

CHRISTIAN FAITH AND EVOLUTION

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**Lecture One
“Darwin: The Man and His Science”
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The Anglican Thesis is compatibility.

The Church of England took Charles Darwin in for burial in Westminster Abbey, making a point about the theological implications of the dead man's science. "It would have been unfortunate," as a bishop explained from the Abbey's pulpit the Sunday following the funeral, "if anything had occurred to give weight and currency to the foolish notion which some have diligently propagated, but for which Mr. Darwin was not responsible, that there is a necessary conflict between a knowledge of Nature and a belief in God."¹ This thesis of religion–science compatibility has been one of the more consistent threads running through the Anglican theological tradition since 1859, when Darwin published *The Origin of Species*. It was just recently reiterated when, by official action of the General Convention, the Episcopal Church affirmed: "an acceptance of evolution is entirely compatible with an authentic and living Christian faith."²

¹ "Westminster Abbey—Place of Worship House of Kings: People Buried or Commemorated—Charles Darwin;" available from <http://www.westminster-abbey.org/library/burial/darwin.htm> (accessed December 8, 2005).

² Episcopal Church in the United States of America, 75th General Convention, Resolution A129: "Affirm Creation and Evolution;" available from http://gc2006.org/legislation/view_leg_detail.aspx?id=136&type=CURRENT (accessed August, 16, 2006). This resolution was enacted in 2006. We will return to it and parse its meaning in chapter four.

The thesis is challenged by some.

However, we sometimes hear our thesis of compatibility challenged, and not only by aggressive atheists like Richard Dawkins.

Philip Kitcher, a respected philosopher of biology, has recently come out with a book titled *Living with Darwin: Evolution, Design, and the Future of Faith*. In picking up the book I was rather startled to see that he opens in the same way I opened my dissertation, with the symbolic fact of Darwin's burial in Westminster Abbey. But whereas my thesis has the burial as fitting, Kitcher is far from sure that he agrees. He wonders whether our church's acceptance of Darwin's science "leaves central religious doctrines and cherished beliefs about ourselves unperturbed—whether, in short, that memorial in the Abbey undermines the institution and the values the site represents, whether, in the interests of accurate representation, Darwin really should be disinterred."³

³ Philip Kitcher, *Living with Darwin: Evolution, Design, and the Future of Faith* (Oxford: Oxford University Press, 2007), 23.

Sometimes, we see our thesis of compatibility ostensibly affirmed, but with conditions that do not rest well with some of our faith's deeper convictions.

For example, the evolutionary psychologist Robert Wright has proposed “A Grand Bargain Over Evolution.”⁴

On Wright's bargain, atheists will back down from their claim that Darwinian evolution is incompatible with belief in God, because “any god whose creative role ends with the beginning of natural selection is, strictly speaking, logically compatible with Darwinism.”

The atheist, he says, “might even grant that natural selection's intrinsic creative power—something they've been known to stress in other contexts—adds at least an iota of plausibility to this remotely creative god.”⁵

As for the faithful, our part of the bargain is to “bite the bullet” and adopt a more “modern theology,” accepting that “God did his work remotely—that his role in the creative process ended when he unleashed the algorithm of natural selection (whether by dropping it into the primordial ooze or writing its eventual emergence into the initial conditions of the universe or whatever.)”⁶

⁴ Robert Wright, “A Grand Bargain Over Evolution,” *The New York Times*, sun. Aug. 23, 2009, “The Week in Review,” 9.

⁵ Ibid.

⁶ Ibid.

For Anglicans, the problem is that the religion we would be left with in this bargain little resembles the religion of the Bible and the Book of Common Prayer.

For example, listen to this prayer:

“O God of unchangeable power and eternal light: Look favorably on your whole Church, that wonderful and sacred mystery; by the effectual working of your providence, carry out in tranquility the plan of salvation; let the whole world see and know that things which were cast down are being raised up, and things which had grown old are being made new, and all things are being brought to their perfection by him through whom all things were made, your son Jesus Christ our Lord.”⁷

We pray this at every ordination, and on Easter Eve, which is the holiest moment of the Christian year. It is not a prayer to a God who has “unleashed an algorithm and stepped back,” but rather to a God who has purposes in mind, and is actively engaged in bringing them to fruition.

