after she has sinned that he will greatly multiply her pain in childbirth. Since zero multiplied by anything remains zero, Ross infers that God did not here initiate Eve's pain but rather increased her existing pain in childbirth. More generally, Ross will suggest that God uses randomness, waste, and inefficiencies (his terms) to bring about the "very good" world into which he placed Adam.<sup>15</sup>

Mark Whorton, in his recent book on the age of the Earth, attempts to justify the creation of a less than perfect world into which God then places humans who have yet to sin (accordingly, the lack of perfection of the world is not to be attributed to human sin). To argue his point, Whorton contrasts what he calls a Perfect Paradise Paradigm with a Perfect Purpose Paradigm:

The two creation paradigms offer diametrically different perspectives on the problem of suffering. The Perfect Paradise Paradigm views suffering in light of the past. All suffering is traceable back to the original sin of Adam in the garden. It was never God's intent for His creation to suffer or be blemished in any way because He created it to be "very good." In stark contrast, the Perfect Purpose Paradigm sees suffering in light of the future. God has a plan, and history is unfolding in a providentially directed process that will ultimately accomplish His eternal purpose. Until the end, the plan will not be complete and the purpose will not be fully accomplished. . . . Suffering in this life can only be reconciled from the eternal perspective of the Master's plan.<sup>16</sup>

Thus, according to Whorton's Perfect Purpose Paradigm, God creates a world of suffering not in response to human sin but to accomplish some future end (i.e., "the Master's plan"). But this makes human suffering a means to an end. And even if this end is lofty, it is still the case that we are being used. Used is used, and there is no way to make this palatable, much less compatible with human dignity. That's why Kant taught that we must treat fellow human beings not as means but as ends in themselves. And that's why, unless human suffering is permitted by God because, at some level, we have brought it on ourselves, Whorton's Perfect Purpose Paradigm commits an end-justifies-the-means fallacy.

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<sup>15</sup>Hugh Ross, *Creation and Time: A Biblical and Scientific Perspective on the Creation-Date Controversy* (Colorado Springs: Navpress, 1994), 55, 65–69, 88.

<sup>16</sup>Mark S. Whorton, *Peril in Paradise: Theology, Science, and the Age of the Earth* (Waynesboro, Georgia: Authentic Media, 2005), 151.

In making sense of the Fall in light of modern science, old-earth creationists often find themselves having to deny that natural evil is morally significant. The rationale here is that personal evil (the harm we intentionally cause to ourselves and others) doesn't kick in until humans first sin, and so, by denying that natural evil is morally significant, old-earth creationists, like their young-earth counterparts, are able to attribute all morally significant evil to human sin after all. On this view, personal evil is morally significant but natural evil doesn't become morally significant until humans experience it as alienation from God, which they do once they have sinned (i.e., after the Fall).

One way to justify that natural evils are not morally significant, inspired by Descartes but no longer popular, is to characterize animals as automatons (i.e., as complex machines consisting of bones, muscles, and organs that in principle could be replaced with cogs, cams, and pistons) and thus to deny them the ability to suffer as humans do. Accordingly, only souls made in the image of God can truly suffer and thus experience natural evil as morally significant. Needless to say, in our pet-friendly culture, this way of dealing with natural evil does not sit well with our noetic environment.

Another way to justify that natural evils are not morally significant is to grit one's teeth and boldly assert that God takes full responsibility for natural evil, that he directly created it, that he even takes pleasure in it, and that, however counterintuitive it may seem, natural evil is entirely compatible with the goodness of God in creation. Accordingly, we are mistaken if we take death, predation, parasitism, disease, drought, famines, earthquakes, and hurricanes as evidence against the creation being "very good." On this view, the challenge of theodicy is not, as Mark Whorton advises, to trust that God's good purposes will be accomplished somewhere down the road but to get over our squeamishness. David Snoke, in justifying that a good God could create dangerous animals and be directly responsible for bringing about natural evil, puts it this way:

The young-earth creationist and the atheist Darwinist have in common their belief that God would never create killer things. The atheist removes God from the picture to account for the natural evils of this world, while the young-earth creationist removes the record of killer animals from the picture to preserve the goodness of God. Both of these views need to interact with a fully biblical picture of God, as he is revealed in Scripture and in nature—powerful, uncontrollable, and able to pour out extreme violence, yet also just, merciful, and able to bless beyond all our expectations.<sup>17</sup>

But how is a God who creates killer things and pours out extreme violence to be regarded as benevolent except insofar as such acts respond to human sin and have redemptive significance? Snoke gives no indication that God brought about natural evil for the greater good of helping to

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<sup>17</sup>David Snoke, "Why Were Dangerous Animals Created?" *Perspectives on Science and Christian Faith* 56(2) (2004): 125, available online at <http://www.asa3.org/ASA/PSCF/2004/PSCF6-04Snoke.pdf> (last accessed January 10, 2006).

redeem humanity. Instead, Snoko portrays the violence and cruelty of nature as a form of divine self-amusement: “God does claim direct responsibility for the creation of natural evil, that is, things in nature which terrorize us. . . . God neither apologizes for making these things, nor weeps over them—he glories in them.”<sup>18</sup>

Elsewhere, Snoko recalls one of his grandfather’s favorite acronyms: “NITRIC”—“Nature In The Rough Is Cruel.”<sup>19</sup> The way Snoko portrays it, NITRIC is a positive virtue of nature rather than defect of nature that needs to be eradicated. Whatever happened to the lovingkindness of God not just for humanity but also for creation as a whole (the Hebrew *hesed*)? Whatever happened to love as the defining attribute of God (the Greek *agape*)? How is the love that 1 Corinthians 13 ascribes to God to be reconciled with the violence that Snoko ascribes to God?

