

HUMAN EVOLUTION AND CHRISTIAN ETHICS

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Introduction

For over a century Christian ethics has been deeply influenced by the social sciences and, in particular, by social theories of the kind developed by Marx, Weber, and Durkheim, but it has not engaged in an analogous enterprise when it comes to the natural sciences.¹ In this book I intend to explore the relevance of science, and specifically the information and insights of evolutionary theory, for Christian ethics.

The theory of evolution is now the primary explanatory context for understanding the origin of species.² Scientists and writers in the last thirty years have produced a significant body of literature dealing with “evolutionary ethics” and the “evolution of morality,” but Christian ethics has for the most part ignored it. This inattentiveness takes place at a time when popular evolution-based writers represent the public face of science. The “sociobiology” proposed by Robert Trivers, E. O. Wilson, and Richard

¹ The term “science” will be taken to refer to the activities in which scientists seek to arrive at a relatively reliable understanding of the natural world. On the meaning of “science,” see George F. R. Ellis, “The Thinking Underlying the New ‘Scientific’ World-Views,” in Robert John Russell, William R. Stoeger, SJ, and Francisco J. Ayala, eds., *Evolutionary and Molecular Biology: Scientific Perspectives on Divine Action* (Vatican City State: Vatican Observatory Publications, and Berkeley, CA: Center for Theology and the Natural Sciences, 1998), pp. 251–280.

² This book provides neither a theoretical justification of the theory of evolution to convince Christian fundamentalists or other religiously based skeptics of its plausibility, nor an attempt to counter the popular misunderstanding and fear of the theory of evolution. Competent scientists have already dedicated many works to explaining the abundant evidence for evolution. For scientific arguments against “scientific creationism,” see Tim M. Berra, *Evolution and the Myth of Creationism: A Basic Guide to the Facts in the Evolution Debate* (Stanford, CA: Stanford University Press, 1990); Kenneth Miller, *Finding Darwin’s God: A Scientist’s Search for Common Ground between God and Evolution* (New York: Cliff Street Books/HarperCollins, 1999); and Stephen Jay Gould, *Hens’ Teeth and Horses’ Toes: Reflections on Natural History* (New York: Norton, 1983), pp. 247–264. For a major, if somewhat dated, Catholic theological response to evolutionary theory, see Karl Rahner, *Hominization: The Evolutionary Origin of Man as a Theological Problem* (New York: Herder and Herder, 1965); Karl Rahner, “Natural Science and Reasonable Faith,” trans. Hugh M. Riley, in *Theological Investigations*, vol. XXI: *Science and Christian Faith* (New York: Crossroad, 1988), pp. 16–55. A helpful survey has been provided by Don O’Leary, *Roman Catholicism and Modern Science* (New York: Continuum, 2006).

Dawkins attempts to provide the comprehensive explanation of social behavior in terms of evolutionary theory.³ The slightly less overtly political “evolutionary psychology” developed in the 1980s by Leda Cosmides, John Tooby, and Donald Symons, and popularized by Steven Pinker and Robert Wright, strives to explain the deepest roots of human behavior in evolutionary terms, primarily through an understanding of the functioning of “evolved psychological mechanisms.”⁴

In this book I argue that, despite various difficulties, Christian ethics and evolutionary theories are in principle consonant with one another. Distinct vantage points do not have to compete with one another if interpreted properly. If one accepts the axiom that, ultimately, “truth cannot conflict with truth,”⁵ then one can argue that the knowledge provided by the natural sciences, including that pertaining to human evolution, is consistent with, and can help to shed light on, the truth affirmed in Christian faith.

Science of course does not provide Christian faith with direct and unambiguous intellectual justification, such that a person without faith would be convinced to adopt Christian belief solely or primarily on the basis of evidence given in the natural world. One cannot argue from evolutionary biology to Christianity, or vice versa. Since theology is an essentially interpretative enterprise, none of us can pretend to work from the vantage point of presuppositionless objectivity. Functioning within a tradition that is mediated historically, the study of theology involves both careful interpretation of magisterial texts and respectful dialogue with present forms of knowledge, including scientific findings about human evolution.

From a Christian standpoint, faith in the Creator requires theology to extend its range of sources to include science and other non-theological

³ See Robert Trivers, *Social Evolution* (Menlo Park, CA: Benjamin/Cummings, 1985); E. O. Wilson, *Sociobiology: The New Synthesis* (Cambridge, MA: Harvard University Press, 1975); and Richard Dawkins, *The Selfish Gene* (New York: Oxford, 1976).

⁴ See Jerome H. Barkow, Leda Cosmides, and John Tooby, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (New York: Oxford University Press, 1992).

⁵ John Paul II, “Message to the Pontifical Academy of Sciences on Evolution,” *Origins* 26 (November 1996): 349, citing Leo XIII, *Providentissimus Deus*. See also Thomas Aquinas, *De Veritate* 1,8. As the pope put it in what was his best discussion of the science–religion relation, “Both religion and science must preserve their own autonomy and their distinctiveness. Religion is not founded on science nor is science an extension of religion. Each should possess its own principles, its pattern of procedures, its diversities of interpretation and its own conclusions . . . While each can and should support the other as distinct dimensions of a common human culture, neither ought to assume that it forms a necessary premise for the other.” John Paul II, “Letter to the Rev. George V. Coyne, S.J.,” *Origins* 18 (November 1988): 377.

sources. Christian faith ought neither to interfere with the pursuit of scientific knowledge nor to require scientists to ignore relevant data, nor to encourage breaches of the procedures proper to scientific inquiry. As physicist Howard Van Till explains, “Linking a specific scientific theory with some religious belief system in such a way that one entails the other, for example, has a serious strategic disadvantage in that any discrediting of that scientific theory automatically tends to call into question the entire belief system attached to it.”⁶ The goal of science, he notes, is “to gain knowledge, not to reinforce preconceptions.”⁷

The most popular term in the academy for the science–theology relation is “dialogue.” Yet scientists and theologians do not learn from one another in the ways that microbiologists learn from biochemists or moral theologians learn from moral philosophers. In fact, scientists *qua* scientists have nothing to learn from theologians about how to conduct scientific research or about the scientific implications of their findings. Inserting theological questions into scientific inquiry is distracting as well as beside the point.

Scientists *qua* thoughtful human beings, on the other hand, are inclined to raise questions about the deeper meaning of their scientific work and to delve into matters that lie outside the domains with which the methods of science are suited to function. Some insights of science have important theological implications but, as wondering, imagining, feeling human beings, scientists raise kinds of questions that their professional training and specialization do not equip them to address. Theologians can alert scientists to ways in which they have attempted to exceed the proper limits of their disciplines and to the intellectual hazards of doing so. Christian ethicists can play a valuable role in disentangling evolutionary science from its ideological misuses, pointing out the shortcomings of distorted applications of evolutionary theory to various kinds of human behavior, and showing that moral and religious implications of evolutionary accounts of humanity can be interpreted nonreductionistically.

The unity of truth suggests that the findings of science and the insights of theology are ultimately compatible and, at certain points, mutually enlightening. Scientific perspectives on nature can clarify, enrich, and deepen the minds of those who view the natural world with the eyes of faith. Yet the wellspring of Christian convictions lies not in science but in

⁶ Howard J. Van Till, Robert E. Snow, John H. Steck, and Davis A. Young, *Portraits of Creation: Biblical and Scientific Perspectives on the World's Formation* (Grand Rapids, MI: Eerdmans, 1990), p. 149.

⁷ *Ibid.*

the personal religious experience made possible by living communities of faith. Approached in this way, knowledge of human evolution need not have the devastating impact on Christian ethics sometimes depicted by evolutionists such as Wilson and Dawkins. On the contrary, knowledge of evolution, and especially understood in terms of the notion of “emergent complexity,” can make an important constructive contribution to Christian ethics, particularly with regard to our thinking about the natural law and the virtues. Science can help us understand the biological factors that allow for the human capacities that provide the basis for morality and religion.

AUDIENCE AND GOAL

We live in an increasingly secular culture in which many people find no grounds for taking seriously belief in God, never mind Christian faith. For some of those deeply influenced by evolutionary biology, Darwin’s refutation of Paley’s argument from design was the last nail in the coffin of theism.⁸ Yet a number of scholars argue that knowledge of human evolution does not have to lead to this skeptical conclusion. What is sometimes characterized as a simple intellectual stand-off between science and religion is actually a much more complex and varied relationship. As historian of science John Brooke points out,

There is no such thing as *the* relationship between science and religion. It is what different individuals and communities have made of it in a plethora of different contexts. Not only has the problematic interface between them shifted over time, but there is also a high degree of artificiality in abstracting from the science and religion of earlier centuries to see how they were related.⁹

What Brooke says here about the general categories of science and religion also applies to the categories of evolutionary theory and Christian ethics.

