

WRESTLING WITH THE DIVINE: GOD, DARWIN & EVOLUTION

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Abstract: Regrettably, a modern cultural myth has arisen that paints a dark and sinister picture of Charles Darwin and the religious implications of his theory of evolution. Many see him as one of the apostles of unbelief. However, the primary historical literature reveals that Darwin was thinking theologically throughout his career and that his reflections were sophisticated. In particular, he dealt with the religious themes of design in nature, the problem of pain, and Divine sovereignty over the world. Though Darwin certainly wrestled with the religious implications of his evolutionary theory, he never completely lost belief in God to embrace atheism.

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In his acclaimed best-seller *The Blind Watchmaker* (1986), the inimitable Richard Dawkins writes, "I could not imagine being an atheist before 1859, when Darwin's *Origin of Species* was published. . . . Darwin made it possible to be an intellectually fulfilled atheist."¹ Many today agree with Dawkins in suggesting that the father of the theory of biological evolution is a chief apostle of modern atheism. However, is this the case? Or is the association of Darwin with unbelief a popular cultural myth that has been thoughtlessly propagated throughout society?

This paper reviews the central religious beliefs of Charles Darwin and presents evidence from the primary historical literature that deals with his theological reflections on evolutionary theory. To the surprise of many, Darwin not only contributed to science a brilliant theoretical outline for biological origins, but his thoughts regarding the religious implications of evolution are profound and insightful.

The Early Years (1809-1831)

Charles Darwin was born 12 February 1809 and raised in a comfortable British setting surrounded by a variety of religious and philosophical beliefs.² His physician

father Robert was a “free thinker on religious matters” and at best a “nominal” Anglican.³ Darwin’s mother Susannah came from a devout Unitarian family and attended church with her children. Sadly, she died when Charles was only eight years old. Thereafter, his older sisters assisted in raising him and brought him to Anglican services.⁴ Darwin received an education from an Anglican day school, and in his autobiography refers to religious beliefs that are typical of a child. He writes, “I remember in the early part of my school life [1818-1825] that I often had to run very quickly to be in time, and from being a fleet runner was generally successful; but when in doubt I prayed earnestly to God to help me, and I well remember that I attributed my success to prayers and not to my quick running, and marvelled how generally I was aided.”⁵ As a teenager, Darwin read his grandfather Erasmus’ *Zoonomia, or the Laws of Organic Life* (1794-1796), which presented a deistic God creating life through an evolutionary process.⁶ He notes that the book had little effect on him at that time, but believes that its positive light on evolution opened the way for serious consideration of this view of biological origins.

After a failed attempt at studying medicine in Edinburgh, Darwin entered Christ College, Cambridge in 1828 to study theology. His intention was not so much religious, but more practical—his father insisted. Dr. Darwin recognized that his son lacked direction and this way he would at the least receive an education befitting a proper young British gentleman. There is little evidence to suggest Charles had a passionate faith at that point in his life, though he recalls, “I did not then in the least doubt the strict literal truth of every word in the Bible.”⁷ Darwin completed the divinity program in 1831, but decided not to be ordained as a minister. Yet, Cambridge gave him a purpose. He fell in love with science. His views on origins were typical of the early 19th century. He accepted that the earth was old, though catastrophic flood events still played a part in geology for understanding various surface features (*eg*, gravel beds, erratic rocks, *etc*). Darwin was also a progressive creationist,⁸ believing in the immutability (unchangeability) of species, and maintaining that God intervened to create life at different points in geological history.

More specifically, Darwin’s view of nature was steeped in the categories of British naturalist-theologian William Paley. His *Evidences of Christianity* (1794) and *Natural Theology* (1802) were required reading at Cambridge in the early 1800s, and Darwin claimed that studying these works were the only valuable part of his education. Well-known for the watchmaker argument⁹, Paley held that the universe features: (1) Design¹⁰—the beauty, complexity and functionality of nature ultimately reflect the mind of the Creator, (2) Perfect Adaption—each and every detail found in the world fits perfectly in its place, and (3) Beneficence—the creation is very good. Looking back on his career, Darwin recognizes in 1871:

I did not at that time trouble myself about Paley's premises; and taking these on trust I was charmed and convinced by the long line of argumentation. . . . I was not able to annul the influence of my former belief, then almost universal, that *each* species had been purposely created; and this led to my tacit assumption that *every detail* of structure, excepting rudiments, was of some special, though unrecognized, service.¹¹

It is important to emphasize that Paley's understanding of design is both static and conflated to the notion of perfect adaptability. That is, *each* and *every detail* in the world had some specifically designed purpose, with the exception being rudimentary structures such as mammary glands in males. Consequently, there was no room for mal-adapted structures or creatures, especially evolving ones, in God's good and perfectly ordered creation.

The *HMS Beagle* Voyage (1831-1836)

Darwin boarded *HMS Beagle* with these assumptions about nature on 27 December 1831. He also came with Christian beliefs and recalls, "Whilst on board the *Beagle* I was quite orthodox, and I remember being heartily laughed at by several of the officers (though themselves orthodox) for quoting the Bible as an unanswerable authority on some moral point. I suppose it was the novelty of the argument that amused them."¹² More significantly for the development of his science, Darwin embarked with the 1st volume of Charles Lyell's newly published *Principles of Geology* (1830-1833), which set down the foundations of modern geology. Soon after arriving in South America, his field experience of the region led him to embrace fully uniformitarian geology. Darwin boasts, "I am proud to remember that the first place, namely, St Jago, in the Cape Verde Archipelago, which I geologised, convinced me of the infinite superiority of Lyell's view over those advocated in any other work known to me."¹³