Snoko has fallen into the trap of converting a problem into its own solution. It does nothing to attenuate the problem of natural evil to say that natural evil is really okay because God invents it and is proud of inventing it—full stop. If anything, such a claim exacerbates the problem of natural evil because it removes from natural evil any redemptive element. The only way for natural evil, and the suffering it entails, to be redemptive is if it helps to free the creation from a deeper, more insidious evil. Natural evil constitutes a disordering of nature. A benevolent God will bring about natural evil only as a last-resort to remedy a still worse evil, not as an end in itself over which to glory.

### 3 The Gravity of Sin<sup>20</sup>

The question that now needs to be addressed is why would a benevolent God permit evil, tolerate its continuation, and even invent a form of it (i.e., natural evil). To answer this question, we need to reexamine the origin of evil. Earlier, I argued that evil is the result of a will that has turned against God. Clearly, the unity of the Godhead is such that God’s will does not, and indeed cannot, turn against God. Evil, therefore, is the result of a *creaturely* will turning against God. The essence of evil is rebellion of the creature. This rebellion constitutes sin (singular) and finds expression in numerous particular sins (plural). As a consequence, sin separates us from God. This rift between God and humanity, however, cannot be left to stand. To let it stand would thwart God’s purpose for humanity, which is to be united with humanity in love. Once sin has entered the picture, God’s overriding task is to find a way to heal this rift.

At this point one might ask what the big deal is about God healing the rift between humanity and himself and why it should be God’s task to oversee the healing. Since we’re the guilty party, why shouldn’t that burden fall on us? Better yet, why doesn’t God just get over it and forgive

us? As Heinrich Heine is reported to have said on his death bed, “Le bon Dieu me pardonnera; c’est son metier” (“The good God will forgive me; that’s his job”).<sup>21</sup> God is in the forgiving business, so why doesn’t he just have at it? There are two problems with this train of questions:

- (1) It presupposes that humans have the power to heal the rift with God by a straightforward act of the will, voluntarily desisting from their rebellion against God. This is Pelagianism. The clear teaching of Scripture is that humanity does not possess this power (see Romans).
- (2) Forgiveness, in the uncomplicated sense of “I won’t hold what you did against you,” doesn’t address the root cause of what led to the rift that calls for forgiveness. Without addressing this root cause, forgiveness becomes irresponsible, condoning what should not be condoned.

The term for God healing the rift between humanity and himself is *atonement*. Within Christian theology, atonement results through the redemption of Christ on the Cross. Redemption is a business term. It denotes an exchange that restores to one party something previously belonging to it but now in the hands of another. God is the redeemer. Humanity used to belong to God. But through sin, humanity has become captive to evil. The redemptive work of God in Christ on the Cross restores humanity back to God.

This picture of Christ’s redeeming work is accurate as far as it goes, but it omits one crucial element: humanity, in becoming captive to evil, gave its consent. In other words, humans are complicit in the evil from which God is striving to deliver them. For redemption to effectively deliver humanity from evil therefore requires humanity to be clear as to precisely what it has consented to in rebelling against God and embracing evil. To achieve this clarity, humanity must experience the full brunt of the evil that it has set in motion, and this requires that the creation itself fully manifest the consequences of humanity’s rebellion against God. This does not mean the creation has to become as corrupt as it could possibly be. But it does mean that the creation must not conceal or soft-sell the gravity of sin. It also explains why God, despite having the power to intervene and stop specific evils, may refrain from doing so.

In answer, then, to the question why a benevolent God would permit evil, tolerate its continuation, and even invent a form of it (i.e., natural evil), it is to manifest the full consequences of human sin so that when Christ redeems us, we may clearly understand what we have been redeemed from. Without this clarity about the evil we have set in motion, we will always be in danger of reverting back to it because we will not see its gravity. Instead, we will treat it lightly, rationalize it, shift the blame for it—in short, we will do anything but face the tragedy of willfully separating ourselves from the source of our life, who is God. Addition-

<sup>18</sup>Ibid., 119–120.

<sup>19</sup>Ibid., 117.

<sup>20</sup>This section was largely inspired by John Stott’s *The Cross of Christ* (Downers Grove, Ill.: InterVarsity, 1986) and, in particular, his assimilation there of Saint Anselm’s *Cur Deus Homo?*

<sup>21</sup>Ibid., 87. Compare <http://www.ronaldbrucemeyer.com/rants/1213almanac.htm> (last accessed May 11, 2006), which places the quote a decade earlier in response to an attack of paralysis.

ally, we will fail to recognize the enormity of Christ's suffering on the Cross to redeem us. In consequence, we will not be moved to repent of our sin and return to God in trust and humility.

In a fallen world, the only currency of love is suffering. Indeed, the only way to gauge the extent to which one loves another is by what that person is willing to endure for the other. Without the cost incurred by suffering, love among fallen creatures becomes cheap and self-indulgent. Suffering removes the suspicion that the good we do for one another is for ulterior motives, with strings attached, a quid pro quo. Christ, by going to the Cross and there taking on himself the sin of the whole world, fully demonstrates the love of God. Moreover, only such a full demonstration of God's love enables us to love God with all our heart. The extent to which we can love God depends on the extent to which God has demonstrated his love for us, and that depends on the extent of evil which God has had to absorb, suffer, and overcome on our behalf.

To say that love in a fallen world depends on suffering raises the question what love would look like in a nonfallen world. In a world untouched by sin, love is expressed through the gift of sacrifice. To see this, consider that the very existence of the world depends on a divine gift of sacrifice. A common challenge to the Christian doctrine of creation is to ask whether in creating the world, God has not augmented himself since it would appear that God plus the world is greater than God alone. This is supposed to raise an insuperable difficulty for Christian orthodoxy, which regards God as perfect and thus as not improvable through the addition of some object, event, or state of affairs external to God (e.g., the world).