Coming from the opposite direction, some Christian ethicists insist so stridently that scientific (or other non-theological) modes of thought not be allowed to set the agenda for theology that they end up ignoring science altogether. But this stance obscures the fact that serious engagement with contemporary science need not diminish Christian identity. The Christian tradition itself generated a profound theological impetus for the

⁸ See John Dupré, *Darwin’s Legacy: What Evolution Means Today* (New York: Oxford University Press, 2003).

⁹ John H. Brooke, *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991), p. 321.

development of modern science.¹⁰ Its colleges and universities were the places of many of the most ground-breaking scientific discoveries, and many of the greatest Christian theologians – from Augustine and Thomas Aquinas to Jonathan Edwards and Karl Rahner – developed their theologies in light of available knowledge regarding the natural world.¹¹ The policy of ignoring the natural sciences on grounds of Christian identity actually constitutes a break with the mainstream of the Christian tradition, not its continuation.¹²

While critical of evolutionary ideology, Christian ethics needs to engage evolutionary knowledge because it can help us better to understand important aspects of human nature and some of the enduring constituents of human flourishing. Christian ethics, especially as developed in the natural-law tradition engaged here, gives moral significance to the central constituents of human nature, so it must take seriously the massive body of literature and significant discoveries about where we come from, who we are, and what we need and desire as human beings. Knowledge of human evolution is a necessary source of insight for any contemporary Christian ethics that takes human nature seriously.

This book attempts to address fundamental questions of Christian ethics more than it considers practical or “applied” matters. One might think that a book on Christian ethics and human evolution would place these evolutionary writings in relation to Christian treatments of the same topics, for example to relate E. O. Wilson on the evolution of deception to Augustine’s analysis of lying or contrast ethological treatments of aggression with the Sermon on the Mount. Yet this kind of analysis is neither particularly interesting nor intellectually fruitful. The most significant level of interchange concerns more fundamental questions about the nature of reality (metaphysics, and especially ontology) and God (theology), rather than practical moral questions. When a given evolutionist disagrees with a Christian moral teaching about sex or lying, for example, the point in

¹⁰ See John H. Brooke, David C. Lindberg, and Ronald L. Numbers, eds., *God and Nature: Historical Essays on the Encounter between Christianity and Science* (Berkeley: University of California Press, 1986).

¹¹ The term “nature” can be used in many ways, including three major uses of the term found in this book: the “nature” or essence of an entity, the totality of the physical world, the world of creation as distinct from supernatural grace. Context will indicate which of these meanings of the term is intended.

¹² It might be added that while the Reformed theologian Karl Barth has often been regarded as indifferent to science, it is possible to develop his theology in a way that includes a more constructive relation to it. See Thomas Torrance: *Theological Science* (New York: Oxford, 1969; reissued in 1996 by T. & T. Clark); *Space, Time, and Resurrection* (Edinburgh: Handsel, 1976); and *Reality and Scientific Theology* (Edinburgh: Scottish Academic Press, 1985).

dispute is more often based on how he or she views human society or human nature and not only about the morality of sexual relations or speech.

The deepest moral disagreements are rooted in competing presuppositions about what is most real, how we can come to understand what is most real, and how this knowledge provides guidance for leading good lives and developing good communities. This book deals with the dispute between Christian moral realism – which holds that the world is intrinsically morally meaningful – and evolutionary ontological naturalism, which denies that it has any meaning other than what we human beings choose to make of it. It will devote some time to considering fundamental theological issues such as faith, creation, and providence, and metaphysical concerns regarding the place of teleology, directionality, and progress in the evolutionary process. Christian ethics cannot participate in dialogue with evolutionary theory without some, even if cursory, prior examination of these themes.

Theories of evolution do not make a direct contribution to Christian ethics. Evolutionary biology can provide neither a “foundation” for Christian ethics nor scientific “backing” to the contents of Christian ethics, even within the natural-law tradition. Our knowledge of nature, including evolution, cannot determine the content of theological or moral affirmations.

Knowledge of human evolution, however, can play a valuable role in helping us to understand important aspects of human nature and human flourishing. The natural-law tradition regards the moral life as the way to move toward the human good, and any account of the human good reflects some account of human nature and the conditions that make for its flourishing.

OVERVIEW

The basic structure of the book falls into three parts: the first part argues for the importance of current knowledge of evolution for Christian ethics in general (chs. 1–6), the second part examines ways in which evolution can enrich and inform our understanding of human nature and specifically regarding the themes of freedom, love, and human dignity (chs. 7–9), and the third part discusses the relevance of evolution to the natural-law tradition (chs. 10–12).

One of my central convictions is that Christian ethics can fruitfully employ evolutionary insights into human behavior as long as these are not

distorted by unjustifiable kinds of reductionism. A nonreductionistic reading of evolution that recognizes its inherent directionality is consonant with Christian belief in creation and providence. The human race is the product of a process that has generated unprecedented forms of emergent complexity. Christian theologians have long maintained that God operates through the “secondary causes” made available by the evolutionary process. The account of human nature as constituted by emergent complexity helps us understand aspects of key notions in Christian ethics, particularly human freedom, love of neighbor, human dignity, morality, and natural law.

The twofold audience of this book causes a certain imbalance in the presentation of the material examined. It requires an explanation of some things that Christian ethicists already know but that scientifically inclined readers do not, and vice versa. A certain amount of introductory explanation is needed for each group, though not, it is hoped, to the point of tedium. Like most interdisciplinary projects, reading this book will require a certain amount of patience and intellectual generosity on the part of the expert reader.

The attempt to engage in interdisciplinary reflection that joins such diverse disciplines, or, more accurately, sets of disciplines, necessarily involves wading into discussions that lie outside any given author’s expertise. This is particularly the case when a Christian wades into the study of human evolution, which, as Simon Conway Morris notes, is a field “riven with controversy.”¹³

My own training is in Christian theological ethics rather than in the natural sciences. Anyone who is willing to engage in materials that so far outstrip his or her competence as I do here, as a Christian ethicist, has to compensate with a heavy reliance on respected authorities in various scientific fields. I realize that the issues broached in this discussion are of far greater complexity than I may appreciate, and that widely respected authorities frequently disagree with one another. As much as possible, I strive not to take a stand on major debates in the field of evolutionary biology, such as group selection, the extent of adaptation, the pace of evolution, and other issues. While attempting to avoid misrepresenting the authors whom I discuss, I no doubt make generalizations that are, from the point of view of scientific experts, coarse-grained, incomplete, and oversimplified. I believe nevertheless that the importance of the topic warrants the risk of gaffes, missteps, and even serious errors that others can correct.

¹³ Simon Conway Morris, *Life’s Solution: Inevitable Humans in a Lonely Universe* (Cambridge: Cambridge University Press, 2003), p. 270.

Evolution and religion

This chapter examines four evolutionary theories regarding religion, offers a critique of them, and then argues that our knowledge of human evolution can be compatible with Christian ethics and the religious faith that it reflects. It begins with a discussion of the place of evil in nature because that presents the central objection to Christian faith.

RELIGION REJECTED BY EVOLUTION: THE “PROBLEM OF EVIL”

The challenge posed by the “problem of evil” was based not only in a growing awareness of the pervasiveness of pain, competition, and wastefulness in the natural world but also in the recognition that these are “built into” the very structure of nature itself. The advent of evolutionary theory brought with it the question of whether a good God could be the Creator and providential Governor of such a natural order.

Young Darwin assumed the truth of conventional Anglican Christianity, and as a college student he was impressed by the argument of design put forth in William Paley’s *Natural Theology*. His reading of Lyell’s *Principles of Geology* on the *Beagle*, however, convinced him that the earth changed gradually over a much longer period of time than either conventional science or religion had been aware. Malthus’ *Essay on the Principle of Population* significantly shaped his view of human society as marked by the same ruthless “struggle for existence” that he found in the world of biological organisms.