So Wright’s ideas for how religion is compatible with science might be agreeable to some religions, but not to ours.

⁷ “The Ordination of a Deacon,” in *The Book of Common Prayer and Administration of the Sacraments and Other Rites and Ceremonies of the Church According to the Use of the Protestant Episcopal Church in the United States of America* (New York: Church Hymnal Corporation, 1979), 540. The prayer containing this phrase recurs at the ordination of priests and bishops, and is also found in the Great Vigil of Easter.

The purpose of this class is to help you understand how *Christian* faith is compatible with evolution.

I hope that by the end you will see through Robert Wright's proposition that evolutionary science requires is to accept a "modern" theology where God is imagined as remote and idle.

To the contrary, this class will explain, defend, and develop the Anglican thesis of compatibility within the framework of classical theology.

And I want you to see that Philip Kitcher is mistaken in supposing that Darwin's science undermines the Church of England and its values and that it is at odds with our central religious doctrines, including our most cherished beliefs about ourselves.

Accepting evolutionary science does not require that we abandon our faith's central affirmations. To the contrary, the opposite is more nearly true: it is through deeper understanding of, and engagement with, those central doctrines that we find deeper harmony between religious and scientific understanding.

Let us begin with the story of a man.⁸

Charles Darwin was a Victorian gentleman of means. From birth, he was financially well endowed through his maternal lineage, the Wedgwood family of china-making fame. On his father's side, he was descended from physicians with free-thinking inclinations—especially his grandfather, the famous Erasmus Darwin. Charles grew up expecting that he would become a physician in turn. That was until he learned, at the University of Edinburgh, what surgery was like. At that point, he reconsidered his options and changed course. He left Edinburgh and medicine for Cambridge, where he would prepare for ordination, and the life of an English country parson.

Darwin had been an indifferent student. Now that changed. For at Cambridge he discovered the joys in naturalistic pursuits and, with these, his avocation. With the careful inspection of the natural world, Darwin's intellectual curiosity caught fire. He found reading William Paley especially enriching. Later Darwin would write that close study of Paley's books was "the only part of the

⁸ The following historical summary draws from Anthony D. Baker, "Theology and the Crisis in Darwinism," *Modern Theology* 18, no. 2 (April 2002), 183–215; Peter J. Bowler, *Monkey Trials and Gorilla Sermons: Evolution and Christianity from Darwin to Intelligent Design* (Cambridge, Mass.: Harvard University Press, 2007); John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (New York: Cambridge University Press, 1991); Janet Brown, *Charles Darwin: The Power of Place* (Oxford: Oxford University Press, 2002); William E. Phipps, *Darwin's Religious Odyssey* (Harrisburg, Penn.: Trinity Press International, 2002); and Michael Sheerer, *Why Darwin Matters: The Case Against Intelligent Design* (New York: Owl Books / Henry Holt, 2006).

Academic Course which, as I then felt and as I still believe, was of the least use to me in the education of my mind.”⁹

From our vantage, one fascinating fact in this is that all work of this kind was carried out beyond the classroom and the prescribed classical curriculum. At Cambridge, as William Phipps tells us, “science was an extracurricular activity that some students engaged in apart from their regular studies.”¹⁰ Another surprise to us is that Darwin’s newfound passion for nature would have served only to confirm his vocational direction—for almost all his scientific mentors were priests as well. The Rev. John Henslow was the faculty expert in botany, entomology, chemistry and assorted other sciences. The Rev. Adam Sedgwick was its renowned geologist. From such teachers, as well as from the author (and archdeacon) Paley, Darwin drank deeply of an assured sense of practical harmony between scientific and priestly pursuits, and intellectual harmony between “knowledge of Nature and belief in God.”¹¹ This harmony was the guiding theme of a then-powerful intellectual tradition, Natural Theology, and Darwin fully planned to serve within that tradition and advance its cause.

