

Denis O. Lamoureux

# Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism—Part I

Divine Creative Action and Intelligent Design in Nature

Denis O. Lamoureux

According to famed atheist Richard Dawkins, "Darwin made it possible to be an intellectually fulfilled atheist." Many people today, both inside and outside of the church, follow Dawkins and assume that Charles Darwin ushered in a dysteleological view of nature with no ultimate plan or purpose and no place for God. However, an examination of the primary historical literature—Darwin's private Notebooks on Transmutation (1837–1839), his two most important books, Origin of Species (1859) and The Descent of Man (1871), and his personal correspondence with colleagues—reveals that the father of evolutionary theory thought deeply about the religious implications of his science.

In this two-part article, I will glean theological insights from Darwin's writings to challenge Dawkins's belief, and I will propose the provocative anti-thesis that Darwin made it possible to be an intellectually fulfilled Christian theist. Here in Part I, we will examine Darwin's views on (1) divine creative action and (2) his experience with and understanding of intelligent design in nature. In Part II, to be published in September, we will review Darwin's thoughts on (3) theodicy and his personal wrestling with the problem of evil and suffering, and his views on (4) the origin of religion and morality in the light of evolutionary psychology.

ew have provoked as many extreme reactions regarding the relationship between science and religion as has Charles Darwin. The Darwin Correspondence Project at Cambridge University observes, "Darwin is

Denis O. Lamoureux is an associate professor of science and religion at St. Joseph's College in the University of Alberta. He holds three earned doctoral degrees – general dentistry, evangelical theology, and developmental and evolutionary biology. Lamoureux is the author of Evolutionary Creation: A Christian Approach to Evolution (2008) and I Love Jesus and I Accept Evolution (2009). He also has numerous audio-slide lectures with handouts on various topics in science and religion on his webpage, www.ualberta.ca /~dlamoure. This paper was first presented November 2009 at "150 Years after Origin: Biological, Historical, and Philosophical Perspectives," Victoria College, University of Toronto, Toronto, Ontario. It was also delivered July 2010 at the annual meeting of the American Scientific Affiliation, Catholic University of America, Washington, DC.

celebrated as a secular saint, and vilified as Satan's agent in the corruption of the human spirit." For example, the father of modern young earth creationism, Henry M. Morris, contends that "Satan himself is the originator of the concept of evolution," and that Darwin's theory of natural selection led to racism, Nazism, Marxism, and numerous other social evils.<sup>2</sup> On the other hand, the inimitable Richard Dawkins, in his acclaimed bestseller The Blind Watchmaker, asserts that "Darwin made it possible to be an intellectually fulfilled atheist."<sup>3</sup> In answer to these opposing claims, the Correspondence Project is quick to note that Darwin "is misquoted in order to support a particular position."<sup>4</sup> Notably, "the popular view of Darwin as purely secularist, or even atheist, is based on a highly selective reading of the sources."<sup>5</sup>

In this article, I will swim against the Dawkinsian tide in order to defend the provocative thesis that Charles Darwin made it possible to be an intellectually fulfilled Christian theist. Not to be misunderstood, let me say it is clear that Darwin gradually came to reject Christianity during the middle of his life, and this is no attempt to "Christianize" him. Instead, employing a method quite different from that of Dawkins, I will submit to the authorial intentionality of Darwinian historical literature so as to glean theological insights that I believe inspire a conservative Christian approach to evolution. Often labeled "theistic evolution" but more accurately termed "evolutionary creation," this view of origins claims that the Father, Son, and Holy Spirit created the universe and life, including human life, through an ordained, sustained, and designreflecting evolutionary process.<sup>6</sup> In this first of two parts, I will draw theological insights from Darwin that deal with (1) divine creative action and (2) intelligent design in nature.<sup>7</sup> In the second part, to be published in September, I will examine Darwinian insights related to (3) evolutionary theodicy and (4) evolutionary psychology.8