Some of the seeds of Darwin’s doubts about the Christian doctrine of God came from his increased awareness of both the inaccuracies of scriptural accounts of human origins and the philosophical weaknesses of natural theology. He gradually came to reject what he took to be the religious content of Scripture, particularly its attribution to God of the

“feelings of a revengeful tyrant.”¹ “Thus disbelief crept over me at a slow rate, but was at last complete,” he confessed in his *Autobiography*.²

Darwin’s views of science, his own life experience, and his philosophical proclivities all made it exceedingly difficult for him to reconcile divine benevolence with the harshness, randomness, and selfishness at the heart of the “struggle for existence.” He experienced the heartlessness of nature and the human suffering it causes in a very personal way with the death of his beloved daughter Anne.³ The experience of the fact that the world does not consistently reward virtue and punish vice led Darwin to reject the providential Creator of orthodox Christianity. Instead of benefiting the “greater good,” nature rewards individuals who survive and their offspring.⁴ The laws that govern the natural order, Darwin came to believe, could not have been created, or the course of evolution supervised, by a benevolent deity.⁵

Darwin’s moral objections to major strains of biblical narratives were balanced by his admiration of some of its major ethical teachings, particularly those of Jesus in the Gospels. He gave no credence to the miracles and supernatural intervention into nature asserted by “revealed” theology. Some scholars believe that Darwin continued to use “God-language” to avoid scandal and outrage, despite the fact that he came to suspect that agnosticism (a term coined by his intellectual ally T. H. Huxley) was intellectually inescapable.⁶ Yet others held that Darwin continued to use “God-language” as a way of expressing his sense of awe at the wonders of the natural world.⁷ Thus he wrote of

the extreme difficulty or rather impossibility of conceiving this immense and wonderful universe, including man with his capacity of looking far backwards and far into futurity, as a result of blind chance or necessity. When thus reflecting I feel compelled to look to a First Cause having an intelligent mind in some degree analogous to that of man, and I deserve to be called a theist.⁸

¹ *Autobiography*, in *Charles Darwin and Thomas Henry Huxley: Autobiographies*, ed. Gavin de Beer (London: Oxford University Press, 1974), p. 49.

² *Ibid.*, pp. 86–87. See also A. Desmond and J. Moore, *Darwin* (New York: Penguin, 1992).

³ See *Autobiography*, ed. de Beer, pp. 97–98.

⁴ Neil Gillespie, however, argues that Darwin did not abandon theism. See *Charles Darwin and the Problem of Creation* (Chicago and London: University of Chicago Press, 1979). Gillespie holds that Darwin came to believe that the laws of nature work for the greater good of the whole of nature.

⁵ See John Hedley Brooke, “The Relations between Darwin’s Science and His Religion,” in John Durant, ed., *Darwinism and Divinity: Essays on Evolution and Religious Belief* (New York and Oxford: Basil Blackwell, 1985), pp. 40–75.

⁶ See Ernst Mayr, *One Long Argument: Charles Darwin and the Genesis of Modern Evolutionary Thought* (Cambridge, MA: Harvard University Press, 1991), p. 85.

⁷ See Gillespie, *Charles Darwin and the Problem of Creation*, pp. 143–145.

⁸ *Autobiography*, ed. de Beer, p. 54. See William E. Phipps, *Darwin’s Religious Odyssey* (Harrisburg, PA: Trinity Press International, 2002).

At the same time, Darwin confessed an increase of “skepticism or rationalism”⁹ in his adult years and growing reservation toward religion, and particularly regarding belief in a “personal God” and any “future existence with reward and retribution.”¹⁰

Some of Darwin’s theistic successors, given to a more benign interpretation of nature, argued that Darwin’s science is fully compatible with theism as long as evolution is understood to be the natural means employed by God to create new species.¹¹ They regarded the evil present in the evolutionary process as a necessary component of a process that was generally good. Other followers of Darwin, however, argued that Darwinism implied the end of theism.¹² Psalm 19:2 announces, “The heavens are telling the glory of God; and the firmament proclaims his handiwork,”¹³ but T. H. Huxley did not think so. The earth is anything but the peaceful garden of the Yahwist creation account in Genesis, and the “survival of the fittest” without the corrections of culture inevitably destroys the finest moral impulses of the human race. Moral virtue for Huxley, then, entailed a course of conduct that “in all respects” runs directly contrary to the “struggle for existence.”¹⁴

The objection to Christian faith from the evil in nature was repeated with even greater intensity in the writings of some neo-Darwinians. Sociobiologists are essentially the latter-day heirs to Huxley in this regard. George C. Williams, author of *Adaptation and Natural Selection*, argues that genes are concerned only with self-replication, and that organic life follows suit by exploiting any opportunity for inclusive fitness maximization, whatever the cost in pain and suffering for other organisms: “Nothing resembling the Golden Rule or other widely preached ethical principle is operating in living nature.”¹⁵ Nature is simply a “process of maximizing short-sighted selfishness” that leads to results that are “grossly immoral”¹⁶

⁹ *Autobiography*, ed. de Beer, p. 55. ¹⁰ *Ibid.*, p. 54.

¹¹ For example, Henry Drummond, *The Ascent of Man* (New York: James Pott and Company, 1894). See Stephen J. Pope. “Neither Enemy nor Friend: Nature as Creation in the Theology of Saint Thomas Aquinas,” *Zygon* 32 (1997): 219–230.

¹² See James R. Moore, “Herbert Spencer’s Henchmen: The Evolution of Protestant Liberals in Late Nineteenth-Century America,” in John Durant, ed., *Darwinism and Divinity: Essays on Evolution and Religious Belief* (New York and Oxford: Basil Blackwell, 1985), pp. 76–100.

¹³ Scriptural citations are taken from the New Revised Standard Version (New York and Oxford: Oxford University Press, 1989).

¹⁴ *Evolution and Ethics and Other Essays*, reprinted in *Issues in Evolutionary Ethics*, ed. Paul Thompson (Albany, NY: SUNY Press, 1995), p. 133. See Moore, “Herbert Spencer’s Henchmen,” pp. 76–100.

¹⁵ George C. Williams, “Huxley’s Evolution and Ethics in Sociobiological Perspective,” *Zygon* 23 (1988): 391.

¹⁶ *Ibid.*, 385.

and driven by the “inescapable arithmetic of predation and parasitism.”¹⁷ How, then, are we to respond to nature? We must use reason and culture to rebel against it, he proposes.¹⁸

Williams draws a theological conclusion from his view of nature. Commenting on the “harem polygyny” of Hanuman langurs in northern India, he notes that,

Dominant males have exclusive sexual access to a group of adult females, as long as they keep other males away. Sooner or later, a stronger male usurps the harem and the defeated one must join the ranks of celibate outcasts. The new male shows his love for his new wives by trying to kill their unweaned infants. For each successful killing, a mother stops lactating and goes into estrous . . . Deprived of her nursing baby, a female soon starts ovulating. She accepts the advances of her baby’s murderer, and he becomes the father of her next child.

Do you still think God is good?¹⁹

There are, however, two major problems with this argument. First, Williams’ improper anthropomorphism involves an equivocal use of language that distorts his description of nature. The terms “harem,” “celibate,” “wives,” and “love” do not apply literally to langurs, who obviously have no social institution of marriage that makes sense of the status of “wives” and “celibates.”

Second, Williams’ theological argument is akin to Darwin’s rejection of design, but it does not pay the slightest attention to more complex theologies of creation. If God created the langur mating system, he reasons, then God cannot be good; no good God would produce such a cruel system. This critique does apply to a fundamentalist view of creation according to which God directly creates each species and the behavior patterns appropriate to it, but even fundamentalism holds that because of the “fall” there is a “gap” between the ordering of the natural world and the will of the Creator. Christian theologians do not hold that nature presents a perfect one-to-one expression of the plan of God. Williams’ naïve assumption ignores the theological positions of those who believe that there is a distance between the ordering that has emerged in the natural world and the divine will of the Creator. The evolutionary process produced species under conditions marked by high degrees of contingency and chance. If this is the case, then one cannot attribute animal behavior patterns to the direct creative intention of God.

¹⁷ *Ibid.*, 398. ¹⁸ *Ibid.*, 403.

¹⁹ George C. Williams, *The Pony Fish’s Glow* (New York: HarperCollins, 1997), pp. 156–157.

Sociobiologist Richard Dawkins develops this mistaken strain of thought even further. In fairness, it can be noted that the real sociobiological objection to divine benevolence comes not so much from the behavior of this or that species but rather from the very processes of evolution. Dawkins argues that a benevolent God cannot exist as the Creator of a world that is indifferent to moral goodness and evil, that is, one in which there is innocent suffering. The world, Dawkins writes,

would be neither evil nor good in intention. It would manifest no intentions of any kind. In a universe of physical forces and genetic replication, some people are going to get hurt, other people are going to get lucky, and you won't find any rhyme or reason in it, nor any justice. The universe that we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, not evil and not good, nothing but blind, pitiless indifference.²⁰

Trying to avoid moral anthropomorphism, Dawkins' argument nevertheless still slides from an indifferent universe to one that is "blind" and "pitiless," terms that only apply to beings actually capable of sight and mercy. This verbal vacillation mixes a sense of disappointment and resignation with outrage at the nature of the universe, but these are wholly inappropriate to a natural world in which nonhuman organisms have neither freedom nor moral intentions.