However, uniformitarianism did not extend to Darwin's biology. Late in the voyage he was still an anti-evolutionist, arguing in a perfect Paleyan fashion, that evolution was "a supposition in contradiction to the fitness which the Author of Nature has now established."¹⁴ Nine months before returning to England, Darwin remained a progressive creationist. He writes, "The one hand has surely worked throughout the universe. A Geologist perhaps would suggest that the periods of Creation have been distinct & remote the one from the other; that the Creator rested in his labor."¹⁵ In the last entry of the *Beagle Diary*, Darwin's acceptance of design in nature is obvious:

Amongst the scenes which are deeply impressed on my mind, none exceed in sublimity the [Brazilian] primeval forests . . . [for they] are temples filled with the varied productions of the God of Nature. No one can stand unmoved in these

solitudes, without feeling that there is more in man than the mere breath of his body.¹⁶

Throughout the famed trip Darwin believed in a Creator. Not only did nature profoundly impact him by reflecting design, but this God intervened to create life at different points in geological history.

1st Period of Religious Reflection (1836-1839)

HMS Beagle docked in Falmouth, England, on 2 October 1836 after a five-year voyage around the world. During the next few years Darwin entered his first period of intense theological reflection. As he recalls, “I was led to think much about religion.”¹⁷ This was also the time that he formulated his theory of biological evolution. To be sure, evolutionary theory has significant religious implications, and Darwin recognized them. In this period he rejected whatever Christian faith he had. Regarding the Bible, he reveals, “I had gradually come by this time, to see that the Old Testament from its manifestly false history of the world, with the Tower of Babel, the rainbow as a sign, etc., etc., and from its attributing to God the feelings of a revengeful tyrant, was no more to be trusted than the sacred books of the Hindoos, or any barbarian.”¹⁸ With a growing appreciation for the regularity of natural processes, Darwin also dismissed the New Testament and its record of miracles. In a positivistic fashion, he argues, “The more we know of the fixed laws of nature the more incredible do miracles become . . . the men at that time [1st Century] were ignorant and credulous to a degree almost incomprehensible by us.”¹⁹ Concluding this period, Darwin confesses, “I came to disbelieve in Christianity as a divine revelation.”²⁰

Though Darwin rejected the personal God of Christianity, he remained a firm believer in a Creator. More precisely, he renounced theism and espoused deism.²¹ During the late 1830s, Darwin outlined a theory on the origin of life, including humanity, that did not require the dramatic Divine *interventions* of progressive creation, and he based his model entirely on *providential* natural laws.²² That is, he envisioned God creating living organisms indirectly through the physical processes of evolution. Excerpts from his scientific notebooks reveal this distinction in God’s activity:

Astronomers might formerly have said that God ordered each planet to move in its particular destiny—In the same manner God orders each animal with certain form in certain country. But how much more simple & sublime power [to] let attraction act according to certain law; such are inevitable consequences; let animals be created, then by the fixed laws of generation. . . . Man in his arrogance thinks himself a great work worthy of the interposition of a deity, more humble & I believe truer to consider him created from animals.²³

Darwin at this time also began formulating the foundations of evolutionary psychology, and he cast his theory within a theological framework. For example, he argues that a “philosopher” (i.e., natural philosopher, or better ‘scientist’) errs if he “says the innate knowledge of creator <is> has been/implanted in us (?individually or in race?) by a separate act of God, & not as a necessary integrant part of his most magnificent laws, which we profane in thinking not capable to produce every effect of every kind which surrounds us.”²⁴ According to Darwin, not recognizing God’s “sublime power” and the “inevitable consequences” of the “magnificent laws” of evolution was to “profane” the Creator. Clearly, evolutionary theory, as first formulated, was not atheistic.

On the Origin of Species (1859)

During the late 1830s, Darwin scratched out in his scientific notebooks a deistic theory of evolution. But it would take twenty years before he made this view of origins public, and a dozen more years after that before Victorian England would read that humanity was also created through evolution.²⁵ In November 1859, *On the Origin of Species* was released and all 1250 copies were quickly sold. It included seven unapologetic and positive references to the “Creator.”²⁶ Staunchly opposed to the science-of-the-day (progressive creation), Darwin defends:

Authors of the highest eminence seem to be fully satisfied with the view that each species has been independently created. To my mind it accords better with what we know of the laws impressed on matter by the Creator, that the production and extinction of the past and present inhabitants of the world should have been due to secondary causes like those determining the birth and death of the individual.²⁷

Darwin’s rejection of interventionism and his acceptance of providentialism in this passage is clear.²⁸ God creates life, both in the womb and on the earth, through natural laws that he ordained. In other words, Darwin’s view of evolution in the famed 1859 work was teleological.²⁹ This natural process had a purpose rooted ultimately in the Creator. Consequently, Darwin did not embrace today’s popular understanding of evolution (atheistic/dysteleological) of a process run merely by chance and irrational necessity.

God’s part in the evolutionary process is further seen in the well-known final sentence of the *Origin of Species*: “There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone on cycling according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.”³⁰ This passage in the second edition of the *Origin* in 1860, and right up until the sixth and final edition in 1872, is even more specific. It includes the phrase

“originally breathed by the Creator.”³¹ Interestingly, Darwin somehow fails to recognize his own interventionism in the origin of the first few forms or form of life.³² But the evolutionary laws were definitely God’s laws. Therefore, it is a regrettable myth in modern society that Darwin’s *Origin* is associated with atheism. Those who have actually read the famed book know that such a belief betrays the historical evidence.³³

2nd Period of Religious Reflection (1860-1861)

Soon after the publication of the *Origin of Species*, Darwin entered a second period of intense theological reflection. His professional colleagues raised important issues, and he dealt directly with the religious themes of design in nature, the problem of pain, and Divine sovereignty. Throughout these discussions a growing tension develops between his religious beliefs and evolutionary science.