A few preliminary comments are in order. First, Darwin was at best a nominal Christian as a young adult. After returning from the HMS Beagle voyage (27 Dec. 1831 to 2 Oct. 1836), he entered a period of religious reflection and "gradually came to disbelieve in Christianity as a divine revelation."9 Darwin had four critical arguments: (1) the opening chapters of the Bible were a "manifestly false history of the world";10 (2) the God of the Old Testament was "a revengeful tyrant"; (3) "the more we know of the fixed laws of nature the more incredible do miracles become"; and (4) "the Gospels cannot be proved to have been written simultaneously with the events, that they differ in many important details, far too important it seems to me, to be admitted as the usual inaccuracies of eyewitnesses."11 Darwin also had an emotive complaint against the notion of eternal damnation, which he called "a damnable doctrine," since he assumed that "my Father, Brother and almost all my best friends, will be everlastingly punished."12 His rejection of Christianity remained

resolute until his death on 19 Apr. 1882. Responding in 1880 to whether he believed in the New Testament, Darwin writes back to F. A. McDermott, "I am sorry to have to inform you that I do not believe in the Bible as a divine revelation, & therefore not in Jesus Christ as the son of God."<sup>13</sup>

Second, it is important to underline that Darwin was never an atheist. In a letter dated 1879, three years before his death, in response to another query about his religious beliefs, he reveals to John Fordyce,

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 (& more and more so as I grow older) but not always, that an Agnostic would be the more correct description of my state of mind.<sup>14</sup>

Darwin's scientific colleague Thomas Henry Huxley coined the term "agnosticism" in 1869, and the first evidence of Darwin embracing this view appears in his 1876 Autobiography. 15 In a section entitled "Religious Belief," Darwin concludes, "The mystery of the beginning of all things is insoluble by us; and I for one must be content to remain an Agnostic."<sup>16</sup> Though he had gradually rejected Christianity, roughly over a period between the late 1830s and the late 1840s, Darwin continued to believe in a God prior to his acceptance of agnosticism.<sup>17</sup> In an 1878 letter to H. N. Ridley, he recalls, "[M]any years ago when I was collecting facts for the Origin [of Species], my belief in what is called a personal God was as firm as that of [the Reverend] Dr Pusey himself."18 This statement aligns with Darwin's claim in the Autobiography that he was a "theist" and that this belief "was strong in my mind" as he wrote the famed Origin of Species (1859), a book which included seven affirming references to the "Creator." In recent years, much has been written about the impact of the death of Darwin's beloved daughter Annie in 1851 on his religious views.<sup>20</sup> But given his rejection of Christian faith by the late 1840s, and his acceptance of theism in the late 1850s, it is apparent that Darwin firmly embraced some generalized form of theism not connected to Christianity or to any other religious tradition even after her passing.<sup>21</sup>

Finally, my justification to pursue such a provocative thesis—and what may seem to some, a perilous thesis—comes from Charles Darwin himself. In the aforementioned correspondence to Fordyce in 1879,

Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism – Part I

Darwin opens with a blunt indictment. "It seems to me absurd to doubt that a man may be an ardent theist & an evolutionist." He then offers the examples of Charles Kingsley, a self-described "orthodox priest of the Church of England," and Asa Gray, an evangelical Christian and Harvard botanist who promoted Darwin in America with his pamphlet Natural Selection Not Inconsistent with Natural Theology (1861). In other words, I feel comfortable speculating that rather than incurring the wrath of Charles Darwin for this two-part article, I may well receive his support.

# Insights into Divine Creative Action

Upon returning to England from his five-year circumnavigation aboard the *HMS Beagle*, Darwin entered a period that he describes as "the most active which I ever spent."<sup>24</sup> Between October 1836 and January 1839, he outlined his theory of evolution by natural selection, and alongside his scientific hypothesizing, he admits, "I was led to think much about religion."<sup>25</sup> Indeed, biological evolution has significant theological ramifications.

This two-year period is marked by Darwin's stern rejection of any interventions by the Creator in origins. Commonly known as the "god-of-the-gaps," this view of creative action assumes that a divine being entered the world at different points in time either to add missing parts or creatures, or to modify those already in existence.<sup>26</sup> For Darwin, the loss of dramatic divine acts in nature first began in Brazil, where he viewed geological evidence through the lens of the first volume of Charles Lyell's Principles of Geology (1830). Lyell's uniformitarianism quickly overthrew catastrophism, the geological paradigm of the early nineteenth century which held that features on the surface of the earth were caused by numerous diluvian events, with the Noahic Flood being the last.<sup>27</sup> However, Darwin did not immediately extend the Lyellian natural-laws-only view of geology to biology, and late in the voyage he still held a progressive creationist understanding of the origin of life.<sup>28</sup> Noting the similarity between ant lion pitfalls (traps) in both England and Australia, he argues in a diary entry dated January 1836,

Would any two workmen ever hit on so beautiful, so simple, & yet so artificial a contrivance [pitfall]?