The universe is shaped by "blind" forces and genetic replication, to be sure, but it also provides a fitting habitat for human agents. As moral agents, we are embedded in nature but also influenced pervasively by cultural, social, and economic factors. There is no natural "balance sheet" according to which more virtuous people are automatically protected from cancer or AIDS. Dawkins and his evolutionary predecessors were not of course the first to discover that nature is not structured like a morally ideal legal system in which the just prosper and the wicked suffer. As theologian John Haught points out, "evolutionist complaints about the struggle, suffering, waste, and cruelty of natural processes add absolutely nothing new to the basic problem of evil of which religion has always been quite fully apprised."²¹ The early Christians, for example, were well aware that God sends the sun to "rise on the evil and the good," and sends "rain on the righteous and on the unrighteous" (Matt. 5:45).

²⁰ Richard Dawkins, *River out of Eden* (New York: HarperCollins, 1995), pp. 132–133. See more recently but in the same vein, R. Dawkins, *The God Delusion* (Boston: Houghton Mifflin, 2006).

²¹ John Haught, *Science and Religion: From Conflict to Conversation* (Mahwah, NY: Paulist Press, 1995), p. 59.

Concentrating on the long-term role of natural selection as well as contingent factors that contribute to human suffering, Dawkins ignores the fact that a great deal of suffering is not caused by either bad luck or nature but rather by human irresponsibility, selfishness, opportunism, and greed. The sweeping nature of his generalization that there is no “rhyme or reason” for human suffering ignores these factors; one can wonder whether most human suffering – even that occasioned by natural disasters such as Hurricane Katrina in New Orleans – is either caused or magnified by human moral failure and especially by injustice.²²

Dawkins’ objection to Christian theism lies in a questionable intellectual starting point: the premise that the proper understanding of all life comes from the natural sciences and that the most adequate explanation of human behavior is provided in evolutionary terms. This premise leads to the assumption that all references to the transcendent are illusions that must be rejected by rational people. Religious beliefs are so tenacious despite the counter-evidence because they speak to deep-set emotional needs. Thus religious practices – rituals, beliefs, taboos, sacred music, dance, moral codes – are so widespread across time and space because they are rooted in the evolved human emotional constitution.

Science proves that the attempt to meet human emotional needs by means of religion is illusory. The universe is purposeless, Dawkins holds, and those who affirm the existence of evolution are intellectually obliged to admit that religion is false. In nature, he writes, one sees, “the total prostitution of all animal life, including man and all his airs and graces, to the blind purposiveness of these minute virus-like substances [i.e. genes].”²³ Dawkins reveals his own confusion here. The term “prostituted” suggests payment for services rendered, and services of a particularly ignoble, demeaning kind. Yet nature cannot be “degraded” if it has neither inherent purpose nor innate moral status.

Dawkins states confidently that “we no longer have to resort to superstition when faced with the deep problems: Is there a meaning to life? What are we for? What is man?”²⁴ Here he presumes a radical but false dichotomy between religion and science because he equates religion with superstition. He mistakenly regards the notion of “God” as an explanatory hypothesis proposed by theology as an alternative to natural selection. Dawkins voices

²² See Judith N. Shklar, *The Faces of Injustice* (New Haven and London: Yale University Press, 1990).

²³ Cited in Anthony O’Hear, *Beyond Evolution: Human Nature and the Limits of Evolutionary Explanation* (Oxford: Clarendon Press, 1997), p. 152.

²⁴ *The Selfish Gene*, p. 1.

a suspicion felt by other sociobiologists as well: “What has ‘theology’ ever said that is of the smallest use to anybody? When has ‘theology’ ever said anything that is demonstrably true and not obvious? . . . What makes you think that ‘theology’ is a subject at all?”²⁵ Dawkins by no means speaks for all scientists – many biologists are devout Christians – but he does articulate a view of theology as a pseudo-discipline that would be assumed by those who believe that science provides the only adequate avenue for coming to some genuine knowledge about religion. This improper reductionism will be examined at length in [chapter three](#).

The central objection to Christian theism from Darwin to Dawkins has been the “problem of evil” – the belief that an absolutely benevolent, intelligent, and powerful God could not have created a natural world marked by so much pain and suffering. This objection does not offer an account of where the line is crossed into the exact “amount” of pain and suffering that makes belief in the Christian God implausible. In any case, Christians can reply to this criticism in several ways. Any response has to begin with the honest recognition of the fact that the presence of moral evil in the universe is ultimately a “mystery.” Evil is a “mystery” not in the sense that it constitutes an intellectual problem that can be “solved” but because it is ultimately unintelligible, unreasonable, and counter-productive for everyone. It does not make sense, in other words, that creatures who possess the capacity for knowing and loving would deliberately turn away from God, who is absolute wisdom and love, and in so doing act in a way that is deeply harmful to themselves and others.

It is important to distinguish the willful decision to reject divine love from the broader notion of evil, which includes the disorder and harm that result from the workings of nature on finite beings. The fact that animals become sick and die, that they often kill to eat, that habitats can be marked by scarce resources and therefore are the scene of the “struggle for existence” and extinctions, that males compete with one another for access to females, and so on – all these are natural conditions that can bring “evil” on some animals and “good” for others. These are not “good and evil” in any moral or religious sense, but simply biological benefits and costs to various organisms. From a Christian perspective, the Creator has made a world in

²⁵ Cited from “Letters to the Editor,” *The Independent* March 20, 1993, in Michael Poole, “A Critique of Aspects of the Philosophy and Theology of Richard Dawkins,” *Science and Christian Belief* 6.1 (April 1994). See also Richard Dawkins, “A Reply to Poole,” *Science and Christian Belief* 7.1 (April 1995): 45–50 and Michael Poole, “A Reply to Dawkins,” *Science and Christian Belief* 7.1 (April 1995): 51–58.

which nature runs its course, lifetimes are relatively short or long, reproduction is achieved or not. The evil experienced by particular creatures takes place within a creation that overall is “very good” (Gen. 1:31).

Evolutionary science helps us to understand in a detailed way the fact that we are only creatures within a larger cosmos. It underscores our own dependence on forces much greater than ourselves, our vulnerability to harm, and our finitude. Christian faith affirms that God’s providence works within the natural order as well as within history, but it does not presume that everything that happens will be for the immediate or even long-term benefit of human agents. The doctrines of creation and providence affirm that all things ultimately work for the glory of God, not that all things are for our benefit. Our sense of dependence and interdependence ought to underscore our gratitude for the goodness of the Creator and a corresponding sense of responsibility to use the power at our disposal for the benefit of creation and not for its destruction. Because Williams and Dawkins lack a doctrine of sin, they tend to ignore the extent to which human beings are responsible for the evils experienced by victims of our bad choices – and not only human victims but also victims in the animal world. Because they do not distinguish human or moral evil from physical evil, they project willful human vices and crimes (greed, rape, theft, etc.) onto the natural world of genes and organisms. If in the past Christian theologians have drawn too thick a line between human and nonhuman animals, Dawkins and the sociobiologists have erased it. The result has been a twofold confusion – one that tends to eliminate our accountability for wrongdoing and place the source of evil in our genes or other aspects of nature, and another that declares that God could not exist because divine existence would entail divine responsibility for the evil in the creation. In the end, for Dawkins, we are not responsible and God does not exist – and therefore nature itself is the cause and source of evil. This effectively proposes a new ontological dualism – evil nature versus human moral culture – without any account of how the “good” possibilities developed in culture could have emerged from such a morally dubious nature.

The traditional Christian understanding of the status of evil makes more sense of the facts of human experience than does neo-Darwinism. The Creator creates a world that is composed of finite creatures made to experience and manifest the goodness of creation and the glory of God. We human beings are given a special set of capacities that enable us to choose to pursue understanding and love. We possess the capacity to grow in understanding and love of ourselves, one another, and God – and in this lies true and complete human flourishing.