As Darwin was wrapping up his Cambridge studies, he found himself presented with a rare opportunity that only a wealthy individual could possibly accept, and only an adventurous and passionately committed naturalist would likely find enticing. A friend of Henslow’s, the Rev.

⁹ Charles Darwin, *The Autobiography of Charles Darwin*, ed. Nora Barlow (New York: Harcourt, 1958), 59, quoted in William E. Phipps, *Darwin’s Religious Odyssey* (Harrisburg, Penn.: Trinity Press International, 2002), 6.

¹⁰ Phipps, *Religious Odyssey*, 9.

¹¹ *Ibid.*, 9–12.

George Peacocke, wanted a suggestion of someone who could sail with Captain Robert FitzRoy on a voyage to chart the South American coastlines. Captain FitzRoy was looking for a man with expert knowledge in geology, and a companionable social peer. Henslow recommended Darwin who, though it would mean deferring ordination, was eager to accept. He was “excited,” as Phipps writes, “by the thought of years rather than weeks on a voyage to learn about the ‘glories’ of creation.”¹² On December 27, 1831, the *Beagle* sailed from Plymouth with Darwin aboard. His journey lasted nearly five years, Darwin not returning home to England until October, 1836.¹³ Throughout the journey, he made notes and collected crates of samples, including some of strange and fascinating varieties of species that were both alike and unlike those with which he was familiar at home in England, or had encountered at other stops along the *Beagle’s* way. Many of the most unusual of these were found when the ship reached the Galapagos Archipelago, an island chain several hundred miles out into the Pacific from Central America. As Darwin writes:

The natural history of his archipelago is very remarkable: it seems to be a little world within itself: the greater number of its inhabitants, both vegetable and animal, being found nowhere else. As I shall refer to this subject again, I will only here remark, as forming a striking character on first landing, that the birds are strangers to man. So tame and unsuspecting were they, that they did not even understand what was meant by stones being thrown at them; and quite

¹² Ibid., 13.

¹³ Charles Darwin, *Voyage of the Beagle*, ed. Janet Browne and Michael Never (New York: Penguin Books, 1989), x.

regardless of us, they approached so close that any number might have been killed with a stick.”¹⁴

What could explain the existence of a variety of birds that harbored no natural fear of humans? And why were the plants and animals throughout these scattered islands so consistently strange? And why, even from island to island, did the same species (finches, for example) assume such different shapes?

As we now know mostly thanks to Darwin, the explanation is found in a process called geographical, or “allopatric” speciation. The word is coined from the Greek *αλλος* (other) and *πατρις* (homeland). Ernst Mayr, one of the more important recent leaders in the Darwinian scientific tradition, has been particularly influential in developing this notion. Mayr defines evolution as “change in properties of organisms over time.”¹⁵ Changes usually happen slowly, as helpful variations catch on and spread throughout an interbreeding population—a species. But sometimes, because of migration or other factors, a sub-group becomes isolated from the rest. This happened with the Galapagos. Populations of organisms now separated from the Americas by five hundred miles of ocean, and from one another on their different islands, adapt to their new surroundings along divergent lines. With the geographical barriers to breeding, the genetic pools are kept apart. Under these conditions, small populations can undergo relatively rapid changes. Thus new, distinct varieties emerge, unique to

¹⁴ Ibid., 270.

¹⁵ Ernst Mayr, *What Evolution Is* (New York: Perseus Books Group / Basic Books, 2001), 8.

each locale. Under these circumstances the divergences can develop to points of anatomical or behavioral difference such that even were the separated groups now reunited, interbreeding is no longer possible. Where there had been one species, now there are two, three, or more. Such is the origin of species.¹⁶

After he had returned to England, and ruminated some years on what he'd seen and other evidence he'd gathered, Darwin was prepared to make the following suggestion:

In considering the origin of species, it is quite conceivable that a naturalist, reflecting on the mutual affinities of organic beings, on their embryological relations, their geographical distribution, geological succession, and other such facts, might come to the conclusion that species had not been independently created, but had descended, like varieties, from other species.¹⁷

Yes, given this variety of evidence, such would be conceivable. But how would it happen? For, as Darwin goes on to say, though this conclusion is consistent with observation, it “would be unsatisfactory, until it could be shown how the innumerable species inhabiting this world have been modified, so as to acquire that perfection of structure and coadaptation which justly excites our

¹⁶ Ibid., 175. Mayr writes: “New species may evolve when a population acquires isolating mechanisms while isolated from its parent population.” Mayr sees this as the main, but not only, way that the number of species multiplies.

¹⁷ Charles Darwin, *The Origin of Species: By Means of Natural Selection, Or the Preservation of favored Races in the Struggle for Life*, 1993 Modern Library edition (New York: random House / Modern Library, 1993), 19–20.

admiration.”¹⁸ To that end, now he delivered his explanation, “the theory of descent with modification through variation and natural selection.”¹⁹

The theory builds from the observation that no two creatures are alike in all respects.²⁰ Even within families, among siblings, there are variations. One giraffe’s neck is longer than another’s. A second observation was inspired by Thomas Malthus: birth rates being what they are, the earth does not have enough resources to go around. There logically ensues a struggle for survival, where some variations bestow advantages over others. The greener the grass snake, the harder it is for a hungry hawk to see and the better its chances for survival. If the green snake survives, it can reproduce, while its browner cousin is eaten at an early age. A third observation: parents pass their variations, sometimes, to their children. Archie Manning’s sons can also throw the ball. (Unbeknownst to Darwin, the reason for this, genetic inheritance, was at that time being worked out by Gregor Mendel.) Here the logic of selection again takes over. Given variations, heritability, and a struggle for survival, the more beneficial variations will tend to increase from the one generation to the next. This is something like the selection dairy farmers make, in breeding their cows to bulls whose offspring have tended to make more milk. The result is that cows today are more productive than cows of yesteryear. Except that, in the wild, the selection happens naturally, as a matter of course. So

¹⁸ Ibid., 20.

¹⁹ Ibid., 612.

²⁰ The following summary draws loosely from Ernst Mayr’s precise capsule account of the logic of natural selection, which consists, as Mayr explains, of “five observations (facts) and three inferences.” Mayr, *Evolution*, 115-117.

Darwin named the process “natural selection.” Through natural selection there may likely be more and more longer necked giraffes, and greener grass snakes, and men who can throw a football sixty yards. Thus, in the space of a single shift in generations, a population acquires a slightly different look. Given time—and the best geologists of Darwin’s era were now convinced that the earth was exceedingly old—the process would proceed apace and along diverging lines to better fit diverse environments. So a first result is that species do not remain the same. The average look, temperament, behavior of a population evolves as time goes by. Meanwhile the number of species multiplies. Such a process would explain, in a way consistent with “the mutual affinities of organic beings,” their “embryological relations,” “geographical distribution,” and the fossil record, how it had come to pass that species of the earth had all “descended, like varieties, from other species.”²¹ In introducing this theory to the world Darwin concludes:

I am fully convinced that species are not immutable; but that those belonging to what are called the same genera are lineal descendents of some other and generally extinct species, in the same manner as the acknowledged varieties of any one species are descendents of that species. Furthermore, I am convinced that Natural Selection has been the most important, but not the exclusive, means of modification.²²

Elliot Sober, the philosopher of biology, has said that in essence Darwin offered a combination of two “big ideas.” The first was of a “tree of life.” This idea comes in stronger and weaker forms.

²¹ Darwin, *Origin of Species*, 20.

²² *Ibid.*, 23.

Darwin advanced the “strong form,” according to which “there is a *single* tree of terrestrial life. That is, for any two species, there is a species that is their common ancestor—not only are we related to chimps, we are also related to cattle, to crows, and to crocuses.”²³ The second big idea, to explain the first, was natural selection.