It cannot be thought so. 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.<sup>29</sup>

Clearly, an interventionistic god-of-the-gaps was still front and center in Darwin's biological science late into his voyage onboard the *HMS Beagle*.

But dramatic divine creative acts were soon to be eliminated after landing in England. In the B Notebook of the famed *Notebooks on Transmutation* (1837–1839), Darwin draws an analogy between astronomy and biological evolution. Appealing to the history of science, he observes,

Astronomers might formerly have said that God ordered [i.e., intervened], each planet to move in its particular destiny [e.g., retrograde planetary motion]—In the same manner God orders each animal with certain form in certain country [progressive creation]. 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.<sup>30</sup>

In other words, Darwin contended that since astronomers no longer appeal to divine interventionistic acts to move planets around, biologists need not require dramatic creative acts in the origin of living organisms. <sup>31</sup> Natural processes alone could explain the data of astronomy and biology. In the D Notebook, he adds that creating life through natural processes was

far grander than [the] idea from cramped imagination that God created (warring against those very laws he established in all organic nature) the Rhinoceros of Java & Sumatra, that since the time of the Silurian he has made a long succession of vile molluscous animals.<sup>32</sup>

Such a micromanager view of divine creative action, concludes Darwin, is "beneath the dignity of him, who is supposed to have said let there be light and there was light."<sup>33</sup>

Darwin then extended this rejection of the god-ofthe-gaps to his evolutionary theorizing on the origin of humanity. "Man in his arrogance," writes Darwin in the C Notebook, "thinks himself a great work worthy of the interposition [i.e., intervention] of a deity, more humble & I believe truer to consider him created from animals." Though this passage is ambiguous about God's activity, Darwin places him firmly as the Creator of the evolutionary process.

In the M Notebook, Darwin asserts that a scientist is mistaken if he

says the innate knowledge of creator is has been implanted in us (by? individually or in race?) by a separate act of God, & not as a necessary integrant part of *his* most magnificent laws, of which we profane degree in thinking not capable to do produce every effect, of every kind which surrounds us.<sup>35</sup>

It is important to underline that this view of evolution is not the dysteleological process assumed by Richard Dawkins. For Darwin, biological evolution is clearly teleological, and ultimately rooted in God. Moreover, he acknowledges the reality of natural (or general) revelation as an innate characteristic of human beings. And by declaring evolutionary laws "most magnificent," Darwin certainly alludes to their having been intelligently designed.

Darwin's rejection of the god-of-the-gaps models, and his acceptance of a teleological evolutionary process ordained by the Creator, appear openly in his seminal book, *Origin of Species* (1859). The first epigraph of the book comes from William Whewell's *Bridgewater Treatise* (1833), and it sets the tone of his approach to divine action:

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 [i.e., interventions] of Divine power, exerted in each particular case, but by the establishment of general laws.<sup>37</sup>

Applying this understanding of God's activity to the evolution of life, Darwin contends,

Authors of the highest eminence [i.e., progressive creationists] 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.<sup>38</sup>

The analogy between developmental biology and evolutionary biology is powerful. No one today believes that God intervenes in the womb to attach fins, wings, or limbs during the creation of individual creatures. Instead, we know that living organisms

arise through natural embryological processes. So too, argues Darwin, with the origin of all creatures that have ever lived on earth—they were created through natural evolutionary processes ordained by God.<sup>39</sup>

The embryology-evolution analogy is also found in Darwin's second most well-known book, *The Descent of Man, and Selection in Relation to Sex* (1871). As noted earlier, he embraced human evolution in the late 1830s. But sensitivity to Victorian society led him to make only one thinly veiled remark on the topic in the *Origin of Species*. <sup>40</sup> *The Descent of Man* was a complete and uncompromising treatise on human evolution; but still mindful of cultural sensitivities, Darwin offered assistance to those struggling with evolution.