But, in fact, God plus the world is less than God alone. To see this, consider that God could have created any number of worlds. Thus, in creating this one, God, far from expanding himself, instead contracted himself. The lesson here is that even apart from evil and sin, it is possible for intelligences (whether created or uncreated) to give irrevocably so as to deny and thereby sacrifice other options. Christian theology has always regarded God's creation of the world as an act of love. In the act of creation, God gives himself irrevocably to this world to the exclusion of all others. Creation is a gift of sacrifice. As beings created in God's image, we are likewise able, and indeed called, to offer such gifts of sacrifice. Moreover, such acts of love would be ours to perform even if we had never sinned.

In a fallen world, however, sacrifice by itself is not enough to assure love. The problem is that fallen creatures know very well about delayed gratification, sacrificing an immediate good for a greater benefit down the road. This is not to say there's anything wrong with delayed gratification of rewards or sacrifice in this sense. But sacrifice ceases to be a gauge for love when it becomes an instrument of exchange, part of a system of reciprocity in which persons are duly compensated for costs incurred. This is why Jesus remarks, "Greater love hath no man than this, that a man lay down his life for his friends." (John 15:13) In laying down his life at the Cross, Jesus offered himself in a sacrifice of suffering that cannot be compensated (certainly not by us). Only the sacrifice of a suffering that cannot be compensated is a true gauge of love in a fallen world.

It is vital here to have a correct picture of Christ's redemption and our role in it. In allowing evil and then redeeming us from it, God is not an arsonist who starts a fire, let's things heat up for us, and then, at the last moment, steps in so that he can be the big hero. Nor is God a casual bystander, who sees a fire start spontaneously and then lets it get out of control so that he can be the big hero to rescue us. We are the arsonists. We started the fire. God wants to rescue us not only from the fire we started but also, and more importantly, from our disposition to start fires, that is, from our life of arson. But to rescue us from a life of arson requires that we know the seriousness of what arson can do. Fires always start out small. If God always instantly put out the fires we start, we would never appreciate the damage fires can do. God therefore allows the fire that we have started in consenting to evil to rage, but not so that he can be a big hero when he rescues us from it but so that we can rightly understand the human condition and come to our senses. In rescuing us, God does end up being a hero. But that is not the point. The point is to fix a broken relationship between God and humanity.

This view of God's redemption in Christ is basic Christian theology. I regard it as not only true but also mandatory for sound Christian faith. Nonetheless, it presupposes that all evil in the world ultimately traces back to human sin. For this view of redemption to be plausible within our current noetic environment therefore requires an explanation of how natural evil could precede the first human sin and yet result from it. Contemporary science is firmly convinced that the Earth and universe are not thousands but billions of years old. It follows that humans have only been around a minuscule portion of that time and that prior to their arrival natural evils abounded. To see how natural evil could precede the first human sin and yet be a consequence of it, we will need to examine a result known as Newcomb's paradox and draw out the implications of this paradox for divine action.

#### 4 Newcomb's Paradox

Physicist William Newcomb devised the paradox that bears his name in the 1960s. The late Harvard philosopher Robert Nozick then popularized it by applying it to decision theory.<sup>22</sup> The paradox works as follows. Imagine two boxes, one black and the other white. The black box always contains \$1,000. The white box contains either \$1,000,000 or nothing. The contents of neither box is visible. You can choose to take the sum of money in both boxes or the money that's in the white box alone. Suppose an agent with perfect foreknowledge (i.e., with perfect knowledge of future contingent propositions) informs you that \$1,000,000 will today be put into the white box if tomorrow you choose only the white box but that no money will

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<sup>22</sup>Robert Nozick, "Newcomb's Problem and Two Principles of Choice," in N. Rescher, ed., *Essays in Honor of Carl G. Hempel*, Synthese Library (Dordrecht, Holland: D. Reidel, 1969), 115. For a nice popular treatment of Newcomb's paradox, see William Poundstone, *Labyrinths of Reason: Paradox, Puzzles, and the Frailty of Knowledge* (New York: Doubleday, 1988), ch. 12.

be put into the white box today if tomorrow you choose both boxes.

Tomorrow rolls around. What do you do? You can adopt either of two strategies: a one-box strategy or a two-box strategy. According to the two-box strategy, since whatever money in the white box has already been placed there, you may as well choose both boxes. To choose only the white box leaves you necessarily \$1,000 poorer. You'll get what's in the white box regardless (hopefully \$1,000,000) and you'll be sure to get the \$1,000 in the black box. On the other hand, you can adopt the one-box strategy. In adopting this strategy, you reason as follows: since you know the agent has perfect foreknowledge (let's say this has been verified on numerous occasions), if you choose both boxes, it's guaranteed that the white box will be empty. To choose both boxes therefore leaves you necessarily \$999,000 poorer. Sure, you'll get the \$1,000 in the black box, but you'll miss out on the \$1,000,000 that would have been placed in the white box if only you hadn't gotten greedy and decided to go for both boxes.

Newcomb's paradox was much discussed in the philosophical literature of the 1970s and 80s. One-boxers and two-boxers debated the merits of their preferred decision principle and divided pretty evenly. Always at issue was what sort of agent could in fact possess knowledge of future contingent propositions. William Lane Craig's article "Divine Foreknowledge and Newcomb's Paradox" appeared in 1987 and thus came toward the end of intense debate among philosophers over this paradox.<sup>23</sup> There Craig detailed how efforts to show that knowledge of future contingent propositions is incoherent all ended in stalemate. Of course, this by itself doesn't prove that such knowledge exists or is instantiated in any agent. Nonetheless, it leaves a wide-open door to the classical Christian view of divine foreknowledge, which historically has held that God possesses comprehensive knowledge of future contingent propositions.<sup>24</sup>