Regarding design, Darwin had a series of written exchanges with Harvard botanist Asa Gray, who was one of the first Christians in America to promote evolution.³⁴ In an 1860 letter to Gray, the clash between Paleyan categories and evolutionary theory began. Darwin writes:

This [issue of design] is always painful to me. I am bewildered. *I had no intention to write atheistically.* But I own I cannot see as plainly as others do, and as I should wish to do, evidence of design and beneficence *on all sides of us.* . . . On the other hand, I cannot anyhow be contented to view this wonderful universe, and especially the nature of man, and to conclude that everything is the result of brute force. . . . I grieve to say that I cannot honestly go as far as you do about Design. I am conscious that I am in an utterly hopeless muddle. I cannot think that the world, as we see it, is the result of chance; and yet I cannot look at *each* separate thing as the result of Design. . . . Again, I say I am, and shall ever remain, in a hopeless muddle.³⁵

Most importantly, Darwin is clearly not an atheist at this point in his career. Of course, “evidence of design . . . *on all sides of us*” and “*each* separate thing as the result of Design” was William Paley still speaking through him. His muddle, pain, and bewilderment over the issue of design can be understood in the light of these categories which were ingrained in his mind during his Cambridge education.

On the one hand, Darwin’s theory of evolution undermined Paley’s static perfection and adaption in each and every corner of the universe. For that matter, the dynamic evolutionary process was by definition incommensurable with the perfectly designed Paleyan world. As Darwin later wrote, “The old argument of design in Nature, as given by Paley, which formerly seemed to me so conclusive, fails, now that the law of natural selection has been discovered.”³⁶ Yet on the other hand, Darwin continued to experience

the impact of nature's beauty, complexity and functionality as a scientist; and he sensed what most people perceive—there is some sort of teleological reality behind the world, like a God or Supreme Force.³⁷ In other words, Darwin was trapped between his Paleyan understanding of design and his experience of nature.³⁸

Darwin also dealt with the greatest challenge to theism—the problem of pain. Concisely stated, why would an all-loving and all-powerful personal God allow suffering in the world? In the same 1860 letter to Gray, he complains:

But I own I cannot see as plainly as others do, and as I should wish to do, evidence of design and *beneficence on all sides of us*. There seems to me too much misery in the world. I cannot persuade myself that a beneficent and omnipotent God would have designedly created the Ichneumonidae with the express intention of their feeding within the bodies of Caterpillars, or that a cat should play with mice.³⁹

Again, a Paleyan category of nature is evident. Beneficence is everywhere throughout world. Most feel the weight of Darwin's complaint. Why would the theistic God allow a wasp (Ichneumonidae) to lay its eggs in a caterpillar, and as these develop slowly, permit them to eat away the host's internal organs until its death?

In an earlier letter to J.D. Hooker, Darwin was even more explicit regarding the lack of beneficence in the living world. He writes, "What a book a Devil's chaplain might write on the clumsy, wasteful, blundering low & horridly cruel works of nature!"⁴⁰

In addition, Darwin was intimately familiar with pain at a personal level. Shortly after his *HMS Beagle* voyage, he contracted a medical condition that saw him suffer bouts of nausea, vomiting, dizziness, chest pains and palpitations for the rest of his life.⁴¹

Moreover, many modern Darwin scholars speculate the suffering and eventual death of his beloved 10-year old daughter Annie in 1851 deeply traumatized the famed British naturalist.⁴² Indeed, nature was not at all like what Paley had envisioned, and it was only late in life that Darwin came to terms with the pain suffered by living creatures.

Finally, Darwin wrestled with the question of Divine sovereignty over the world during his second intense period of theological reflection. In an 1861 letter to Charles Lyell, he writes:

The view that *each* variation has been providentially arranged seems to me to make Natural Selection entirely superfluous, and indeed take the whole case of the appearance of new species out of the range of science. . . . It seems to me that variations in the domestic and wild conditions are due to unknown causes, and are without purpose, and in so far accidental; and that they become purposeful only when they are selected by man for his pleasure, or by what we call Natural Selection in the struggle for life, and under changing conditions. I do not wish to

say that God did not foresee everything which would ensue; but here comes very nearly the same sort of wretched imbroglio as between freewill and preordained necessity.⁴³

Again, Darwin's argument is steeped in Paley's notion of perfect adaptability. But more significantly, a non-teleological element is clearly developing in his understanding of evolution at this time. He is considering that biological variations "are without purpose, and in so far accidental." However, Darwin does not embrace an fully dysteleological world view. He continues to believe in the existence of God, and he advances a sophisticated theological understanding of Divine sovereignty. The Creator's foresight ultimately reigns over the evolutionary process.⁴⁴

Variation of Plants and Animals (1868) and Descent of Man (1871)

Many of the theological notions that Darwin expressed in private correspondence during the second period of intense religious reflection later became public in his more important scientific books. In these works, he continued to wrestle with the ultimate character of biological variation, and for the first time presented human evolution.