I am aware that the conclusions 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.<sup>41</sup>

Once again, Darwin provides a view of evolution that is clearly not dysteleological, as assumed by Dawkins. For that matter, it could be argued from this passage that embryological and evolutionary processes are both natural revelations that reflect intelligent design. And Darwin's significant epistemological claim that the human mind refuses to embrace a world run by blind chance offers an argument that God ordained the evolution of our brain in order to lead us to that very conclusion. Some implications of this conclusion will be explored in Part II of this article.

Finally, a comment is in order regarding Darwin's famed evolutionary mechanism of natural selection and the notion of survival of the fittest. Theories of biological evolution were being discussed for at least one hundred years before the *Origin of Species*. For example, Charles's grandfather Erasmus Darwin outlined a deistic and "Lamarckian" model of evolution in *Zoonomia*, or the Laws of Organic Life (1794–1796).<sup>42</sup> But it was the discovery of a scientific mechanism—natural selection—that captured the imagination and respect of the scientific community

Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism – Part I

in Darwin's day. Of course, dysteleological polemicists such as Dawkins focus on this rather unsavory aspect of evolutionary theory along with the idea of the survival of the fittest in order to justify their disbelief. However, rarely do they reveal that Darwin later mitigated both of these concepts. In the *Descent of Man*, he confesses, "In the earlier editions of my 'Origin of Species' I perhaps attributed too much to the action of natural selection or the survival of the fittest." His "excuse" for "having exaggerated its [natural selection] power" was for rhetorical purposes so as "to overthrow the dogma of separate creations." Darwin then adds, "We know not what produces the numberless slight differences between the individuals of each species."

Indeed, evolution features two pivotal concepts: (1) the production of biological variability, and (2) the natural selection of the fittest variants. Yet Darwin had no idea about the mechanisms behind the former, and late in life he even postulated what could be seen as a teleological factor in evolution. In an 1878 letter to H. N. Ridley, he observes that "there is almost complete unanimity amongst Biologists about Evolution," but he qualifies that "there is still considerable difference as to the means, such as how far natural selection has acted & how far external conditions, or whether there exists some mysterious innate tendency to perfectibility."46 Once again, such a view of biological evolution is far from that of Dawkins, which assumes that the process is driven by irrational necessity and blind chance.

To summarize, Charles Darwin offers some valuable insights to Christian theists regarding divine creative action. His appeal to the history of astronomy and his own experience with geological catastrophism shows that god-of-the-gaps models have always failed. The purported gaps in nature are not indicative of divine intervention, but rather, they are gaps in human knowledge later filled by scientific discoveries. Thanks to Darwin, it is clear that evolution is not necessarily atheistic or dysteleological.<sup>47</sup> From the writing of his *Notebooks on Trans*mutation in the late 1830s to the publication of Origin of Species in 1859, he viewed the evolutionary process as God's method of creation. Finally, Darwin's embryology-evolution analogy, appearing in his two most important books, remains a powerful argument to assist Christians today in coming to terms with the evolution of life.

## Insights into Intelligent Design

Regrettably, the term intelligent design has been coopted and muddled by proponents of the so-called "Intelligent Design (ID) Movement." Purporting to detect design *scientifically*, ID theorists only entrench in the minds of the public a false dichotomy—biological evolution vs. intelligent design. ID theory is a narrow view of design in which design is connected to miraculous interventions in the origin of life. In other words, it is just another god-of-the-gaps model. For example, parts of the cell like the flagellum are said to be "irreducibly complex"; as a result, they could not have evolved through natural processes. Since this is the case, ID theory should be more accurately termed *interventionistic* design theory.

Ironically, it is a famed atheist who has a more cogent grasp of the biblical and traditional understanding of intelligent design than the evangelical Christians who form the core of the ID movement. In *The Blind Watchmaker* (1986), Richard Dawkins declares,

The problem is that of complex design ... 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 [1] feats of engineering and [2] 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 ... It is as if the human brain were specifically designed to misunderstand Darwinism, and find it hard to believe.<sup>50</sup>

Note that design has nothing to do with purported gaps in nature, or so-called "irreducible complexity." Moreover, intelligent design is not limited to complexity alone (a prejudice so typical of the engineering mentality of ID theorists), but also includes beauty as a significant indicator. And finally, though Dawkins dismisses design as merely "apparent," he correctly asserts that design is a powerful argument, not a proof, experienced by everyone throughout history. These tenets are in alignment with Ps. 19:1–6, Rom. 1:18–23, and the apocryphal text Wisd. of Sol. 13:1–9.<sup>51</sup> In the light of Dawkins and scripture, I define intelligent design as *the belief* that beauty, complexity, and functionality in nature point to an Intelligent Designer.