²³ Elliot Sober, *Philosophy of Biology*, 2nd ed. (Boulder, Colo.: Westview Press / Perseus Books, 2000), 8.

Wallace

Darwin, as the story goes, was in no rush to make his theory public. To the contrary, he kept it under his hat for years, decades while building and strengthening his case. Then one day he received a most unexpected packet in the mail. The sender was Alfred Russel Wallace, a naturalist and sample-collector of his acquaintance. Wallace, to Darwin's astonished chagrin, had come up with the same theory. Overseas and far from England, he was sending his argument to Darwin, in hopes that Darwin might use his greater influence and connections to help Wallace gain a hearing for the theory in the scientific world. According to his biographers, Darwin was distressed if not nearly despondent to find that someone else had worked through to the same theory he had thought would be all his own. A less virtuous man holding in his hands the theory of a rival, unknown and out-of-sight, would have had several options. But Darwin responded in an honorable way, immediately showing Wallace's paper to Charles Lyell, the eminent geologist. Lyell and other friendly colleagues crafted the plan that would allow both Wallace and Darwin to receive recognition for their work in independently arriving at the same theory. Arrangements were made for a joint presentation of papers through the Linnean Society of London. (Wallace was still in the field, and Darwin had only that week suffered the crushing loss of his infant son to scarlet fever. So the material was presented through proxies.) It was after that low-key announcement, July 1, 1858, that Darwin sat down to write the *Origin of Species*.²⁴

²⁴ For the full account of Darwin's response to Wallace's revelation, see Janet Brown, *Charles Darwin: The Power of Place* (Oxford: Oxford University Press, 2002), 14–42.

Sexual Selection

Darwin went on to great, world-wide renown. He published other major works, most notably *The Descent of Man*. In this book, Darwin develops his theory about a variant of natural selection that he termed “sexual selection.” Sexual selection gives Darwin’s answer to the question: How did the peacock get its tail? It is a complex theory that considers “the advantage which certain individuals have over others of the same sex and species solely in respect of reproduction.”²⁵ The peacock got his tail because it would help him attract a mate. In the same book, Darwin also considers how natural selection could give rise to the intellectual, social, and moral faculties of humankind. Thus he sows the seeds of the programs of sociobiology and evolutionary psychology, where the rise of human affections, sympathies and ethical commitments is examined through the same logic that accounts for strong-armed quarterbacks, green grass snakes, and long-necked giraffes.

²⁵ Charles Darwin, *The Descent of Man* (Amherst, N.Y.: Prometheus Books, 1998), 216.

Death and Burial

Darwin died on April 19, 1882, one of the most recognized and honored men in England—“the greatest Englishman since Newton,” as one editorial obituary exclaimed.²⁶ Thus, though he was by then no more a churchman, in every other respect Darwin was a distinguished person of the kind eligible for burial with honors in England’s greatest church, the Abbey. So it was arranged.

²⁶ Browne, *Power of Place*, 497.

Evolutionary Theory Today

Time has in many respects been good to Darwin and his contribution. Although time has brought some changes to the theory, Darwinian evolution today remains remarkably close to its source in the ideas and pattern of evidence first laid out in the *Origin of Species*.

That is not to say that all the problems have been settled. Evolutionary theorists have labored to understand the parts that “necessity” and “chance” have played through evolutionary history, with major disagreements.

The biggest unanswered and disputed question in evolutionary theory is about the explanatory sufficiency of natural selection. Is the process powerful enough to have generated species in all their diverse complexity?

The new science of evolutionary development—“evo-devo”—is the latest in a string of scientific developments that present, at the very least, a strong challenge to the logic of selection. According to that logic, as Daniel Dennett explains it, “Each innovative step had to ‘pay for itself’ somehow, in the *existing* environment in which it first occurred, independently of whatever its role might become in later environments.”²⁷ However, experts in evolutionary development have found that in some instances the genetic basis for certain adaptations had evolved before the adaptations themselves could be of any use. Consider in point of fact a *New York Times*, “Science Times,” report on the

²⁷ Dennett, *Breaking the Spell*, 102.

recent fossil discovery of *Tiktaalik* in Northern Canada. In one way the discovery was a triumph for Darwinian theory, the culmination of a focused search for a transitional form between sea and land-dwelling life forms. *Tiktaalik* was in most ways just the form—a missing link—researchers had predicted should exist. After several years of looking, there it was, and in just the place it should have been expected. Of such successful predictions, modern science was made. However, as the *Times* reported, *Tiktaalik* “also had a few surprises.”