In the closing pages of *The Variation of Animals and Plants Under Domestication* (1868), Darwin is still being influenced by Paleyan notions of nature, but comes to an uneasy resolution by employing his Divine foresight argument. The last sentences of this scientific work conclude:

If we assume that *each particular* variation was from the beginning of all time preordained, then that plasticity of organization, which leads to many injurious deviations of structure, as well as the redundant power of reproduction which inevitably leads to a struggle for existence, and, as a consequence, to the natural selection or survival of the fittest, must appear to us superfluous laws of nature. On the other hand, an omnipotent and omniscient Creator ordains everything and foresees everything. Thus we are brought face to face with a difficulty as insoluble as is that of free will and predestination.⁴⁵

Clearly, Darwin still believed in the existence of a "Creator" who was both "omnipotent" and "omniscient." However, he struggled in coming to terms with this belief and those features in his evolutionary theory which pointed away from a world created by God—"injurious deviations," "redundant reproduction," "natural selection," and "survival of the fittest." Undoubtedly, remnants of Paleyan beneficence still tugged at Darwin's theology.⁴⁶

In *The Descent of Man* (1871), Darwin finally revealed to Victorian England that humanity was of part of his evolutionary theory. As noted previously, human evolution was an integral part of his science from the earliest notebooks in the late 1830s. Darwin

hinted at it in the famed *Origin of Species* with his only remark on the subject: “In the distant future I see open fields for far more important researches. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history.”⁴⁷ *The Descent of Man* offered an outline of evolutionary psychology, and it even included the evolution of religious belief.⁴⁸ Anticipating criticism from religious individuals, Darwin defends:

I am aware that the conclusion arrived at in this work will be denounced by some as highly irreligious; but he who denounces them is bound to shew why it is more irreligious to explain the origin of man as a distinct species by descent from some lower form, through the laws of variation and natural selection, than to explain the birth of the individual through the laws of ordinary reproduction. The birth both of the species and of the individual are equally parts of that grand sequence of events, which our minds refuse to accept as the result of blind chance.⁴⁹

Unquestionably, Darwin saw evolutionary psychology as neither atheistic or dysteleological. Using the analogy presented in the *Origin of Species*, he left the possibility for a Creator to be behind the “grand sequence of events” in both embryology and evolution.

The Autobiography of Charles Darwin (1876)

Darwin’s mature theological views appear in his *Autobiography* (1876) in a section entitled “Religious Belief.” He deals directly with the classic arguments both for and against God’s existence, and examines these in the light of evolutionary theory.

Beginning with the problem of suffering, Darwin argues:

A being so powerful and so full of knowledge as a God who could create the universe, is to our finite minds omnipotent and omniscient, and it revolts our understanding to suppose that his benevolence is not unbounded, for what advantage can there be in the suffering of millions of lower animals throughout almost endless time? This very old argument from the existence of suffering against the existence of an intelligent first cause seems to me a strong one.⁵⁰

But interestingly, Darwin is quick to answer this complaint. In coming to terms with pain in nature, he defends, “According to my judgment happiness decidedly prevails . . . all sentient beings have been formed so as to enjoy, as a general rule, happiness. . . most sentient beings [experience] an excess of happiness over misery, although many occasionally suffer much.”⁵¹ For Darwin, this is not the beneficence-dripping cosmos of Paley, but it is a good world. In particular, life would never have evolved if creatures suffered most of the time. The bite of the Ichneumonidae from Darwin’s second period of theological reflection seems to have lost its sting if evolution is viewed from a higher

or global perspective. According to Darwin, the problem of suffering is not an argument against God's existence.

The *Autobiography* then turns to two arguments for God's existence, and the centrality of design in each is evident. In the first, Darwin admits to once having what he terms a "religious sentiment." He writes:

At the present day the most usual argument for the existence of an intelligent God is drawn from the deep inward conviction and feelings which are experienced by most persons. . . . Formerly I was led by feelings such as those just referred to . . . [and these led] to the firm conviction of the existence of God, and of the immortality of the soul. In my Journal I wrote that whilst standing in the midst of the grandeur of a Brazilian forest, 'it is not possible to give an adequate idea of the higher feelings of wonder, admiration, and devotion which fill and elevate the mind.' I well remember my conviction that there is more in man than mere breath of his body.⁵²

However, Darwin writes-off these experiences as being merely psychological. He claims, "But now the grandest scenes would not cause any such convictions and feelings to rise in my mind. It may be truly said that I am like a man who has become colour-blind, and the universal belief by men of the existence of redness makes my present loss of perception of not the least value as evidence."⁵³ From Darwin's perspective, the "religious sentiment" stirred up in the human mind by nature is not an argument for God's existence.

In the *Autobiography's* second argument for the existence of God, a more substantive design argument is presented. Darwin writes:

Another source of conviction in the existence of God, connected with the reason and not with the feelings, impresses me as having much more weight. This follows from the extreme difficulty or rather impossibility of conceiving this immense and wondrous universe, including man with his capacity of looking 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.⁵⁴

Sensitive Darwin scholars note the present tense of the verb "feel" in the final sentence of this passage.⁵⁵ That is, in 1876, late in his life, Darwin is pressed to look for a "First Cause with a intelligent mind," and he even argues that being identified as a "Theist" is justifiable.⁵⁶ But like the previous two arguments dealing with God's existence, Darwin has a rebuttal. He claims that though this belief in design was "strong" at the time he wrote the *Origin of Species*, it "has very gradually with many fluctuations become weaker."⁵⁷ In particular, he is deeply troubled with this line of reasoning because a

“horrid doubt” arises, and he complains, “Can the mind of man, which has, as I fully believe, been developed from a mind as low as that possessed by the lowest animal, be trusted when it draws such grand conclusions?”⁵⁸ According to Darwin, design in nature appears to be a powerful and rational argument for God’s existence, but in final analysis, it is not trustworthy.