Darwin began his academic career by being entrenched in a view of design similar to that of the ID Movement. William Paley's *Natural Theology: or, Evidence of the Existence and Attributes of the Deity, Collected from the Appearances of Nature* (1802) was required reading at Cambridge University in the early nineteenth century, and, interestingly, Darwin admits that this was the best part of his education.<sup>52</sup> However, later in life, he recognizes,

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." <sup>53</sup>

Three of Paley's premises of nature included (1) intelligent design, (2) perfect adaptation, and (3) beneficence.<sup>54</sup> But these categories were unnecessarily conflated together. Therefore, Darwin's notion of design by necessity had perfect adaptation and beneficence built into it. In particular, according to Paley, each and every detail of every living organism fitted together flawlessly; as a result, each species was by definition static.<sup>55</sup> Darwin would eventually propose his *dynamic* theory of evolution, and in doing so, he came to reject Paley's immutability of species along with Paley's concept of intelligent design. However, observations in nature impacted Darwin deeply throughout his life, and it drove him back to the belief that the world reflected intelligent design. In other words, at a tacit intellectual level, Darwin assumed that design necessitated Paley's perfect adaptation, but, at an experiential level, he encountered what Christian theology has long recognized as a nonverbal divine revelation inscribed deeply into the creation. And as is always the case, conflation leads to conflict.

Immediately following the publication of the *Origin of Species*, Darwin entered a second two-year period of intense theological reflection. The central issue was intelligent design, and since he had uncritically accepted Paley's conflation of design with perfect adaptation, he experienced conflict, frustration, and fluctuation. Numerous letters dated between 1860 and 1861 reveal Darwin's confusion on design, and the following three passages, written to leading scientific colleagues of the day, depict his

view and state of mind. On 26 Nov. 1860, he admits to Asa Gray,

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.<sup>56</sup>

To the famed astronomer John F. Herschel, Darwin writes on 23 May 1861,

The point which you raise on intelligent design has perplexed me beyond measure. I am in a complete jumble on the point. One cannot look at this Universe with all living productions & man without believing that all has been intelligently designed; yet when I look to *each* individual organism I can see no evidence of this.<sup>57</sup>

And to show that Darwin's confusion about intelligent design extended beyond the early 1860s, he confesses to botanist J. D. Hooker on 12 July 1870,

[B]ut how difficult not to speculate! 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.<sup>58</sup>

These passages reveal both Darwin's wonderful candor with his correspondents and his confusion regarding design. He is trapped between (1) his experience of the creation which leads him to the belief the world is "intelligently designed" and not "the result of blind chance," and (2) his tacit Paleyan understanding of design featuring perfect adaptation as reflected in his use of the terminology "each separate thing," "each individual organism," "beneficent design," "design of any kind, in the details," and "each variation."

But Darwin's confusion and frustration over intelligent design disappeared completely in his 1876 *Autobiography*. As noted previously, T. H. Huxley coined the term "agnosticism" in 1869, and Darwin embraces it in the section on "Religious Belief." He arrives at this position by offering arguments both *pro* and *contra* God, and in each case

Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism – Part I

concludes with a rebuttal. Consequently, the stalemate leads him to an agnostic position. Notably, the issue of intelligent design is once more central to his views on religion. Employing what might be called an "emotional" or "psychological" design argument, Darwin observes,

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 referred to, (although I do not think that the religious sentiment was ever strongly developed in me) 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, astonishment, and devotion, which fill and elevate the mind." I well remember my conviction that there is more in man than the mere breath of his body.<sup>59</sup>

However, Darwin is quick to rebut, "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 colorblind." <sup>60</sup> Indeed, the question must be asked, can one become "color-blind" to design in nature? As we shall see, Darwin will offer a different answer in the last year of his life.