Creation in this view is deeply ambiguous. It is created good and we experience this goodness as nature's fertility, bounty, and beauty. The countless examples we find in the world of Darwinian adaptation speak to its intelligibility and order. At the same time, Christianity is aware of the indifference of nature and the power it has not only to support but also to thwart our well-being. Theologian Karl Rahner speaks in this regard of "a threatening, merciless, cruel, life-giving and life-destroying nature, a nature that humans experience as a multiplicity of impersonal and enslaving forces to which they seem helplessly delivered."²⁶ Alongside the elevating experiences of human dignity, freedom, and moral responsibility, nature forces on us the experience of "the power of death, the drive of instinct, the blind law of what is merely physical and chemical."²⁷ The conjoining of these realities underscores the ambiguity of nature as creation, the fact that nature appears to us as "simultaneously both ground and abyss, home and something foreign, bathed in splendor and yet sinister, heavenly and demonic, life and death, wise and blind."²⁸ Left with only nature, Rahner argues, we would be tempted to resign ourselves to nihilism or at best a Promethean struggle in which we can win a "thousand battles" but still face "final defeat" in the inevitable terminus of death. As a Christian, though, Rahner holds that the final unity of the ambiguous dimensions we experience in nature can only be achieved through understanding nature as the divine creation. Humanity and nature both have their unity in their origin: the one God who is "maker of heaven and earth." For Rahner, the negative experiences resulting from our place in the natural world underscore the "unmistakable dignity of the human person." The positive experiences we have as natural creatures remind us that we share with all animals a common divine origin: we are all "made by the one creative love of an eternal ultimate reality that lies beyond all duality and which we name God."²⁹ Christian theology thus offers an alternative to Huxley's and Dawkins' radical opposition between human beings and the evolutionary process because, for Christians, our ultimate meaning and final unity derives from our proper relation to our first cause and ultimate destiny, the Creator. Since nature and humanity are still in a process of developing, final harmony can only be spoken about as achieved in the future. Thus the Christian doctrine of creation must be complemented by "an eschatology of the eternal kingdom of God at the end of time."³⁰

²⁶ Karl Rahner, SJ, "Nature as Creation," in Karl Lehmann and Albert Raffelt, eds., trans. ed. Harvey D. Egan, SJ, *The Content of Faith* (New York: Crossroad, 1999).

²⁷ *Ibid.* ²⁸ *Ibid.* ²⁹ *Ibid.*, p. 84. ³⁰ *Ibid.*

From the beginning of human history we have failed to accept God's offer of love. The central meaning of "guilt" in Christian theology is not the subjective conviction that we have done wrong ("guilt feelings") but the objective fact that we have repeatedly chosen to do wrong to both God and others. The cumulative effect of this refusal to accept God's love over the course of human history has been radically to limit our freedom to see and do good and even to recognize our failure in this regard. Rahner holds that because the choices we make become "objectified," the world we are born into is marked by "objectifications of guilt" and is "codetermined by guilt and by the guilty refusals of others."³¹ Thus "the guilt of others is a permanent factor in the situation and realm of the individual's freedom, for the latter are determined by his personal world."³²

Because of the deeply ambiguous history of human decisions, we inherit disordered dispositions to prefer self to others and to be unfairly biased in favor of our own "in-groups" and to the detriment of others. Humanity is pervaded by habits of ingratitude, apathy, moral blindness, and other vices, or, as Augustine understood it, "disordered love." The creation is good, but we have a disturbed relation to it because of our own disorder and as a result even creation itself has been damaged. Human nature is made in God's image, but we violate it when we exploit and ignore one another.

Christians have to admit that there is no tidy intellectual "solution" to the "problem of evil."³³ We affirm two things: that the world is the scene of innocent suffering (and we cannot make the deeply flawed assumption that all suffering is somehow "deserved") and that God is just and merciful (and hence not the source of innocent suffering). Creation possesses a relative independence from the Creator, in the sense that the course of nature runs according to the interaction of "natural laws" and contingent events (including the "chaotic" processes in nature). God "permits" or "allows" for the conditions that lead to human suffering but does not will that the innocent suffer.³⁴ Innocent suffering can be fought, resisted, avoided, mitigated, but it cannot be made "right" or "proper" by any theodicy. Trust in God can lead to quiet resignation in the face of unavoidable

³¹ *Ibid.*, p. 105.

³² Karl Rahner, *Foundations of the Christian Faith: An Introduction to the Idea of Christianity*, trans. William V. Dych (New York: Crossroad, 1985), p. 107.

³³ See Karl Rahner, SJ, "Why Does God Allow Us to Suffer?," trans. Edward Quinn in *Theological Investigations*, vol. XIX: *Faith and Ministry* (New York: Crossroad, 1983), pp. 194–208.

³⁴ See Paul G. Crowley, SJ, *Unwanted Wisdom: Suffering, the Cross, and Hope* (New York and London: Continuum, 2005), pp. 81–84.

suffering but is accompanied by the conviction that evil does not have the final word in God's good creation. **Chapter four** below will develop these themes further.

RELIGION REPLACED BY EVOLUTION: E. O. WILSON

I now turn to four evolutionary approaches to the relation of science and religion. Given what sociobiologists take to be the obvious errors of Christianity, the existence and persistence of religion requires an explanation. Why would so many people give religion a place in their lives when it is so patently false? Where did it come from, how does it function, and what benefits do its adherents seek? Given its apparently deep roots in human nature, can it be simply abandoned as Dawkins urges?

E. O. Wilson admits that by "religion" he usually means the "blind faith"³⁵ taught to him as a young Christian fundamentalist.³⁶ Perhaps he was indeed asked to have "blind faith" in an almighty divine Father by ignorant and rigid religious authorities. Given the vehemence of creationism within this context, it is no coincidence that he came to regard religion as the archenemy of evolutionary theory.

Wilson believes that since the religious impulse is found throughout all cultures, one ought to inquire into its adaptive significance. "The highest forms of religious practice, when examined closely," Wilson argues, "can be seen to confer biological advantage. Above all they congeal identity."³⁷ Wilson argues that in our archaic past religion allowed small groups or bands of early humans to work together more effectively as hunters and gatherers than competing groups who were less religious. "When the gods are served, the Darwinian fitness of the members of the tribe is the ultimate unrecognized beneficiary."³⁸

Human beings have a deeply implanted desire to belong to groups and a desire to feel a sense of purpose within the great scheme of things. Since we are a social species, religious needs cannot be confined to the private sphere of purely subjective feelings. They are addressed by the culture of every society in its myths, scriptures, rituals, priesthoods, doctrines, narratives, paradigmatic figures, and icons. E. O. Wilson maintains that the ideal of self-sacrifice functions to encourage loyalty to the group, thereby tacitly promoting the selfish interests of the individuals that have belonged to

³⁵ See E. O. Wilson, *On Human Nature* (Cambridge, MA: Harvard University Press, 2004), p. 265.

³⁶ *Ibid.*, p. 249. ³⁷ *Ibid.*, p. 188. ³⁸ *Ibid.*, p. 184.

these groups: “membership in dominance orders pays off in survival and lifetime reproductive success.”³⁹

Religion is especially important because it supports morality, a human construct generated from biologically innate rules of mental development (or “epigenetic rules”)⁴⁰ for the purpose of securing survival and reproduction. All human communities teach some moral code to encourage cooperation and to discourage cheating. Compliant individuals are usually given rewards by society such as power, status, and wealth that in turn contribute to greater longevity and more secure families; those who are not compliant are punished by being deprived of these goods.

Though Wilson is more willing than Dawkins to admit that religion has provided some benefits to the human race, he emphasizes two major moral criticisms of religion. First, religious tribalism has inspired wars of religions, persecutions, pogroms, and suchlike. Second, religious anthropocentrism – its view of human beings as superior to all other animals, as special, morally noble, and created in the image of God – has allowed human beings to wreak havoc on nature.

Complementing the ethical critique is the scientifically based argument that religion advances erroneous empirical views of nature that compete with what is presented by science. Pre-literate religion was the only way for people to comprehend the natural world and to cope with human suffering, but it has long been intellectually superseded by modern science. Religion persists now because of an emotional lag and because it continues to provide psychological comfort in private life and social cohesion in public life, especially through civil religion. Wilson is confident that in the long run institutional religion will diminish and finally disappear. He hopes that the deep emotional needs now addressed by religion can be satisfied by the new “sacred narrative” of the “evolutionary epic.”⁴¹

Unlike Dawkins, who attempts to debunk religion in order to eliminate it altogether, Wilson wants to promote a new faith, complemented with a hope, based on a naturalistic epic. Scientific materialism will eventually overtake Christianity: “the final decisive edge enjoyed by scientific naturalism will come from its capacity to explain traditional religion, its chief competition, as a wholly material phenomenon. Theology will not likely succeed as an independent academic discipline.”⁴²

Make no mistake about the power of scientific materialism. It presents the human mind with an alternative mythology that until now has always, point for point in

³⁹ E. O. Wilson, *Consilience: The Unity of Knowledge* (New York: Alfred A. Knopf, 1998), p. 259.

⁴⁰ *Ibid.*, pp. 246–247, also p. 257. ⁴¹ *Ibid.*, p. 265. ⁴² *Ibid.*, p. 192.

zones of conflict, defeated traditional religion. Its narrative form is the epic, the evolution of the universe from the big bang . . . The true Promethean spirit of science . . . constructs the mythology of scientific materialism, guided by the corrective devices of the scientific method, addressed with precise and deliberately affective appeal to the deepest needs of human nature, and kept strong by the blind hopes that the journey on which we are now embarked will be farther and better than the one just completed.⁴³

Wilson's naturalism contains four components: a metaphysic (scientific materialism), a scripture or mythology (the epic), a method (the scientific method), and a set of cardinal virtues (faith [in science], ["blind"] hope, and ["Promethean"] courage). Each of these components is vulnerable to significant criticisms.⁴⁴

First, scientific materialism is a metaphysical and not a scientific position. To be intellectually responsible, Wilson ought to explain his position as metaphysical, defend it against the relevant philosophical objections, and show its superiority to alternative metaphysical positions. Instead he treats it as a simple part of natural science.