The conclusion Darwin draws in the section entitled “Religious Belief” from the *Autobiography* is that arguments either for or against the existence of God are inconclusive. He then confesses, “I cannot to pretend to throw light on such abstruse problems. The mystery of the beginning of all things is insoluble by us; and I for one must be content to remain an Agnostic.”⁵⁹

The Final Years (1876-1882)

Darwin’s agnosticism and fluctuating religious beliefs also appear during the last years of his life. In a letter addressed to James Fordyce in 1879, he writes:

What my own [religious] views may be is a question of no consequence to any one but myself. But, as you asked, I may state that my judgment often fluctuates. . . . In my most extreme fluctuations *I have never been an Atheist* in the sense of denying the existence of a God. I think that generally (and more and more as I grow older), but not always, that an Agnostic would be the more correct description of my state of mind.⁶⁰

It is important to note that this letter was written only a few years before Darwin’s death in 1882, and he is stating quite explicitly that he has “never been an Atheist in the sense of denying the existence of God.” Therefore, Darwin throughout his professional career never did embrace an atheistic or dysteleological view of biological evolution. Moreover, it follows from this passage that if he has “never been an Atheist” and “generally, but not always” an agnostic, then there must have been times when he was a “theist,” as he had acknowledged earlier in his *Autobiography*.

Finally, in the last year of Darwin’s life, the Duke of Argyll raised with him the issue of design in nature. Writing about this conversation, the Duke recalls:

I said to Dr. Darwin, with reference to some of his own remarkable works on the ‘Fertilization of Orchids’ and upon ‘The Earthworms,’ and various other observations he made of the wonderful contrivances for certain purposes in nature—I said it was impossible to look at these without seeing that they were the effect and the expression of mind. I shall never forget Mr. Darwin’s answer. He looked at me very hard and said, ‘Well, that often comes over me with overwhelming force; but at other times,’ and he shook his head vaguely, adding, ‘it seems to go away.’⁶¹

This is an especially fascinating passage. Only six years earlier in his *Autobiography*,

Darwin claimed to have become “colour-blind” to purported design in nature, and that “the grandest scenes would not cause any such convictions and feelings to rise in [his] mind.” Undoubtedly, the impact of “the expression of mind” in nature served as a source fuelling Darwin’s “not always” belief in a God.

Conclusion

The historical record clearly reveals that Charles Darwin was never an atheist. Throughout out his career, the father of modern evolutionary theory gave serious consideration to the religious implications of his science. For that matter, he often integrated these beliefs within his evolutionary theory as seen in his scientific notebooks, private correspondence, and professional publications. In fact, Darwin offers sophisticated insights regarding the notion of design in nature, the problem of pain, and Divine sovereignty over the world.

To be sure, Darwin’s story presents a classic struggle between science and religion. In particular, his evolutionary biology and Paleyan natural theology were in sharp conflict. Consequently, for a good part of his professional career, Darwin wrestled with the religious implications of his science. But late in life he came to realize that Paley’s notion of perfect adaptability was a tacitly held belief that caused his bewilderment and frustration. Today, the new science-religion dialogue serves in a similar way by identifying suspect assumptions in science. This emerging scholarship within the academy is re-defining the relationship between science and religion, and moving it toward a healthy and more peaceful co-existence.⁶²

Regrettably, a modern cultural myth has demonized Darwin along with his scientific theory. As fundamentalist Christian and leading anti-evolutionist Henry M. Morris harshly judges, “Satan himself is the originator of the concept of evolution.”⁶³ But proselytizing atheists like Richard Dawkins are every bit as guilty in fuelling Darwin’s purported atheism with their often venomous and tired polemic.⁶⁴ The time has come to let the historical record speak in order to move beyond the ill-informed myths of Charles Darwin’s religious beliefs and the misunderstood theological implications of the theory of biological evolution.