The overwhelming reason for truncating divine foreknowledge in current theological discussion (especially among openness and process theologians) is to assist in the task of theodicy. In such theodicies, a limited God is absolved from having to remove evils for the simple reason that he is incapable of removing them. But why engage in such theodicies at all? No sound arguments show that divine foreknowledge is logically incoherent. To argue against God knowing future contingent propositions invariably involves questionable assumptions about how the world, though created by God, might nonetheless impede God's knowledge of the future.<sup>25</sup> Moreover, divine foreknowledge does not preclude human freedom. If God fore-

knows what I shall choose, then I shall not choose otherwise. It doesn't follow, however, that I can't choose otherwise. As William Lane Craig puts it, "my freely chosen actions . . . supply the truth conditions for the future contingent propositions known by God."<sup>26</sup> In contrast to theodicies that attempt to justify God's goodness/benevolence by looking to divine limitation, I'm going to argue that full divine foreknowledge of future contingent propositions is indispensable to a theodicy that preserves the traditional understanding of the Fall (i.e., one that traces all evil in the world back to human sin).

## 5 The Teleological-Semantic Logic of Creation

Christian theism has traditionally regarded God as omniscient in the sense of possessing perfect knowledge of future contingent propositions and as omnipotent in the sense of being able to act effectively in the world to bring about any result that is not logically impossible. Combined with Newcomb's paradox, divine omniscience and omnipotence now yields an interesting insight into divine action, namely this: God is able to act preemptively in the world, anticipating events and, in particular, human actions, thereby guiding creation along paths that God deems best. In fact, it would display a lack of love and care for the world if such an omniscient and omnipotent creator God did not act preemptively in the world.

Embedded as we are in the world's nexus of cause and effect, such preemptive acts may strike us as counterintuitive. Because we are part of the world's causal nexus and limited in our knowledge, all our actions have unanticipated consequences. Thus, our power of preemption is extremely limited, based not on precise knowledge of the future but on probabilities (which can amount to completely unsubstantiated guesses). As creatures confined to space and time (time here conceived as *chronos*), our activities and those of the rest of physical creation follow a causal-temporal logic that treats time as linear and sees events as unfolding in tightly linked chains of cause and effect. The totality of these causal chains, the causal nexus of nature, has an integrity that does not permit willy-nilly changes. Change the causal nexus at one place, and other changes in cause-effect relations will ramify throughout space and time.

For beings like us embedded in the causal nexus of nature, the logic of cause and effect is inviolable. In contrast, God, as an omnipotent and omniscient being, transcends the physical world and therefore is not bound by this causal-temporal logic. This is not to say that in acting in the world God violates this logic. To violate it, he would need to be under its jurisdiction. But as the creator of nature's causal nexus and therefore as the originator of its causal-temporal logic, God perforce acts in ways that this logic cannot circumscribe. Indeed, if this logic did circumscribe divine action, then God would be part of nature and creation would be other than *ex nihilo*.

Because God knows the future and is able to act preemptively to anticipate future events, divine action properly follows not a causal-temporal logic but a teleological-

<sup>23</sup>William Lane Craig, "Divine Foreknowledge and Newcomb's Paradox," *Philosophia* 17 (1987): 331-350, available online at <http://www.leaderu.com/offices/billcraig/docs/newcomb.html> (last accessed January 12, 2006).

<sup>24</sup>For instance, in *The City of God* (v, 9) Augustine writes, "One who does not know all future things surely is not God."

<sup>25</sup>For instance, appeals to quantum indeterminacy to undercut divine foreknowledge are highly dubious—as though a deity that creates a world operating by quantum mechanical principles should be limited by those principles.

<sup>26</sup>*Ibid.*

semantic logic. This teleological-semantic logic treats time as nonlinear (cf. *kairos*) and sees God as acting in the world to accomplish his purposes in accord with the meaning and significance of the events happening in the world. The causal-temporal logic underlying the physical world and the teleological-semantic logic underlying divine action are not at odds—they do not contradict each other. At the same time, they are not reducible to each other.

The causal-temporal logic and the teleological-semantic logic constitute the two logics of creation. The causal-temporal logic is bottom-up and looks at the world from the vantage of physical causality. The teleological-semantic logic is top-down and looks at the world from the vantage of divine intention and action. The causal-temporal logic that underlies the physical world is the organizing principle for natural history (*chronos*). The teleological-semantic logic that underlies divine action is the organizing principle for the order of creation (*kairos*). As noted earlier, young-earth creationism attempts as much as possible to make natural history mirror the order of creation. Divine preemption, by contrast, suggests that natural history need not mirror the order of creation and that the two logics of creation can proceed on independent, though complementary, tracks.

An omniscient and omnipotent God who is able to act preemptively to anticipate human actions will certainly do so to anticipate so momentous a human action as the Fall. To see what's at stake here, suppose you knew with certainty that someone would commit a crime—as in the film *The Minority Report*. You could, as in the film, restrict the prospective criminal's freedom prior to committing the crime. The problem with such restrictions, however, is that up until the crime is committed, the person is literally innocent (i.e., has done no harm). To preempt by restricting the freedom of the would-be criminal is therefore to base legal praxis on the presumption of guilt rather than innocence. Moreover, if carried out consistently, this approach, depending on how many potential criminals are in the society, will require constantly putting people in straitjackets to prevent them from committing crimes. This hardly makes for a carefree and vibrant society.

An alternative approach that avoids these difficulties is for you to take steps prior to the crime to ensure that once it is committed, the person committing the crime is immediately dealt with effectively. With this approach, getting the proper structures in place beforehand so they are set to go once the crime is committed becomes a moral imperative lest the crime go unaddressed. Just what form those preemptive structures take will depend on your purposes. If, for instance, your aim were not punishment but rehabilitation, you might take steps so that the means for rehabilitation were in place prior to the crime being committed.