‘*Tiktaalik* is special,’ Dr. [Neil] Shubin said. ‘It has a flat head with eyes on top. It has gills and lungs. It’s an animal that’s exploring the interface between water and land.’

But *Tiktaalik* was a truly stunning discovery because this water-loving fish bore wrists, an attribute thought to have been an innovation confined strictly to animals that had already made the transition to land.

‘This was telling us that a piece of the toolkit, to make arms, legs, hand and feet, could very well be present in fish limbs,’ Dr. Shubin said. In other words, the genetic tools or toolkit genes for making limbs to walk on land might well have been present long before fish made that critical leap.”²⁸

Thus *Tiktaalik* would appear to defy Dennett’s principle that evolution is a pay as you go process. How does nature “select” for potential? The environment can only select for manifest (phenotypic)

²⁸ Carol Kaesuk Yoon, “From a Few Genes, Life’s Myriad Shapes,” *Science Times, New York Times*, June 26, 2007.

traits, and it can only select for those traits that are beneficial in the moment. For these and other reasons, at least one of Darwin's major theories is said by some to be in trouble.²⁹

²⁹ As Arthur Peacocke writes, some “biologists are convinced that natural selection is not the whole story, and some even go so far as to say that it alone cannot account for the formation of distinctly new species. They claim a significant role for other factors, including: the ‘evolution of evolvability’: the constraints and selectivity effected by self-organizational principles; ‘genetic assimilation’; that how an organism might evolve is a consequence of its state at any given moment; the innovative behaviour of individual organisms in a particular environment; ‘top-down causation’ through a flow of information from environment to the organism; group selection (after all!); long-term changes resulting from ‘molecular drive’; effects of the context of adaptive changes or even stasis; and the recognition that much molecular evolutionary change is immune to natural selection.” Arthur Peacocke, *Paths from Science towards God: The End of All Our Exploring* (Oxford: Oneworld, 2001), 74.

If natural selection is under a new wave of skeptical scrutiny, the other “big idea,” the tree of life, seems more solidly grounded than ever. Today’s Darwinians cite much the same diverse range of observations that Darwin had done to support the theory. Mayr includes the fossil record (which, fragmentary though it is, is consistent with theory at nearly every turn), and comparative anatomy, embryology, and biogeography. The power and wonder of Darwin’s theory is that it provides a single, “unified” explanation for phenomena across such diverse realms of consideration.³⁰ As Philip Kitcher puts it: “Evolutionary theory rests on its ability to subsume a vast number of diverse phenomena—including the *details* of biogeography, adaptive characteristics, relationships among organisms, and the sequence of fossils—under a single type of historical reasoning.”³¹

³⁰ Mayr, *Evolution*, 13–39.

³¹ Philip Kitcher, *Abusing Science: The Case Against Creationism* (Cambridge, Mass.: MIT Press, 1982), 130.

That this is so is something which, for our purposes, we can take for granted. Theological training doesn't supply the knowledge or the tools to ascertain whether or not, in this respect, "Darwin got it right."³² Rather, granting here that he did, we will be taking up the problem of what that means to Christians. And if expert science should decide that on a major point he got it wrong? That would ask for a different presentation, with a different thesis, answering a different question.

³² Here we borrow for frequent use a phrase from John Haught, while agreeing with this point that most of our problems come when theorists make the leap from "Darwin got it right" to "Darwin tells the whole story." John Haught, *Deeper than Darwin: The Prospect for Religion in the Age of Evolution* (Boulder, Colo.: Westview Press / Perseus books, 2003), 103.