Acknowledgments

Jennifer Shaw and Eugene Malo

Endnotes

1. Richard Dawkins, *The Blind Watchmaker* (London: Penguin Books, 1991 [1986]), 5-6.

2. For complete historical reviews of Darwin see Adrian Desmond and James R. Moore, *Darwin* (New York: Warner Books, 1991); Peter Bowler, *Charles Darwin: The Man and His Influence* (Cambridge: University Press, 1990); Michael Ruse, *The Darwinian Revolution: Science Red in Tooth and Claw*. 2nd ed (Chicago: University Press, 1999 [1979]).
3. Charles Darwin, *The Life and Letters of Charles Darwin*, Francis Darwin, ed., 3 vols. (London: John Murray, 1888), II:178. Hereafter cited as *LLD*.
4. Charles Darwin, *The Autobiography of Charles Darwin, 1809-1882*. Nora Barlow, ed. (London: Collins, 1958), 22. Hereafter cited as *ACD*.
5. *ACD*, 25.
6. *ACD*, 49.
7. *ACD*, 57.
8. The term ‘creationist’ carries a variety of nuances and requires qualification. *Young Earth Creation* is the popular understanding of the creationist position. It rejects all the modern sciences dealing with origins and suggests that the world was created in six literal days less than 10,000 years ago and that all of geological stratification was the result of Noah’s global flood. *Progressive Creation* (or Old Earth Creation) accepts the standard geological dating of the earth (4.6 billion years), but rejects biological evolution and maintains that God created life in stages over the eons of time. *Evolutionary Creation* (or Theistic Evolution) asserts that the personal God of the Bible created the universe and life through ordained and sustained evolutionary processes. *Deistic Evolution* (also Theistic Evolution) has an impersonal God begin the evolutionary process, but He never enters the universe thereafter. *Dysteleological Evolution* (or Atheistic Evolution) is the popular understanding of the evolutionist position. It rejects the existence of God and believes that the world evolved entirely by chance and irrational necessity. For an introduction on Evolutionary Creation, see my web page: www.ualberta.ca/~dlamoure.
9. Concisely stated, Paley argued that if a watch is found in a field, then it is logical to suggest the existence of a watchmaker. So too with nature. Complexity, contrivance and design in the world point to a Creator with a purpose. See William Paley, *Natural Theology* in Robert Lynam, ed., *The Works of William Paley*, 6 vols. (Edinburgh: Baynes and Son, 1825), IV:1-12.
10. The notion of ‘intelligent design’ has gained much attention in recent years due to the so-called ‘Intelligent Design Movement.’ However, it is important to distinguish this modern interpretation of design from the traditional position. For intelligent design theorists like Phillip Johnson, Michael Behe and William Dembski, design is associated with biological structures (termed ‘irreducibly complex’ and ‘complex specified information’) that purportedly could not evolve by natural processes. However, the traditional understanding of design focuses on the beauty, complexity and functionality of nature, and it does not deal with the mechanisms through which these features arose. The historical view of design simply acknowledges that the world powerfully impacts everyone toward the belief that it reflects the mind of an Intelligent Being. For central Intelligent Design Theory works see, Phillip E. Johnson, *Darwin on Trial* (Downer’s Grove: IVP, 1991) and his *Defeating Darwinism by Opening Minds* (Downer’s Grove: IVP, 1997); Michael J. Behe, *Darwin’s Black Box: The Biochemical Challenge to Evolution* (New York: Free Press, 1996); William A. Dembski, *Intelligent Design: The Bridge between Science and Theology* (Downer’s Grove: IVP, 1999). For my debate with Johnson see Phillip E. Johnson and Denis O. Lamoureux, *Darwinism Defeated? The Johnson-Lamoureux Debate on Biological Origins* (Vancouver: Regent College Press, 1999); a synopsis of my argument in this book can

be see on my web page: www.ualberta.ca/~dlamoure.

11. ACD, 59; Charles Darwin, *The Descent of Man and Selection in Relation to Sex*, New Edition, Revised & Augmented (New York: D. Appleton, 1886 [1871]), 61. My italics.

12. ACD, 85.

13. ACD, 101.

14. Quoted in Sandra Herbert, "The Place of Man," *Journal of the History of Biology* (1997): 233 note 50. Darwin MSS, vol. 42, ULC (Feb 1835).

15. Charles Darwin, *Diary of the Voyage of H.M.S. Beagle*, Nora Barlow, ed., vol. 1 in *The Works of Charles Darwin*, Paul H. Barrett and R.B. Freeman, eds., 29 vols (London: William Pickering, 1986), I:348. (18 Jan 1836)

16. *Diary*, I:388. (24 Sep 1836)

17. ACD, 85.

18. ACD, 85.

19. ACD, 86.

20. ACD, 86.

21. Theism refers to belief in an all-loving and all-powerful personal God. This Divine Being is personally involved in the lives of people and answers their prayers in miraculous ways. On the other hand, deism states that God is impersonal and never enters the universe, having nothing to do with humanity. It is important to note that 40% of first-rate American scientists today are theists. See Edward J. Larson and Larry Witham, "Scientists Are Still Keeping the Faith," 386 *Nature* (3 Apr 1997): 435-436.

22. An important theological distinction needs to be made regarding Divine action. Interventionism is dramatic supernatural activity. For example, prior to Copernican astronomy, many believed that God or angels moved planets off their normal west-to-east courses, causing them to make short east-to-west loops known as 'retrograde motion.' Darwin refers to this type of Divine action in the next passage. Providentialism is God's subtle activity. An example would be the Creator employing natural laws to create life, both individually in the womb and collectively through evolution. This is the type of Divine activity Darwin envisioned during the years he formulated his evolutionary theory, and it was clearly included in his famed *Origin of Species*. In the light of this categorical distinction, a well-known comment by Darwin can be better understood. One of the first people he reveal his evolutionary views to was J.D. Hooker. In an 1844 letter, Darwin writes, "I am almost convinced (quite contrary to the opinion I started with [i.e., progressive creation]) that species are not (it is like confessing a murder) immutable." Darwin to Hooker (11 Jan 1844) in Francis Darwin, ed., *More Life and Letters of Charles Darwin*, 2 vols. (London: John Murray, 1888), I:40-41. Hereafter cited as *MLL*. Also found in Frederick Burkhardt and Sidney Smith, eds., *The Correspondence of Charles Darwin*, 11 vols (Cambridge: University Press, 1987 [1985-1999]), III:2. Hereafter cited as *CCD*. Some skeptics argue that this is evidence for Darwin's atheism in that God is the murdered victim. However, an appreciation of the categories of Divine action challenges this interpretation. Darwin's intention in this letter was to confess to his slaying the interventionistic God of progressive

creation, which at that time was accepted by the scientific community. As this paper will reveal, Darwin never embraced atheism. Rather, during most of his career, he believed in a deistic God who created life through a providential evolutionary process.

23. Charles Darwin, “B Notebook (Feb 1837 to Jan 1838),” in Gavin de Beer, ed., “Darwin’s Notebooks on Transmutation of Species,” *Bulletin of the British Museum (Natural History)*, II (1960), pp. 101, 106. Note that excerpts from the notebooks are exactly that—rough notes that are not grammatically sound or stylistically proper. In this paper they will be presented as they appeared originally with words occasionally added in brackets [] to smooth a passage.