How, then, does God act preemptively to anticipate the Fall? Before answering this question, we need consider a wrinkle not addressed by Newcomb's Paradox but implicit in the teleological-semantic logic by which God acts in the world. In Newcomb's Paradox, an agent either places or refrains from placing \$1,000,000 in a white box depending on what a box-chooser is going to do. The agent's very act of placing money inside the box, however, does not in any way affect the box-chooser or, for that matter, the rest of

the world until the boxes are opened. The agent's act of placing the money is therefore causally isolated and does not ramify throughout the world as long as the boxes remain unopened.

The problem with this idealized situation is that in the real world there are no causally isolated events. Everything hangs together with everything else, and the slightest change in one thing can fundamentally change the course of history thereafter.<sup>27</sup> Thus, by the luck of a draw, a young Dostoevsky is spared execution and becomes the greatest of Russian novelists. Thus, by a butterfly flapping its wings in Brazil, a hurricane is averted in Miami. Thus, by a chance encounter, two people fall in love, marry, and produce children who would otherwise not have existed.

The causal structure of the world is extremely fragile. Indeed, the slightest change makes everything different—if not immediately, soon enough. That's why films like *It's a Wonderful Life*, *Frequency*, and *Timecop* (in decreasing order of excellence), which chart different possible futures but keep too many features of the world constant, make for entertaining fiction but are completely unrealistic. As with such films, Newcomb's Paradox, as originally formulated, does not factor in the fragility of the world's causal nexus. When we do factor it in, however, and try to understand what it would mean for God to act preemptively by anticipating future events, we come face to face with what I call the *infinite dialectic*.

Think of the infinite dialectic in this way: Suppose God acts to anticipate certain events. So long as divine action is not a hollow concept, God's actions make a difference in the world and therefore must induce novel events (all change in the physical world being mediated through events). But this requires that God act preemptively to anticipate the novel events induced by God's prior actions (priority here being conceived not temporally or causally [*chronos*] but in terms of the teleological-semantic logic [*kairos*] by which God orders the creation). And yet, such actions by God now induce still further novel events. And so on. This up and back between divine action and creaturely causation proceeds indefinitely. It constitutes an infinite dialectic. In the infinite dialectic, God does not so much act *in* the world as *across* the world (*across* both space and time).

Because of the fragility of the world's causal nexus, the infinite dialectic is ever in danger of spinning out of control, degenerating into a positive feedback loop in which divine preemption needs to rectify difficulties raised by (logically) prior acts of divine preemption. Consequently, only an infinitely powerful and infinitely wise God can pull off the infinite dialectic. The infinite dialectic renders divine action at once real-time and eternal. It bridges the immanent with the transcendent. In the infinite dialectic, God acts on the whole of creation at all times and in all places, acting not as a cause among other causes (God does not moonlight as a physical cause) but as a *cause of*

<sup>27</sup>This is the lesson of nonlinear dynamics as well as of quantum mechanics. See respectively James Gleick, *Chaos: Making a New Science* (New York: Viking, 1987) and David Bohm, *Wholeness and the Implicate Order* (London: Routledge & Kegan Paul, 1980).



causes (God causes physical causes to fulfill his purposes). As a cause of causes, God's action in the infinite dialectic is not merely ontological, in the sense of giving being to the world (cf. Paul Tillich's "ground of being"). Nor is it merely providential in a general sense, as might be subsumed under the regularities of nature (cf. God maintaining seasonal weather patterns).

In the infinite dialectic, God acts providentially to guide the world in its particulars, taking an active interest in the details of this world and making a difference at all levels of the created order. This is not to say that God is a micromanager. Good managers know the precise details of the system they are managing but intervene sparingly, giving the system as much autonomy as it needs to flourish. God is a good manager. In particular, he has not created the world to be his prosthesis or puppet. At the same time, even though God has granted the world a measure of autonomy, the world's autonomy is not absolute. Just as an orchestra cannot make do without the conductor's continual guidance, so too does the world require God's continual guidance. That guidance is neither dispensable nor coercive. It is real and powerful, and it takes the form of an infinite dialectic. Because of the infinite dialectic, Jesus can say that God knows our name, numbers the hairs on our head, and monitors the sparrow that falls to the ground.

## 6 A Kairological Reading of Genesis 1–3

Having distinguished the teleological-semantic logic of creation from the causal-temporal logic of the physical world, we are now in a position to offer a reading of Genesis 1–3 that reconciles a traditional understanding of the Fall (which traces all evil in the world to human sin) with a mainstream understanding of geology and cosmology (which regards the Earth and universe as billions of years old, and therefore makes natural evil predate humanity). The key to this reading is to interpret the days of creation in Genesis as natural divisions in the teleological-semantic logic of creation. Genesis 1 is therefore not to be interpreted as ordinary chronological time (*chronos*) but rather as time from the vantage of God's purposes (*kairos*). Accordingly, the days of creation are neither exact 24-hour days (as in young-earth creationism) nor epochs in natural history (as in old-earth creationism) nor even a literary device (as in the literary-framework theory).<sup>28</sup>

Rather, the days of creation in Genesis are actual (literal!) episodes in the divine creative activity. They represent key divisions in the divine order of creation, with one episode building logically on its predecessor. As a consequence, their description as chronological days needs to be viewed as an instance of the common scriptural practice of employing physical realities to illuminate deeper spiritual realities (cf. John 3:12). John Calvin referred to this practice as God condescending to our limited understanding. The justification for this practice is that the physical world, as a divine creative act, provides a window into the life and mind of God, the one who created it. (The general principle

here is that the things one makes and does invariably reveal something about oneself.)