Challenges

Our concern with this class is not with scientific challenges to Darwin, but with theological and philosophical challenges to our Anglican thesis of science-religion compatibility.

I often cite a book review by Professor Jerry Coyne, an evolutionary scientist at the University of Chicago. Professor Coyne notes that *The Origin of Species* sold out on the first day of its publication, and quips that the public seemed eager for a book where “Man was reduced to an aberrant ape and God to a powerless bystander.”³³

³³ Jerry Coyne, “Doing Acid,” *New York Times Book Review*, July 13, 2003, 11.

First Challenge

Christian teaching places a high estimate on the value and significance of humankind. We were made for a little while (slightly) lower than the angels, but now in Christ we are crowned with a glory and honor surpassing even theirs (Heb. 1:4,7–8). Humankind is the bearer of God’s image in the world. Darwinists may regard these notions as either quaint, or vain, but either way they will assume that they have now been superceded. Given what we have learned about our late appearance in the cosmic story, about the erratic course of organic evolution, about our close kinship with the chimpanzee, such exalted self–conceptions have gone by the boards. In the grand scheme of things, our species appears rather small and beside the point. That is the first challenge.

Second Challenge

The second problem, concerning God, has to do with the fact that Darwin not only identified the fact of evolution, he also explained it. And in that highly successful explanation, God is nowhere in sight.

That is what Wright has in mind in saying that accepting Darwin requires that we understand God's involvement with creation as remote. We are free to continue to believe he established the process and set it in motion, but beyond that the notion of God's involvement is superfluous.

Third Challenge

There is a third challenge stemming from the fact that natural selection involves a large amount of suffering, and depends on randomness and waste. The science historian Peter Bowler writes: “natural selection does not look at all like the kind of mechanism a wise and benevolent God would institute to bring about adaptive evolution.”³⁴

I said that Darwin, by the end of his life, was no longer a churchman. I would be remiss if I left out the part of the story where Darwin leaves the faith behind, because it has to do with the challenges of faith raised by the problem of evil.

³⁴ Bowler, *Monkey Trials*, 21.

Darwin's work as a scientist is generally thought to have made the problem of evil that much harder for Christian theology, because he exposed a prodigious amount of waste, suffering and cruelty in evolution by natural selection.³⁵ The literate public is familiar with the catchphrase "Nature red in tooth and claw." The line is from Tennyson's *In Memoriam*:

Who trusted God was love indeed
And love Creation's final law –
Tho' Nature, red in tooth and claw
With ravine, shriek'd against his creed – ³⁶

Darwin certainly recognized that his scientific work had raised a problem for Christian thinking on this front. His own theological position evolved through the years, by most accounts a downward drift from conventional Victorian (Unitarian) piety to a vaguely restless agnosticism, where he settled and remained. "The mystery of the beginning of all things is insoluble by us," wrote Darwin in his autobiography, "and I for one must be content to remain

³⁵ Christopher Southgate et al., *God, Humanity and the Cosmos: A Textbook in Science and Religion* (Harrisburg, Penn.: Trinity Press International, 1999), 141.

³⁶ Alfred Lord Tennyson, *In Memoriam A.H.H.* Canto 56, lines 13–16. It is interesting to note that the poem predates the publication of *The Origin of Species* by nine years.

an Agnostic.”³⁷ (A surprising discovery for researchers in this field is that the word “agnostic” was first coined in 1869 by Huxley to describe his own and Darwin’s theological position.)³⁸ Randall Keynes, a biographer of Darwin (and his great-great grandson) attests that, to the end of his life, Darwin inclined toward belief in a kind of Divine Creator. “But while others had faith in God’s infinite goodness,” writes Keynes, “Charles found him a shadowy, inscrutable and ruthless figure.” In this connection Keynes recalls Darwin’s notorious exclamation: “What a book a Devil’s Chaplain might write on the clumsy, wasteful, blundering low and horridly cruel works of nature.”³⁹ To this extent, for Darwin the problem of evil was theological. But it was also existential. From early adulthood and then for the remainder of his life, Darwin was afflicted by almost daily episodes of nausea. The man was, for many practical purposes, an invalid. Another biographer, Janet Browne, tells of a not atypical period when “Darwin was confined to bed for two or three weeks, prostrated with retching, colic, giddiness, and fatigue,

³⁷ Phipps, *Religious Odyssey*, 143, citing *The Autobiography of Charles Darwin*, ed. Nora Barlow (New York: Harcourt, 1958), 93–94.