24. Charles Darwin, “M Notebook (Jul 1838-Oct 1838),” in Howard E. Gruber, *Darwin on Man: A Psychological Study of Scientific Creativity Together with Darwin’s Early and Unpublished Notebooks*, Paul H. Barrett, transcriber and ed., (New York: Dutton & Co., 1974), 292, # 136.

25. For the sake of brevity, I will not examine numerous theological passages that Darwin composed in the years between his early notebooks (late 1830s) and the *Origin of Species* (1859). During this period he began with unpublished and private synopses of his theory in the “Sketch” (1842; 35 pages) and the “Essay” (1844; 213 pages). Later he started a major work, the “Big Species Book” (1856-1858), now known today as *Natural Selection*, but it was abbreviated and became the *Origin of Species*. The religious beliefs expressed in these works are outlined in the notebooks and then repeated (sometimes almost verbatim) in the *Origin*. See Charles Darwin, *Foundations of the Origin of Species: Two Essays Written in 1842 and 1844*, Francis Darwin, ed., (Cambridge: University Press, 1909), xxviii, 51-52, 253-255; Charles Darwin, *Charles Darwin’s Natural Selection; Being the Second Part of His Big Species Book Written from 1856 to 1858*, R.C. Stauffer, ed., (London: Cambridge University Press, 1975), 224-225.

26. See Charles R. Darwin, *On the Origin of Species. A Facsimile of the First Edition*. Introduced by Ernst Mayr. (Cambridge: Harvard University Press, [1859] 1964), 186, 188, 189, 413 (twice), 435, 488.

27. *Origin of Species*, 488. In the “Big Species Book,” Darwin adds to the original manuscript, “By nature, I mean the laws ordained by God to govern the universe.” *Natural Selection*, 224.

28. The William Whewell epigraph in the *Origin of Species* depicts Darwin’s rejection of interventionism: “But with regard to the material world, we can at least go so far as this—we can perceive that events are brought about not by insulated interpositions of Divine power, exerted in each particular case, but by the establishment of general laws.”

29. The term ‘teleology’ comes from the Greek word *τελος* which has a meaning of movement directed toward a goal, final outcome or an end accomplished. See *Liddell and Scott Greek-English Lexicon* (Chicago: Follett Publishers, 1954), 697; W.F. Arndt and F.W. Gingrich, *A Greek-English Lexicon of the New Testament and Other Early Christian Literature* (Chicago: University Press, 1979), 811.

30. *Origin of Species*, 490.

31. Morse Peckham, ed., *‘The Origin of Species’ by Charles Darwin: A Variorum Text* (Philadelphia: University of Pennsylvania, 1959), 759.

32. Even more interesting, Darwin’s modern critic Michael Behe seems to be a reincarnation of the famed evolutionist! Similar to the *Origin of Species* (1859), *Darwin’s Black Box* (1996)

proposes that the “irreducible structures” of the cell were put together “in one fell swoop” in a “first cell” from which all life evolved. See Michael J. Behe, *Darwin’s Black Box: The Biochemical Challenge to Evolution* (New York: Free Press, 1996), 39, 227-228. Also see my response to a paper by Behe entitled “A Box or a Black Hole? A Response to Michael J. Behe.” *Canadian Catholic Review*, (July 1999): 67-73. This paper is also found on my web page: www.ualberta.ca/~dlamoure.

33. Critics of this view claim that Darwin in the *Origin of Species* was simply hiding his true beliefs in order to have his book accepted. This was after all Victorian England. A letter to J.D. Hooker is often cited to defend this position. Darwin writes, “I have long regretted that I truckled to public opinion, and used the Pentateuchal term of creation, by which I really meant ‘appeared’ by some wholly unknown process.” Darwin to J.D. Hooker (29 Mar 1863) in *LLD*, III:18; *CCD*, XI:278. However, if this is the case, then Darwin’s regret is short-lived. In the three editions of the *Origin of Species* (1866, 1869, 1872) following this letter to Hooker, he made no effort to remove the “Pentateuchal term of creation” from his work. But more importantly, a review of Darwin’s *personal* scientific notebooks, which were never intended to be public, reveal his theological views are the same as those expressed in the *Origin*. See endnote 26.

34. See Asa Gray, *Natural Selection Not Inconsistent with Natural Theology: A Free Examination of Darwin’s Treatise on the Origin of Species and of Its American Reviewers* (London: Trubner & Co, 1861).

35. Darwin to Gray (22 May 1860) *LLD*, II:311-312; *CCD*, VIII:224. Darwin to Gray (26 Nov 1860) *LLD*, II:353-354; *CCD*, VIII:496. My italics.

36. *ACD*, 87.

37. For anyone in disagreement with this statement, I appeal to no one less than atheist Richard Dawkins who states, “The complexity of living organisms is matched by the elegant efficiency of the apparent design. If anyone doesn’t agree that this amount of complex design cries out for an explanation, I give up. . . . Our world is dominated by feats of engineering and works of art. We are entirely accustomed to the idea that complex elegance is an indicator of premeditated, crafted design. This is probably the most powerful reason for the belief, *held by the vast majority of people that have ever lived, in some kind of supernatural deity.*” *Blind Watchmaker*, xiii, xvi. My italics. Furthermore, a 1996 Princeton University study on the beliefs of Americans reveals that 96% accept the existence of “a God or universal spirit.” No author, “Religion Index Hits Ten-Year High,” *Emerging Trends: Journal of the Princeton Religion Research Center* (Mar 1996): 4. Also see Darwin’s affirmation of my view in quotes 54 and 61.