Darwin then offers a second design argument in the *Autobiography*, one which he finds more compelling and could be termed a "rational" design argument.

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.<sup>61</sup>

It is important to recognize that here in 1876, Darwin employs the present tense for the verbs "feel" and "deserve." In other words, late in life Darwin had periods of theistic belief amidst his agnosticism, and the source of this belief was design in nature. Also

worth pointing out is that immediately following this passage, Darwin reveals, "This conclusion was strong in my mind about the time, as far as I can remember, when I wrote the *Origin of Species*; and it is since that time that it has very gradually with many fluctuations become weaker." To the surprise of most people today, and I suspect Dawkins as well, Darwin was a theist who embraced intelligent design when he wrote his most famed book!

Yet consistent with the agnostic argument pattern of the *Autobiography*, Darwin rebuts his rational argument for design. He immediately adds,

But then arises the horrid doubt—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?<sup>64</sup>

The problem with this rebuttal is quite obvious. What has Darwin just done to make his argument? He trusted his own mind, developed from the lowest animal! In other words, his argument is circular; more specifically, it suffers from self-referential incoherence. This problem, which I term "Darwin's epistemological dilemma on design," results in Darwin not offering a sound rebuttal to his rational argument against design. Therefore, the "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" remains steadfast as a powerful argument for "a First Cause having an intelligent mind in some degree analogous to that of man." The content of the steady of the s

Finally, in the last year of Darwin's life, the Duke of Argyll engaged him directly on the topic of intelligent design by appealing to some of Darwin's extraordinary research. Recalls the Duke,

In the course of that conversation 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." 68

In the light of this passage, it is obvious that Darwin miswrote in the *Autobiography* when he claimed to be "color-blind" with regard to design in nature. This passage also adds clarity to his religious beliefs mentioned in the 1879 letter to Fordyce in which he stated,

I have never been an Atheist in the sense of denying the existence of a God. I think that generally (& more and more so as I grow older) *but not always*, that an Agnostic would be the more correct description of my state of mind.<sup>69</sup>

Since Darwin was never an atheist, and since most of the time he was an agnostic, it follows that, during his "not always" periods, he was either a deist or theist. These periods were most likely the result of "effect and the expression of mind" in nature striking him "with overwhelming force."

To conclude, Charles Darwin offers valuable insights concerning intelligent design. It is evident that throughout his life, beauty, complexity, and functionality in nature impacted him often and powerfully. This is consistent with the theological notion of natural revelation and the well-known biblical verse, "The heavens declare the glory of God, and the firmament proclaims the works of his hands" (Ps. 19:1). Unfortunately, popular culture today is led astray by a cacophony of views on intelligent design-from the intolerant atheism of Richard Dawkins, who sees design as a delusion, to the equally intolerant anti-evolutionism of the intelligent design movement that proclaims design in purportedly irreducibly complex molecular structures. Interestingly, Darwin sits between these two extremes. Contra Dawkins, he is "compelled to look to a First Cause having an intelligent mind" because of "the impossibility of conceiving this immense and wondrous universe ... as a result of blind chance or necessity."<sup>70</sup> Contra the ID Movement, he rejects Paley's belief in the immutability of species and the perfect adaptation of "every detail of structure."71 Instead, Darwin opens our minds to a viva media, featuring a divinely ordained evolutionary process that reflects God-glorifying intelligent design.

\* \* \*

Now equipped with Darwinian theological insights on divine creative action and intelligent design in nature, the second part of this article will attempt to draw other helpful concepts from the Darwin literature in order to offer Christian approaches to evolutionary theodicy and evolutionary psychology. It will be published in the September 2012 issue of this journal.

### Acknowledgments

I am grateful to Paul Fayter for his incisive review of this article. His encyclopedic knowledge of the Darwin literature never ceases to amaze me. I am also thankful to an anonymous reviewer at *Christian Scholar's Review* for introducing me to valuable literature on nineteenth-century biology. And I am always appreciative of my assistant Anna-Lisa Ptolemy for her editorial work, as well as that of Lyn Berg, Esther Martin, Nancy Rosenzweig, Karen Spivey, and Chelsea Murray.

### Notes

<sup>1</sup>"Belief," Darwin Correspondence Project, accessed January 11, 2011, http://www.darwinproject.ac.uk/content/view/106/100. Hereafter cited as DCP.