Second, the "epic of evolution" presents the functional equivalent of Wilson's founding myth. It is noteworthy that Wilson does not, like Dawkins, use science only to debunk mythology. Yet Wilson's treatment of mythology as something constructed by theorists who need to invent a scientifically intelligible account of the world is based on a significant misunderstanding of the very nature of mythology, an extended symbolic story created by the human imagination. Religiously powerful myths are not constructed artificially for instrumental purposes. As Midgley observes, spiritual needs "are met through a slow and painful communal development, through the effort to find, in experience, new effective symbols, which must grow out of better ways of living and feeling."⁴⁵

Third, Wilson speaks rather univocally of "the" scientific method, which somehow is corrective of the excesses that might be produced by imbalanced interpretations of the epic of evolution and its mythology. Perhaps this is shorthand for scientific methods in the plural, but there is no univocal scientific method.

Finally, the virtues that Wilson encourages – openness, tolerance, justice, respect for nature, and so on – are not derived from science. The

⁴³ E. O. Wilson, *On Human Nature*, pp. 196 and 209.

⁴⁴ See James M. Gustafson, "Sociobiology: A Secular Theology," *The Hastings Center Report* 9.1 (February 1979): 44–45.

⁴⁵ Mary Midgley, *Science as Salvation: A Modern Myth and Its Meaning* (Florence, KY: Routledge, 1994), p. 54.

suggestion that they are derived from his account of evolution is self-defeating. If cultivating virtue is worthwhile because it is a strategy for fitness, one has to infer that the best strategy would be to cultivate the appearance of virtue while acting opportunistically. If reputation is the key issue, appearance takes priority over the moral reality of virtue.

This sociobiological approach to religion and morality is driven by a forced dichotomy between religion as adaptive and religion as true. From a theological standpoint, there is no reason to argue that because the religious impulse has evolutionary roots it must be illusory. Evolution could be the means by which the Creator gave human beings a natural inclination to know and love God.

Critics sometimes miss the extent to which Wilson's vision is motivated by moral idealism, even if only in a rather modest form. He passionately advocates intellectual integrity, freedom of inquiry, religious tolerance, democracy, human rights, and ecological responsibility – and he argues against institutional religion because he regards it as an enemy to these values. He believes that the survival and well-being of our species depends upon establishing a reasonable consensus about our origins, our nature as human beings, our place in the natural world, and even our purpose, that is, about what makes human life worth living.

Wilson is particularly troubled by our inability to reach clear and stable moral agreement about how to solve the major social, political, and moral problems of our day. He believes that the close identification of ethics with religion lies behind the intractable nature of our moral conflicts, but he ignores the fact that religion also inspires peacemaking, forgiveness, and reconciliation as well as support for social justice and human rights. Wilson sees the need to eliminate one major source of a host of evils related to excessive in-group bias but he does not acknowledge that faith in a universal God of justice and love provides the most powerful basis for universal concern.

RELIGION SERVING EVOLUTION: D. S. WILSON

David Sloan Wilson argues that group selection provides the best perspective from which to understand religion as a social institution. He maintains that, under some circumstances, some human social groups function like single organisms and social insect colonies. Religion persists because it tends to be adaptive, at least for the group. Religious groups are “super-organisms” characterized by a composition of parts whose actions are coordinated with one another to enable the whole to function as an

adaptive unit and who depend on social control mechanisms for their maintenance. Groups can function as adaptive units, “but only if special conditions are met. Ironically, in human groups it is often religion that provides the special conditions.”⁴⁶ In contrast to the “selfish gene” of sociobiology, D. S. Wilson proposes a multilevel selection theory that acknowledges ways in which traits of groups as well as individuals can be adaptive. “Very simply, immoral individuals may best moral individuals within groups, but moral groups best immoral groups.”⁴⁷ Group selection concerns traits that might have evolved to maximize the fitness of a group relative to other groups, just as individual selection concerns traits that might have evolved to give an advantage to an individual relative to other individuals within a particular group.

Religion functions as part of a community “superorganism.” It allows for a high degree of collective organization and coordination, as in, he argues, the historic case of Calvin’s Geneva.⁴⁸ Religion provides incentives for cooperation, a system for detecting and punishing cheats, and goals that effectively direct and motivate desired behavior. Groups strongly manifesting these traits will be more adaptive than groups less able to manifest them.

D. S. Wilson makes an effort to be as sympathetic and broad-minded as possible to religion. He does not think that religious beliefs can be true or that theology provides an intellectually coherent basis for understanding faith. He is just as dismissive of the truth-claims of religion as are other evolutionists. Yet unlike Dawkins and E. O. Wilson, he holds that religion can be good for societies when it functions as a group-level adaptation. Seeking to understand its positive function within society, D. S. Wilson echoes Emile Durkheim’s practice of taking all appeals to “God” as nothing more than references to the social order. According to Steven Lukes, Durkheim regarded religion as “social” in three ways: “as socially determined, as embodying representations of social realities, and as having functional social consequences.”⁴⁹ Wilson in effect “Darwinizes” Durkheim in arguing that the social function of religion brings adaptive

⁴⁶ D. S. Wilson, *Darwin’s Cathedral* (Chicago: University of Chicago Press, 2001), p. 6.

⁴⁷ D. S. Wilson, “Evolution, Morality, and Human Potential,” in Steven Scher and Frederick Rauscher, eds., *Evolutionary Psychology: Alternative Approaches* (Boston: Kluwer, 2003), p. 60. Wilson’s view differs from that of Pascal Boyer, whose *Religion Explained: The Evolutionary Origins of Religious Thought* (New York: Basic Books, 2001) argues that religion was adaptive in earlier human environments in which communities were largely composed of kin groups, but that it has become maladaptive in conditions of large societies composed of unrelated individuals.

⁴⁸ D. S. Wilson, *Darwin’s Cathedral*, pp. 89–91, 109–110, 123–124.

⁴⁹ Steven Lukes, *Emile Durkheim* (Stanford: Stanford University Press, 1985), p. 462.

benefits to groups. D. S. Wilson does not agree with Dawkins that religion is not “real,” but its reality bears only on society rather than on some transcendent realm inaccessible to science. Like his sociobiological competitors, Wilson assumes that if religion serves a functional purpose it must be explained comprehensively in these terms. He does not acknowledge that religion can be the expression of a fundamental human recognition of our place in the creation and a means by which we are inclined to be in right relation to God.

RELIGION AS A “BY-PRODUCT” OF EVOLUTION: PINKER

Evolutionary psychology does not regard religion as an adaptation but rather as a “by-product” of the evolutionary process.⁵⁰ It identifies “information-processing modules” designed by natural selection to respond to certain aspects of the environment, process this information by means of particular algorithms, and produce behavior that solves specific adaptive problems faced by individuals. Psychological mechanisms are numerous and pertain to specific domains. Though psychological mechanisms themselves are adaptive, the many behaviors in which they are implicated are obviously not always adaptive. The mechanisms constitute our species-wide cognitive and emotional architecture; the behaviors themselves do not always promote fitness.

Denying that there is an adaptive “sense of the sacred” or “God module” specifically designed by nature for a particular adaptive function, evolutionary psychologists view religion as a powerful by-product of various psychological mechanisms that evolved for nonreligious purposes.⁵¹ This position has the advantage of acknowledging that religion is not a unitary phenomenon. Some of the key mechanisms include “naïve” (or common sense) physics and biology, intrasexual competition, kin selection, reciprocity, attachment, intergroup bias, and coalitional psychology. Steven Pinker holds that evolution has given us “modules for objects and forces, for animate beings, for artifacts, for minds, and for natural kinds like animals, plants, and minerals.”⁵² The history of religion offers extensive evidence of the way that these “modules” can be tricked and misapplied to

⁵⁰ The by-product position is advanced by Boyer, *Religion Explained*.

⁵¹ See D. M. Buss, M. G. Haselton, T. K. Shackelford, A. L. Bleske, and J. C. Wakefield, “Adaptations, Exaptations, and Spandrels,” *American Psychologist* 53 (1998): 533–548. Gould coined “exaptations.” See S. J. Gould, “Exaptation: A Crucial Tool for Evolutionary Psychology,” *Journal of Social Issues* 47 (1991): 43–65.