³⁸ Phipps, *Religious Odyssey*, 143–48 offers a nuanced appraisal of the meaning of agnosticism for both Huxley and Darwin. They carefully positioned themselves *not* as atheists. See also Bowler, *Monkey Trials*, 104. Bowler, citing Bernard Lightman’s *The Origins of Agnosticism: Victorian Unbelief and the Limits of Knowledge*, says that Huxley came up with the term “to denote a state of active doubt rather than of positive disbelief.”

³⁹ Randal Keynes, *Darwin, His Daughter and Human Evolution* (New York: Riverhead Books, 2001), 269–70, where Keynes cites George Foote, *Darwin on God* (London, 1889), 20. The “Devil’s Chaplain” comment, now a title of a Richard Dawkins book, is cited from *The Correspondence of Charles Darwin* (Cambridge University Press, 1985), 6.178.

sometimes barely able to walk.” These problems lasted more than twenty–five years, getting worse with age.⁴⁰

Above all, the problem of evil was for Darwin spiritual, and personal, because it involved his children, and especially his daughter. Keynes’s book is a sad story of Darwin’s suffering over the illness, and death at age ten, of his and Emma’s second child, Annie. Annie, who had been healthy, cheerful, an especially delightful daughter, took ill with coughing and flu-like symptoms in the autumn of 1850. Her condition worsened despite treatments over the next period of several months, through the winter and into spring. After agonizing periods of acute suffering, Annie died the Wednesday following Easter Sunday. Charles had taken Annie for treatment in the town of Malvern and was with her during those final weeks, and at the end. Emma had remained home, caring for their several other children. Charles wrote his wife with the news:

My dear dearest Emma, I pray God Fanny’s note may have prepared you. She went to her final sleep most tranquilly, most sweetly at twelve o’clock today. Our poor dear dear child has had a very short life but I trust happy, and God only knows what miseries might have been in store for her. She expired without a sigh. How desolate it makes one to think of her frank cordial manners. I am so thankful for the daguerreotype. I cannot remember

⁴⁰ Browne, *Power of Place*, 232–33.

ever seeing the dear child naughty. God bless her. We must be more and more to each other, my dear wife.⁴¹

With that blessing, Darwin was through with God.

Keynes tells us that after Annie's death "Charles set the Christian faith firmly behind him. He did not attend church services with the family; he walked with them to the church door, but left them to enter on their own and stood talking with the village constable or walked along the lanes around the parish."⁴²

⁴¹ Keynes, *Darwin, His Daughter*, 215.

⁴² *Ibid.*, 269.

Conclusion

So, these are some of the challenges before us, that we must face as Anglicans to justify our claim that Darwinian evolution is “entirely compatible with authentic and living faith.”

Our goal is faith, with understanding.

In this arena, that means understanding the science.

It means understanding the challenges the science said is said to have posed to our religion.

But it is also going to mean understanding of traditional faith and what I am calling the classical theological tradition. When I say “classical theology” I am talking about Augustine, Aquinas, John Calvin, Richard Hooker, Karl Barth, and C.S Lewis.

When I say that Darwinian evolution is compatible with authentic and living faith, I mean that it is compatible with the faith as understood through this classical tradition.

It is this tradition that enables us to see why Jerry Coyne is mistaken in thinking that Darwin reduces God to bystander, or man to aberrant ape. It is this tradition that allows us to accept natural selection as a method appropriate for use by a wise and benevolent God.

So, next week we will begin to see how classical theology makes sense of Darwin's science, by looking at God and Christ in Christian Understanding."