Because the Genesis days represent key "kairological" divisions in the teleological-semantic logic of creation, a widely cited reason for treating the days of creation as strict 24-hour periods dissolves. Young-earth creationists sometimes insist that the author of Exodus, in listing the Ten Commandments, could only be justified in connecting sabbath observance to the days of creation if the days of creation were successive 24-hour chronological days (see Exodus 20:11 where sabbath observance is justified by noting that God created the world in six days and rested on the seventh). But if the days of creation are kairological, referring to basic divisions in the divine order of creation, then sabbath observance reflects a fundamental truth about the creation of the world. Specifically, since days form a basic division in the way humans experience time, sabbath observance becomes a way of getting us, who are made in the image of God, to recognize the significance of human work and rest in light of God's work and rest in creation. Without this sabbatarian perspective, we cannot understand the proper place of work or rest in human life.

Yet, from a purely chronological perspective, there is nothing particularly fitting or distinctive about God creating the world in six 24-hour days. God could presumably have created the same world using very different chronologies (in his *Literal Commentary on Genesis*, Augustine entertains the possibility of God creating everything in one chronological instant). By contrast, a kairological interpretation of the Genesis days gives greater force to sabbath observance, requiring humans to observe the sabbath because it reflects a fundamental reality about how God created the world and not because it underscores a purely contingent fact about the chronology of creation (a chronology which God could have altered in any number of ways to effect the same purposes in creation).

A kairological interpretation of the six days of creation is unashamedly anthropocentric. Genesis clearly teaches that humans are the end of creation. For instance, Genesis describes the creation as merely "good" before humans are created but describes it as "very good" only after they are created. God's activity in creation is therefore principally concerned with forming a universe that will serve as a home for humans. Although this anthropocentrism sits uneasily in the current noetic environment, it is not utterly foreign to it. Indeed, the intelligibility of the physical world by means of our intellects and, in particular, by means of such intellectual feats as mathematics suggests that we live in a meaningful world whose meaning was placed there for our benefit.<sup>29</sup>

To raise anthropocentrism in theological discussions often elicits the charge of humans creating God in their own image. Although there is a danger here, contemporary theological discussions have vastly overblown this danger.

<sup>28</sup>See, for instance, David G. Hagopian, *The Genesis Debate: Three Views on the Days of Creation* (Mission Viejo, Calif.: Crux Press, 2001).

<sup>29</sup>See Benjamin Wiker and Jonathan Witt, *A Meaningful Universe: How the Arts and Sciences Reveal the Genius of Nature* (Downers Grove, Ill.: Intervarsity, 2006), especially ch. 4. See also Mark Steiner, *The Applicability of Mathematics as a Philosophical Problem* (Cambridge, Mass.: Harvard University Press, 1999).

Precisely because humans are made in the image of God and because humans are the end of creation and because the Second Person of the Trinity was incarnated as a human being, our humanity (especially in light of Christology) is the best window into understanding God. This is not to say that we ever exhaustively comprehend God. But it is to say that knowledge of our humanity provides accurate knowledge of the Godhead.<sup>30</sup>

A kairological interpretation of the creation days in Genesis now proceeds as follows: On the first day, the most basic form of energy is created: light. With all matter and energy ultimately convertible to and from light, day one describes the beginning of physical reality.<sup>31</sup> With the backdrop of physical reality in place, God devotes days two and three to ordering the Earth so that it will provide a suitable home for humanity. On these days, God confines the Earth's water to appropriate locations and forms the plants on which humans and other animals will depend for their sustenance. On day four, God situates the Earth in a wider cosmic context. On day five, animals that inhabit the sea and sky are created. And finally, on day six, animals that inhabit dry land are created, most notably human beings. Finally, on day seven, God rests from his activity in creation. To be sure, Genesis 1 omits and abbreviates many details of creation. Nor does it provide insight into how the divine purposes of creation were implemented chronologically. Even so, here is the gist of creation as viewed kairologically.

The key question that now needs to be addressed is how to position the Fall within this kairological view of creation. In answering this question, we need to bear in mind that Genesis 1 describes God's *original* design plan for creation. The Fall and its consequences, in constituting a subversion of that design plan through human rebellion, elicits no novel creative activity from God. The Fall repre-

sents the entrance of evil into the world, and evil is always parasitic, never creative. Indeed, all our words for evil presuppose a good that has been subverted. Impurity presupposes purity, unrighteousness presupposes righteousness, deviation presupposes a way (i.e., a *via*) from which we've departed, sin (the Greek *hamartia*) presupposes a target that was missed, etc. This is not to deny or trivialize evil. Rather, it is to put evil in its proper place.

God's immediate response to the Fall is therefore not to create anew but to control the damage. In the Fall, humans rebelled against God and thereby invited evil into the world. The challenge God faces in controlling the damage resulting from this original sin is how to make humans realize the full extent of their sin so that, in the fullness of time, they can fully embrace the redemption in Christ and thus experience full release from sin. For this reason, God does not merely allow personal evils (the disordering of our souls and the sins we commit as a consequence) to run their course *subsequent* to the Fall. In addition, God also brings about natural evils (e.g., death, predation, parasitism, disease, drought, famines, earthquakes, and hurricanes), letting them run their course *prior* to the Fall. Thus, God himself disorders the creation, *making it defective on purpose*. God disorders the world not merely as a matter of justice (to bring judgment against human sin as required by God's holiness) but even more significantly as a matter of redemption (to bring humanity to its senses by making us realize the gravity of sin).

A kairological reading of Genesis preserves the young-earth creationist emphasis on tracing all evil in the world to human sin: God creates a perfect world, God places humans in that world, they sin, and the world goes haywire. But this raises the question how to make sense of the Fall chronologically. Humans do not merely exist kairologically in the divine mind; they exist chronologically in space and time, and the Fall occurred in space and time. To understand how the Fall occurred chronologically and how God acts preemptively to anticipate the Fall by allowing natural evils to rage prior to it, we need to take seriously that the drama of the Fall takes place in a *segregated area*. Genesis 2:8 refers to this area as a garden planted by God (i.e., the Garden of Eden). Now, ask yourself why God would need to plant a garden in a perfect world untouched by natural evil. In a perfect world, wouldn't the whole world be a garden? And why, once humans sin, do they have to be expelled from this garden and live outside it where natural evil is present?