<sup>2</sup>Henry M. Morris, *The Troubled Waters of Evolution* (San Diego, CA: Creation-Life Publishers, 1982), 75.

<sup>3</sup>Richard Dawkins, *The Blind Watchmaker* (London: Penguin Books, 1991 [1986]), 6.

<sup>4</sup>"Darwin and Religion," DCP, accessed January 11, 2011, http://www.darwinproject.ac.uk/content/blogcategory /36/63/.

5"Belief," DCP.

<sup>6</sup>See Denis O. Lamoureux, Evolutionary Creation: A Christian Approach to Evolution (Eugene, OR: Wipf & Stock, 2009), xiii, 29–35. Hereafter cited as EC; Denis O. Lamoureux, "Evolutionary Creation: Moving beyond the Evolution versus Creation Debate," Christian Higher Education 9 (2010): 28–48.

<sup>7</sup>Regrettably, in recent years the term "intelligent design" has been stripped of its traditional meaning and conflated with antievolutionism by so-called intelligent design theorists. See page 112 for my definition of design.

<sup>8</sup>The second part of this article will be published in the September 2012 issue of this journal, *PSCF*.

PCharles Darwin, *The Autobiography of Charles Darwin,* 1809–1882, ed. Nora Barlow (London: Collins, 1958), 86. My italics. Hereafter cited as *ACD*. This loss of faith appears to have occurred over a period of time, from the late 1830s to the late 1840s. In an interview with Edward B. Aveling in 1881, Darwin states, "I never gave up Christianity until I was forty years of age [i.e., in 1849]" (Aveling, *The Religious Views of Charles Darwin* [London: Freethought Publishing, 1883], 5, 7). This is consistent with Darwin's assertion in the *Autobiography*,

Thus disbelief crept over me at a very slow rate, but was at last complete. The rate was so slow that I felt no distress, and I have never since doubted for a single second that my conclusion was correct. (*ACD*, 87)

### Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism – Part I

Regarding Darwin's Christian faith, Michael Ruse notes that there is no evidence of "burning religious zeal" at any point in his life (Ruse, *The Darwinian Revolution: Science Red in Tooth and Claw* [Chicago: University of Chicago Press, 1979], 182). Though Darwin studied theology at Cambridge, this decision reflects his father Robert Darwin's "worldly wisdom more than piety" in that "it might at least save him [Charles] from dissolution and prodigality" (Frank Burch Brown, *The Evolution of Darwin's Religious Views* [Macon, GA: Mercer University Press, 1986], 8–9).

<sup>10</sup>In a letter to his sister Caroline in 1837, it is evident that Darwin was reassessing the assumed concordist interpretation of the early chapters of Genesis.

You tell me you do not see what is new in Sir J. Herschel's idea about the chronology of the Old Testament being wrong.—I have used the word chronology in a dubious manner, it is not to the days of Creation which he refers, but to the lapse of years since the first man made his wonderful appearance on this world—As far as I know everyone has yet thought that the six thousand odd years had been the right period but Sir J. thinks that a far greater number must have passed since the Chinese [space left in copy] the Caucasian languages separated from one stock. (Darwin to Caroline S. Darwin, 27 Feb. 1837, DCP Letter 346)

<sup>11</sup>ACD, 85-6. Clearly, Darwin assumed that a concordist hermeneutic was essential to Genesis 1-11. As well, he does not seem to be aware that the gospels went through an oral phase before being written down and later redacted. Concordism is not possible in the early chapters of scripture since they feature recycled and reinterpreted ancient Near Eastern motifs (ancient scientific/historical paradigms of the day); and sharp contradictions between some New Testament events are expected with eyewitness accounts and their oral transmission. In fact, the latter argues for the authenticity of the accounts. Moreover, I wonder what Darwin would have said if he knew that 40% of American scientists believe in a personal God who answers prayer that is "more than the subjective psychological effect of prayer" (Edward J. Larson and Larry Witham, "Scientists Are Still Keeping the Faith," Nature 386 [3 Apr. 1997]: 436). <sup>12</sup>ACD, 87.