38. One might ask why Darwin did not consider a view of design not suffocated by Paley’s strict categories of design in each and every detail of the world. He did mention this idea in his correspondence with Asa Gray, “I am inclined to look at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may call chance.” Regrettably, Darwin never develops the concept and writes it off with little justification, “Not that this notion *at all* satisfies me.” *LLD*, II:311-312; *CCD*, VIII:224. This categorical entrapment in Paleyan categories and the frustration it produced for Darwin is further seen in a letter to J.D. Hooker nearly ten years later. Darwin writes, “My theology is a simple muddle; I cannot look at the universe as the result of blind chance, yet I can see no evidence of beneficent design, or indeed of *design of any kind, in the details.* As for *each* variation that has ever occurred having been preordained for a special end, I can no more believe in it than that the spot on which *each* drop of rain falls has been specially ordained.” Darwin to Hooker (12 Jul 1870)

MLL, I:321. My italics.

39. Darwin to Gray (22 May 1860), *LLD*, II:311-312; *CCD*, VIII:224.

40. Darwin to Hooker (13 Jul 1856), *MLL*, I:94; *CCD*, VI:178.

41. For a concise review of Darwin's medical condition and possible diagnosis see Lybi Ma, "On the Origin of Darwin's Ills," *Discover* (September 1997): 27.

42. See James R. Moore, "Of Love and Death: Why Darwin 'Gave Up Christianity'" in his edited, *History, Humanity, and Evolution: Essays for John C. Greene* (Cambridge: University Press, 1979), 195-229; Randall Keynes, *Annie's Box: Charles Darwin, His Daughter and Human Evolution* (London: Fourth Estate 2001).

43. Darwin to Lyell (2 Aug 1861) *MLL*, I:191-192; *CCD*, IX:226. My italics.

44. For an excellent review of this theological approach see Ernan McMullin, "Cosmic Purpose and the Contingency of Human Evolution," *Theology Today* 55, no. 3 (1998): 389-413.

45. Charles Darwin, *The Variation of Animals and Plants Under Domestication* (London: John Murray, 1888 [1868]), II:428. My italics. Darwin seems to have eventually abandoned his Divine sovereignty argument. First evidence of this appears in a letter two years later to J.D. Hooker where he writes, "Your conclusion that all speculation about preordination is idle waste of time is the only wise one; but how difficult not to speculate! Darwin to Hooker (12 Jul 1870), *MLL*, I:321. Moreover, this argument does not appear in Darwin's mature theological position found in his *Autobiography* (1876).

46. Neal Gillespie recognizes this intellectual tension in Darwin's thinking. He writes, "Darwin's materialism [was] compatible in his mind with theism. . . . There were in effect, two Darwins: one had caught the vision of a new method; the other still adhered to the older view that the very possibility of there being such a thing as science was necessarily linked to theism as the source of meaning and rationality in nature. . . . He rejected the creationist doctrine of divine intervention or superintendence because it was philosophically incompatible with the tenets of an emerging positive science . . . [but] Darwin's own approach fell short of complete positivism. Because of the theological elements in his thought, he continued to speculate . . . on the possibility of life and was loath to abandon the universe to the full meaninglessness that a complete positive view of the cosmos entailed." Neal C. Gillespie, *Charles Darwin and the Problem of Creation* (Chicago: University Press, 1979), 139, 146.

47. *Origin*, 488.

48. See section entitled "Belief in God—Religion" in *Descent of Man*, 93-96.

49. *Descent of Man*, 613.

50. *ACD*, 90.

51. *ACD*, 88, 89-90.

52. *ACD*, 90-91. Darwin is referring to the passage in his *Beagle Dairy*. See quote 16. Darwin's comment that this "religious sentiment" is "experienced by most persons" compliments my argument in endnote 37.

53. *ACD*, 91. Darwin's "colour-blindness" seems to be somewhat temporary or intermittent as quote 61 will reveal.
54. *ACD*, 92-93.
55. See Frank Burch Brown, "The Evolution of Darwin's Theism," *Journal of the History of Biology* (1986), 28. Brown argues cogently that Darwin's statement should not be understood as simply a reminiscence.
56. The question arises as whether Darwin uses the term 'theist' correctly in this passage when in fact he means 'deist.' In defence that he does employed the term properly is the following assertion three pages earlier in this section on "Religious Belief." Darwin states, "I did not think much about the existence of a *personal* God until a considerably later period of my life." *ACD*, 87. My italics.
57. *ACD*, 93.
58. *ACD*, 93. One must ask, "Is Darwin not using a mind 'evolved from lower forms' to make this argument?" Yes, there is a problem here with self-referential incoherence.
59. *ACD*, 94.
60. Darwin to Fordyce (1879) *LLD*, I:304. Italics added.
61. *LLD*, I:316.
62. One of the first fruits of this scholarship was to recognize that leading evangelical Christian academics were not opposed to Darwin's theory. Revisionist historians identify a *modus vivendi* existed. See David N. Livingstone, *Darwin's Forgotten Defenders: The Encounter Between Evangelical Theology and Evolutionary Thought* (Grand Rapids: Eerdmans, 1987); James R. Moore, *The Post-Darwinian Controversies. A Study of the Protestant Struggle to Come to Terms with Darwin in Great Britain and America, 1870-1900.* (Cambridge: University Press, 1979).
63. Henry M. Morris, *The Troubled Waters of Evolution* (San Diego: Creation Life Publishers, 1982), 75.
64. Richard Dawkins openly admits, "I want to inspire the reader with a vision of our own existence . . . I want to persuade the reader, not just that the Darwinian world-view *happens* to be true, but that it is the only known theory that *could*, in principle, solve the mystery of our existence." *Blind Watchmaker*, xiv. Italics original. Clearly, Dawkins is promoting a secularized form of religion.