⁵² Steven Pinker, *How the Mind Works* (New York and London: W. W. Norton, 1997), p. 315.

issues that are inherently unintelligible. “For anyone with persistent intellectual curiosity, religious explanations are not worth knowing because they pile equally baffling enigmas on top of the original ones.”⁵³

If actions of individuals are known to reflect the intentions of agents, Pinker argues, then people make the inference that events in nature are caused by the intentions of unseen supernatural agents. If human agents can be appeased and bargained with, so might supernatural agents, and so forth. If the social group is organized according to various structures of reciprocity, then life as a whole can be considered so structured. Pinker believes that specific modules can be correlated with certain religious activities or practices: attachment by piety and religious affections, status hierarchy by ontology and institutional churches, reciprocity by cults of sacrifice and covenants, fear of death and desire for survival by promises of an afterlife, cooperation by religious loyalty, and indoctrinability by creeds and religious authorities.

Pinker complains that religion “exploits people’s dependence on experts.”⁵⁴ The powerful proneness to form alliances based on kinship is co-opted in a variety of ways by religion, especially by ancestor worship, by those who envision priesthood as “fatherhood,” by the ethic of “brotherly love,” and by ways in which religious groups attempt to function as “fictive kin.”⁵⁵ Pinker claims that all religions strive to undermine families to build stronger loyalties to the larger religious group.

There are a variety of problems with Pinker’s “explanation” of religion – he makes spurious claims to objectivity, attempts to force all knowledge to meet criteria appropriate only to scientific inquiry, employs philosophical and theological terms in nonsensical ways, vastly underestimates the extent to which culture influences human practices, and tends to ignore, or at least insufficiently recognize, the contingency and unpredictability of human behavior.

EVOLUTION SEPARATE FROM RELIGION: GOULD

The late Stephen Jay Gould challenged the evolutionary explanations of religion offered by sociobiology and evolutionary psychology. Whereas E. O. Wilson would explain religion by means of evolutionary theory, ultimately in order to eliminate or at least radically revise it, Gould wanted

⁵³ *Ibid.*, p. 560. ⁵⁴ *Ibid.*, p. 557.

⁵⁵ T. Crippen and R. Machalak, “The Evolutionary Foundations of Religious Life,” *International Review of Sociology* 3 (1989): 68.

to leave them independent of one another. His thesis was that, at their best, science and religion occupy separate intellectual spheres and have usually pursued a policy of peaceful coexistence summarized in the acronym, “NOMA,” or “Non-Overlapping Magisteria.” (By “magisterium” he means only something like a distinctive zone of reflection, discussion, and debate.)

This position flows from an apparently straightforward and clear claim: that science concerns itself with empirical realities, whereas religion addresses matters of meaning, ultimacy, and moral values. We could avoid all sorts of nasty fights, he argued, if only we would stop expecting science to provide validating evidence for religious dogmas or biblical events. So there should be no more natural theology, anthropic principle, or attempts to find scientific confirmation for religious beliefs. Nor, conversely, ought religion to be employed to resolve questions of a properly scientific nature. There should be no attempt to obtain satellite scans for evidence of the buried remnants of Noah’s ark, or more geology based on a ten-thousand-year-old planet, or fundamentalist “creation science” – all of these claims violate NOMA. In short, “science gets the age of rocks, and religion the rock of ages; science studies how the heavens go, religion how to go to heaven.”⁵⁶ Gould’s main point was that this conflict is psychologically, ethically, scientifically, and religiously unnecessary and that the way to avoid it lies in a mutually agreed nonaggression pact based on uncompromising assent to NOMA.

Gould was suspicious of any ideological appeals to nature, especially in the guise of anything resembling social Darwinism. He insisted that we ought not to give ethical authority to science because the knowledge of nature produced by science does not generate moral wisdom: “we must simply admit that nature offers no moral instruction at all.”⁵⁷ Yet if nature offers no moral instruction *per se*, is it not the case that our ideas and normative perspectives often function to direct our observation of nature and our ascertainment of relevant facts? If so, perhaps we need a more complex alternative than Gould’s Weberian (and Nietzschean) dichotomy of value-free science versus value-invested religion.

The appeal of this position lies in its common-sense moderation. After Dawkins’ vehement denunciations of the “God-meme pathology” and the “emptiness of theology,” Gould seems refreshingly irenic, nuanced, and

⁵⁶ S. J. Gould, *Rock of Ages: Science and Religion and the Fullness of Life* (New York: Ballantine, 1999), p. 6.

⁵⁷ *Ibid.*, p. 196.

broad-minded. Gould attempted to strike an admirable balance between his own self-professed agnosticism and skepticism, on the one hand, and respect for the consciences of religious people and an appreciation of the positive moral contributions made by religious communities, on the other. Rather than repeating the tired cliché that the Roman Catholic Church is simply a bastion of anti-intellectual dogmatism and anti-scientific authoritarianism, Gould saw that the church has been a cautious defender of science in general and evolutionary theory in particular.

Gould echoed what some Christian theologians have been saying for some time. Neo-orthodox theologian Langdon Gilkey, for example, suggests that we view science and religion as “two languages.” Science concerns public, objective knowledge of proximate origins, and religion deals with personal awareness of ultimate origins. Religion is concerned about the “why?” questions, whereas science focuses on the “how?” questions.⁵⁸ Christians have to ask both kinds of questions but should avoid confusing or collapsing them. Answers to one type of question do not satisfy the other. They do not conflict because in principle they cannot conflict if properly understood.

The anti-Darwinian professor of law Phillip E. Johnson, author of *Darwin on Trial*,⁵⁹ attacked Gould’s earlier presentations of NOMA for advocating an artificial separation of morality from reality. Moral claims, Johnson rightly points out, are highly dependent on descriptive beliefs and assumptions regarding human conduct. In fact, Gould’s own book on the IQ controversy, *The Mismeasure of Man*,⁶⁰ provides ample demonstration of the dependence of moral positions on premises about what are purported to be descriptive realities. Johnson properly points out that Christian religious affirmations concerning God, Jesus Christ, and eternal life (to name just a few) are not about some vague “meaning” but purport to refer to *realities*, even if they are revealed and deeply mysterious.

Christianity describes the way the world *is* – created, fallen, and redeemed – and not only about how we ought to act within it. The theological description is prior to ethical prescriptions. Yet even though belief in creation, fall, and redemption concern what is most real, they cannot be classified as empirical questions, if that phrase means addressed through

⁵⁸ See Langdon Gilkey, *Creationism on Trial* (San Francisco: Harper and Row, 1985), pp. 49–52, 108–113. This position has been modified in favor of a more cooperative relationship in Gilkey’s later book, *Nature, Reality, and the Sacred* (Minneapolis: Augsburg Fortress Press, 1993).

⁵⁹ Second edn., Downers Grove, IL: InterVarsity, 1993.

⁶⁰ New York: W. W. Norton, 1981.

laboratory work or field studies. More generally, Christians affirm the reality of the objects of their belief, but the truth and meaning of these beliefs cannot be established or even indirectly examined by means of scientific investigation. Yet they are not completely independent of what we know about humanity from scientific studies that pertain to human beings, any more than what we think about creation is utterly independent of what we know from natural science. This kind of complexity indicates the weakness of Gould's simple descriptive/prescriptive dichotomization.

Gould was not as strict an interpreter of NOMA as initially seems to be the case. He did believe that science can act as a check on religious claims, at least inasmuch as religion makes *empirical* claims about nature, human behavior, and the world. Gould should actually have called his principle "POMA," for "*Partially Overlapping Magisteria*" – a position which is both more interesting to think about and more difficult to explicate. POMA is exemplified in Gould's decision to rule out miracles and other forms of divine intervention, for instance, on the principle that since they are not accessible to science, they cannot be true. He aimed primarily at "creation science" appeals to revelation – for example, to uphold a ten-thousand-year-old view of the earth – but in so doing actually brought into his range any belief in a God who cares for and orders creation.

Gould, like Dawkins and E. O. Wilson, held as intellectually untenable any belief in the existence and activity of a personal, benevolent, and almighty God who orders history and nature. Gould not only registered the standard methodological restriction of science to nature but he also denied that belief in the transcendent has any intellectual support from logic or evidence. As one reviewer put it, Gould wished that "religion should make an orderly retreat from the assertion of truth to the propounding of moral values."⁶¹

Gould did not replicate Dawkins' aggressive stance toward religion because he also appreciated the positive value it has for millions of people. He was aware of the fact that though science has great explanatory power, it cannot provide answers for the big and inescapable existential questions that human beings encounter. Gould's modesty in this regard is to be admired, especially when contrasted with Wilson's overly confident substitution of evolutionary mythology and morality for religion or with Dawkins' dismissal of religious questions as silly adolescent anachronisms.