Proponents of the Documentary Hypothesis for the Pentateuch ("JDEP") describe the juxtaposition of Genesis 1:1–2:3 and Genesis 2:4–3:24 as a kludge of two disparate and irreconcilable creation stories (the days of creation vs. humanity's creation and fall in the Garden).<sup>32</sup> But in fact, the second creation account, situated in the Garden, is just what's needed for *kairos* and *chronos* to converge in the Fall. If we accept that God acts preemptively to anticipate the Fall, then in the chronology leading up to the Fall, the

<sup>30</sup>The view presented here is thus at odds with extreme forms of "negative theology" in which the knowledge of God consists in what can (and on this view must) be denied of the deity. Rudolf Otto's *Mysterium Tremendum* is a case in point. The problem with a purely negative theology is that it is self-referentially incoherent. G. K. Chesterton made this point as follows: "We do not know enough about the unknown to know that it is unknowable." (See G. J. Marlin, R. P. Rabatin, and J. L. Swan (eds.), *The Quotable Chesterton* (Garden City, N.Y.: Image, 1987), 336.) Christian orthodoxy has always balanced an apophatic theology with a kataphatic theology. Apophatic theology recognizes that none of our concepts can fully encompass God and thus approaches the knowledge of God via negations. Kataphatic theology, on the other hand, recognizes that negation, if pushed too far, becomes a positive affirmation of divine inscrutability and thus emphasizes the need for positive affirmations about God that are accurate as far as they go but can only go so far.

<sup>31</sup>Some scholars see God as bringing physical reality into being in Genesis 1:1 and then interpret the days of creation as God organizing this brute unformed physical reality (described in Genesis 1:2 as "formless and void"). Nothing in my kairological reading of Genesis 1 is fundamentally changed on this view. There are, however, exegetical reasons for preferring the approach I am taking, which identifies the origin of physical reality with the creation of light on day 1. See, for instance, Marguerite Shuster's sermon on Genesis in Paul K. Jewett, ed., *God, Creation, and Revelation: A Neo-Evangelical Theology* (Grand Rapids: Eerdmans, 1991), 506–512.

<sup>32</sup>See Eugene Maly, "Introduction to the Pentateuch," in Raymond Brown, Joseph Fitzmyer, and Roland Murphy, eds., *Jerome Biblical Commentary* (Englewood Cliffs, N.J.: Prentice-Hall, 1968), 1:3–4.

world has already experienced, in the form of natural evil, the consequences of human sin. This seems to raise a difficulty, however, because for humans who have yet to sin to come into a world in which natural evil rages seems to put them at a disadvantage, tempting and opposing them with evils for which they are not (yet) responsible. The Garden of Eden, as a segregated area in which the effects of natural evil are not evident (one can think of it as a tropical paradise), provides the way out of this difficulty.

The essential point of the Fall is not the precise physical backdrop against which Adam and Eve play out their drama in the Garden but rather their phenomenological experience of willfully turning against God. Think of the hardware-software distinction in computer science. Different computer hardware (cf. different possible physical backdrops for creation) can run the same software (cf. the phenomenological experience of willfully turning against God). Perhaps one piece of hardware is state-of-the-art whereas the other is old and unreliable. Nonetheless, for a given software application, they may both run equally well, performing the required operations accurately. By analogy, one can imagine a “perfect creation” that has a segregated area in which Adam and Eve turn willfully against God and for which everything, both inside and outside that area, is perfect prior to the Fall (cf. the state-of-the-art computer). Alternatively, one can imagine an “imperfect creation” that has a segregated area in which Adam and Eve have exactly the same phenomenological experience of turning willfully against God as in the “perfect creation,” but for which only this segregated area is “perfect”—the perfection in this case being strictly in the phenomenological sense of no evil overtly tempting or opposing Adam and Eve (cf. the old unreliable computer that nonetheless can perform at least one software application well).

In the Garden of Eden, Adam and Eve simultaneously inhabit two worlds. Two worlds intersect in the Garden. In the one world, the world God originally intended, the Garden is part of a larger world that is perfect and includes no natural evils. In the other world, the world that became corrupt through natural evils that God brought about by acting preemptively to anticipate the Fall, the Garden is a safe haven that in the conscious experience of Adam and Eve (i.e., phenomenologically) matches up exactly with their conscious experience in the perfect world, the one God originally intended. In the originally intended world, there are no pathogenic microbes and, correspondingly, there is no need for Adam and Eve to have an immune system that wards off these microbes. In the imperfect world, whose imperfection results from God acting preemptively to anticipate the Fall, both pathogenic microbes and human immune systems exist. Yet, in their garden experience, Adam and Eve never become conscious of that difference. Only after they sin and are ejected from the Garden do they become conscious of the difference. Only then do they glimpse the world they might have inhabited but lost, a world symbolized by the tree of life. Only then do they realize the tragedy they now face by being cast into a world full of natural evil and devoid of a tree that could grant them immortality.

Why doesn't God grant Adam and Eve immortality despite the Fall? The ancient myth of Tithonus and Eos cap-

tures what's at stake. Eos (Latin Aurora), the goddess of dawn, is married to Tithonus, who is human and mortal. She asks Zeus to make Tithonus immortal but forgets to ask that Zeus also grant him eternal youth. As a consequence, Tithonus grows older and older, ultimately becoming completely decrepit. The lesson here is that immortality and corruption don't mix—instead of attenuating corruption, immortality intensifies it. In enforcing mortality on humans by ejecting them from a garden that has a source of immortality (the tree of life) at its center, God limits human corruption and, in the protevangelium (Genesis 3:15), promises a way out of that corruption. Thus, given our corruption through sin, mortality is a grace and benefit.

A final question now remains: How did the first humans gain entry to the Garden? There are two basic options: progressive creation and evolving creation.<sup>33</sup> In the first, God creates the first humans in the Garden. In the second, the first humans evolve from primate ancestors outside the Garden and then are brought into the Garden. Both views require direct divine action. In the former, God specially creates the first humans from scratch. In the latter, God introduces existing human-like beings from outside the Garden but then transforms their consciousness so that they become rational moral agents made in God's image. With an evolving creation, this transformation of consciousness by God on entry into the Garden is essential to the kairological reading of Genesis. For if the first humans bore the full image and likeness of God outside the Garden prior to the Fall, they would have been exposed to the evils present there—evils for which they were *not yet* responsible. This would be problematic since humanity's responsibility and culpability in the Fall depends on the Fall occurring without undue temptations or pressures. These temptations and pressures are absent in the Garden but not outside.

## 7 Epilogue: The Problem of Good

In this paper I have focused on the problem of evil. To resolve the problem of evil, I proposed a kairological reading of Genesis that looks to the teleological-semantic logic by which God acts in creation. According to this logic, God is able to act preemptively in the world, anticipating events and, in particular, human actions. In acting preemptively, God does not hinder the exercise of human freedom but rather anticipates the consequences of its exercise. The kairological reading of Genesis described in this paper preserves the classic understanding of Christian theodicy, according to which all evil in the world ultimately traces back to human sin at the Fall. Moreover, having preserved this classic understanding of the Fall, this reading of Genesis also preserves the classic Christian understanding of God's wisdom and particular providence in creation.

In focusing on divine preemption as the means by which God anticipates the Fall and controls its damage, I have stressed the active role God played in bringing about

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<sup>33</sup>For these options, see respectively Fazale Rana and Hugh Ross, *Who Was Adam? A Creation Model Approach to the Origin of Man* (Colorado Springs, Colo.: Navpress, 2005) and Keith Miller, ed., *Perspectives on an Evolving Creation* (Grand Rapids, Mich.: Eerdmans, 2003).

natural evil prior to the Fall. Natural evil mirrors the personal evil in our souls brought on through the distorting power of sin. Accordingly, a world that exhibits natural evil becomes an instrument for revealing to us the gravity of sin. In particular, the emergence of living forms through a violent and competitive historical process (be it through a sequence of special creations or through a more continuous evolutionary development) does itself exhibit natural evil attributable to the Fall. The theodicy proposed in this essay therefore does nothing to soft-pedal natural evil. It is as stark as the Darwinian view, which regards evolution as a “great battle for life” (Darwin’s own choice of words) and nature as “red in tooth and claw” (words of Darwin’s compatriot Alfred Lord Tennyson).<sup>34</sup>

And yet, the theodicy I propose here also allows God’s grace and mercy to break through in nature. Although divine preemption can account for why natural evils occur prior to the Fall, divine preemption is not limited to bringing about natural evils. The world is a cosmos, an ordered arrangement meant to reflect the glory of God. The natural evil that God (preemptively) introduced into the world on account of the Fall clouds the world’s ability to reflect God’s glory but it can never entirely occlude it. Indeed, God’s original intention for creation always has a way of bleeding through regardless of the pervasiveness of personal and natural evil. Moreover, in responding preemptively to the Fall, God does not merely bring about natural evil but also, as a matter of common grace, stems its influence. Yes, pathogenic microbes constitute a natural evil brought on by God in response to the Fall. But God doesn’t just leave us at the mercy of these microbes. Our immune system is an amazing work of common grace by which God, acting preemptively, mitigates the harm these microbes would otherwise cause us.<sup>35</sup>

With God, evil never has the final word. The tree of life, which Adam and Eve could not reach because they were expelled from the Garden, appeared again 2,000 years ago as a cross on a hill called Golgotha.<sup>36</sup> Through the Cross of Christ, the immortality that eluded humanity in the Garden is restored. Evil is but a temporary feature of the world. Created as it is by God, the world is destined to fulfill God’s good purposes. More than any other problem, people have used the problem of evil to distance God from themselves and even to rationalize that God doesn’t exist. In response, Boethius posed the following riddle: “If God exists whence evil; but whence good if God does not ex-

ist?”<sup>37</sup> Let us always bear in mind that the problem of evil is part of a much larger problem, namely, the problem of a benevolent God restoring a prodigal humanity to himself. This is the problem of good, and it subsumes the problem of evil.

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<sup>34</sup>See respectively Charles Darwin, *On the Origin of Species*, facsimile 1st ed. (1859; reprinted Cambridge, Mass.: Harvard University Press, 1964), 129 and Tennyson’s universally accessible “In Memoriam.”

<sup>35</sup>For a fascinating and accessible introduction to immunology, see Lauren Sompayrac, *How the Immune System Works*, 2<sup>nd</sup> ed. (Malden, Mass.: Blackwell, 2003).

<sup>36</sup>It is perhaps not coincidental that the tree of life was positioned at the center of the Garden and that the tree on which Christ was crucified was positioned at Jerusalem, effectively the center in the Promised Land. In *Genesis Unbound* (Sisters, Oregon: Multnomah, 1996), John Sailhamer offers an interesting argument identifying the Garden with the Promised Land.

<sup>37</sup>Boethius, *The Consolation of Philosophy*, in *Loeb Classical Library* (Cambridge, Mass.: Harvard University Press, 1973), 153.

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Contributor, "Prospects for Post-Darwinian Science," symposium, New College, Oxford, August 2000. Other contributors included Michael Denton, Peter Saunders, Mae-Wan Ho, David Berlinski, Jonathan Wells, Stephen Meyer, and Simon Conway Morris.  
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