⁶¹ Nigel Hawkes, review of Gould's *Rock of Ages*, in *The Tablet*, March 3, 2001, p. 309.

CRITIQUE OF EVOLUTIONARY ACCOUNTS OF RELIGION

All of these treatments of religion suffer from oversimplification. Dawkins does not recognize that what we call “religion” involves an extremely complex and sometimes very subtle collection of activities, practices, and beliefs. E. O. Wilson, too, collapses a rich, diverse, and complex array of human experiences, practices, and beliefs into one monolithic amalgam called “religion.”

Loose, undisciplined evolutionary speculations about religion are all the more offensive because they are proposed under the banner of “scientific objectivity.” In fact, however, this understanding of religion and science is far from being the product of detached (let alone genuinely scientific) reflection. Sociobiologists take for granted a way of thinking about religion that is a product of our own western, liberal effort, beginning in the late Middle Ages and escalating during the wars of religion, to establish a juridical and cultural separation of religion from the secular, public order, and the church from the state, in order to promote more securely, if not guarantee, civil order, domestic peace, and international security.

The change that comes about with the modern use of the word “religion” is underscored when viewed in contrast to an example of its medieval use. For Thomas Aquinas, faith concerned the whole of life – most of all, it connoted a sense of reverence for God and other human beings.⁶² “Religion” regarded the particular duties of justice one owed to God. The term “secular” described mundane activities such as manual labor that, while ordinary, nevertheless received their deeper intelligibility from their place in the totality of life. Religion was by no means opposed to the secular.

The meaning of religion changed when it became a category used by modernity – from Machiavelli, Hobbes, and Locke through their contemporary disciples – in its attempt to establish and legitimate the modern state.⁶³ Religion came to be identified with activities, organizations, and beliefs that are purely private and have no contribution to make to politics or the political community, which is conceived as coming under the sole and undisputed authority of the state.⁶⁴ Evolutionary analysis of religion reflects the long-term effort of modernity to marginalize, control, and

⁶² See *Summa Theologiae* (hereafter *ST*) II-II, 81 (Rome: Marietti, 1948). English translation by the English Dominican Province, 3 vols. (New York: Benziger Brothers, 1946).

⁶³ See N. Lash, *The Beginning and the End of “Religion”* (New York: Cambridge University Press, 1996).

⁶⁴ See Johann Baptist Metz, *Faith in History and Society*, trans. David Smith (New York: Crossroad, 1980), ch. 3.

finally eliminate religious communities – first as intellectually persuasive, then as socially viable. Sociobiology and evolutionary psychology provide an ideology intended to help along its demise.

The evolutionary agenda in effect echoes Hobbes' project of establishing "convenient articles of peace" to provide freedom from the fear of death. This stands in direct contrast to Augustine's classic definition of peace as the "tranquility of order."⁶⁵ In Hobbes' time, of course, the major competitor for authority in Christendom was the church, so one of his major concerns was radically to reduce and domesticate the power of the church and the normative order which it defended. As a seventeenth-century Anglican, Hobbes, unlike E. O. Wilson and Dawkins, continued to believe in the "true religion" as opposed to Catholicism (which preferred the pope to the sovereign) and Puritanism (which preferred the Christian conscience to the sovereign), but his philosophical subordination of church to state played a major role in the privatization of religion which Wilson applauds.

Paying attention to this intellectual and political lineage helps to bring into focus the *political* rather than the ostensibly purely scientific side of Wilson's critique of religion. In addition to his epistemological critique of religion – that religion cannot validate its truth-claims in the way that scientists can validate the truth-claims of science – he also objects to religion on the grounds that it violates the democratic ideal of political order. The democratic value of freedom is at odds with religion's allegedly irrational coercion, its slavish dependence on tradition, and its authoritarianism. For Wilson, the project of making a society democratic *requires* the weakening of religion.⁶⁶

The modern creation of religion, however, brought with it a profoundly ironic result: an undercurrent of deep *intolerance* toward religion and a deeply *undemocratic* attempt to determine in advance, and not through extended and public conversation and debate, what kinds of ideas, standards, and ideals count as worthy for public discourse, and even deliberate social appropriation. One can advocate the separation of church and state without banishing all religious values and ideals from the public sphere. But as a matter of fact Wilson insists that anything having to do with religion – what he terms "transcendentalism" – is determined a priori to be inherently irrational, potentially divisive, and therefore first relegated to the private sphere and then eliminated altogether in the science-driven process of secularization.⁶⁷

⁶⁵ See Thomas Hobbes, *Leviathan* (New York: Collier, 1962), ch. 17. Augustine, *De Civ. Dei* XIX, 13.

⁶⁶ See E. O. Wilson, *Consilience*, p. 256. ⁶⁷ See *ibid.*, p. 265.

Sociobiologists and evolutionary psychologists fail to appreciate the fact that undermining the authority of religious communities as sources of moral guidance and wisdom has the effect of removing one of the major cultural sources of resistance to the dominance not only of the state but also of the ever growing bureaucratic and market forces over civil societies in the world today. The allegiance and strong sense of identity cultivated by vital religious communities provide an important alternative to the homogenizing forces of the market, the power of the state, and the ideologies that would deem them the only authorities that can legitimately use the power discovered by science and developed in technology. Evolutionists seek freedom rather than coercion.⁶⁸ But when they advocate the elimination of religious traditions or their isolation into a secluded moral “magisterium,” they in effect help to undermine what has historically been a critically important counterbalance to the coercive power of the state and the market and thereby undercut one of the key roots of democracy itself.

From a Christian theological viewpoint, it is a mistake to force a choice between religion and evolution. Even if there are evolutionary conditions for why religion arose at a very early stage in human evolution, there is no reason why it should, for this fact alone, be an illusion or false. Religion and morality are social institutions that reflect central human needs and desires. Like other human institutions, they can be good or bad, healthy or sick. They are ways in which people are drawn to God and to the good. Scientific insights into the evolutionary roots of religion are compatible with the Christian view of the person as a self-transcending being made in the image of God. Philip Hefner is right to say that “religion generally, and Christian faith and theology, specifically, are systems of memes, cultural information, that have played a fundamental role in the emergence of persons, and continue to make significant proposals for understanding today what it means to be a person.”⁶⁹

The persistence of religions (despite the predictions of many observers of “secularization”) across human cultures and through time testifies to the universal human desire to come to proper relation with what is ultimate. They can help us to underscore ways in which the human person is divinely created, habituated to the moral life, denigrated by sin, and healed by grace. A biologically informed view of human behavior, including the

⁶⁸ See, for example, *ibid.*, p. 247.

⁶⁹ Philip Hefner, “Imago Dei: The Possibility and Necessity of the Human Person,” in N. Gregerson, W. B. Drees, and U. Gorman, eds., *The Human Person in Science and Theology* (Edinburgh: T. & T. Clark, 2000), p. 80.

powerful desires that lead to religion, can deepen our appreciation of the many levels on which we are embedded in the organic world. It can also encourage a greater appreciation of our transcendence of the organic world in acts of knowing and loving God and neighbor. Pursuing this line of thought will enable us to appreciate both the biological roots and the moral fruits of the complex creature that is the human person.

Evolution and Ethics- Summary. Some people argue that morality is the result of blind evolutionary forces rather than an omnipotent Creator. This view is flawed because (1) it assumes a morality that transcends evolutionary "morality," (2) it cannot explain motive and intent, (3) it denies rather than explains morality, and (4) it cannot account for the "oughtness" of morality. C. S. Lewis argues in *Mere Christianity* that there is a persistent moral law that represents the ethical foundation of all human cultures. This, he says, is evidence for the God who is the author of the moral law. Not everyone agrees. Scenarios like that of Bongo the chimp have been offered as evidence for rudimentary forms of morality among animals, especially the "higher" primates like chimpanzees. Stephen J. Pope. Can the origins of morality be explained entirely in evolutionary terms? If so, what are the implications for Christian moral theology and ethics? Is the latter redundant, as socio-biologists often assert? Stephen Pope argues that theologians need to engage with evolutionary theory rather than ignoring it. He shows that our growing knowledge of human evolution is compatible with Christian faith and morality, provided that the former is not interpreted reductionistically and the latter is not understood in fundamentalist ways. Christian ethics ought to incorporate evolutionary approaches to human nature to the extent that they provide helpful knowledge of the conditions of human flourishing, both collective and individual. The topic of this lecture is "Human Evolution and Christian Ethics." It joins two enterprises, and two intellectual worlds, that are not often thought about in relation to one another. One reason for the distance between these worlds concerns disciplinary specialization. Scholars in the one field are wary of entering into the other. So I will begin my presentation by confessing my appropriate humility and my own sense of the profound limits to my own understanding of human evolution. I am a moral theologian, not a scientist, so everything I say about human evolution comes from my attempt to ma...