<sup>13</sup>Darwin to F. A. McDermott, 24 Nov. 1880, DCP Letter 12851. Similarly, in 1879 Darwin wrote to a German student, "For myself, I do not believe that there ever has been any Revelation. As for a future life, every man must judge for himself between conflicting vague possibilities" (Francis Darwin, ed., *The Life and Letters of Charles Darwin*, 3 vols. [London: John Murray, 1887], I:307). Hereafter cited as *LLD* 

<sup>14</sup>Darwin to J. Fordyce, 7 May 1879, DCP Letter 12041. My italics. Also in *LLD*, I:304.

<sup>15</sup>Adrian Desmond, *Huxley: From Devil's Disciple to Evolution's High Priest* (Reading, MA: Helix Books, 1994), 374.

<sup>16</sup>ACD, 94. Darwin immediately follows this concluding sentence with what could be deemed as his definition of agnosticism: "A man who has no assured and ever present belief in the existence of a personal God or of a future existence with retribution and reward" (ACD, 94).

<sup>17</sup>See endnote 9.

<sup>18</sup>Darwin to H. N. Ridley, 28 Nov. 1878, DCP Letter 11766. My italics. This letter is a response to Pusey's sermon criticizing Darwin's *Origin of Species*.

<sup>19</sup>ACD, 93. See Charles R. Darwin, On the Origin of Species. A Facsimile of the First Edition, introduction by Ernst Mayr (1859; reprint, Cambridge, MA: Harvard University Press, 1964), 186, 188, 189, 413 (twice), 435, 488. Hereafter cited as OS.

<sup>20</sup>Adrian Desmond and James Moore assert that Annie's painful death "chimed the final death-knell for his [Darwin's] Christianity, even if it had been a long, drawn-out process of decay" (Desmond and Moore, *Darwin* [New York: Warner Books, 1991], 387). The suffering endured by his father Robert ("for days he lay writhing on a sofa, 'groaning & grumbling' plagued by bursting boils" [Ibid., 350]) before dying in November 1848, was undoubtedly a contributing factor as well.

<sup>21</sup>There is a challenge in understanding how Darwin employed the term "theist." The traditional definition is someone who believes in a personal God, "transcendent from the world, who is omnipotent, omniscient, and perfectly good" (Michael Peterson, William Hasker, Bruce Reichenbach, and David Basigner, *Reason and Religious Belief* [New York: Oxford University Press, 1991], 9). Historians have offered a variety of categories to describe Darwin's religious belief.

- Michael Ruse calls him "a deist of a kind" when he wrote Origin of Species (Ruse, Darwinian Revolution, 181).
- John Hedley Brooke refers to "a nonbiblical deism" during this same period (Brooke, "Darwin and Religion: Correcting the Caricatures," Science and Education 19 [2010]: 393).
- James D. Loy and Kent M. Loy suggest that "Charles's Christianity would fade into a generalized theism" (Loy and Loy, *Emma Darwin: A Victorian Life* [Gainesville, FL: University Press of Florida, 2010], 86).
- And James R. Moore contends that "Darwin indeed gave up Christianity long before he wrote *Origin* but he remained a muddled theist to the end" (Moore, "Darwin of Down: The Evolutionist as Squarson-Naturalist," in *The Darwinian Heritage*, ed. David Kohn [Princeton, NJ: Princeton University Press, 1985], 438).

Moore also emphasizes the need to differentiate Darwin's rejection of Christianity from his acceptance of a general theism. He incisively notes, "[E]ven those [Darwin historians] who carefully distinguish Christianity from natural religion in Darwin's religious outlook have tended to conflate his growing doubts about the latter with his disbelief in the former" (Moore, "Of Love and Death: Why Darwin 'Gave Up Christianity'" in *History, Humanity and Evolution: Essays for John C. Greene*, ed. James R. Moore [Cambridge: Cambridge University Press, 1989], 197).

It is worth adding that Darwin was aware of the term "deist" and used it in an 1862 letter to Asa Gray. Commenting on Clémence Royer, the French translator of *Origin of Species*, he writes that she "is [an] ardent deist & hates Christianity, & declares that natural selection & the struggle for life will explain all morality, nature of man, politicks Etc Etc!!!" (Darwin to Asa Gray, 20 June 1862, DCP Letter 3595). I suspect that Darwin's distaste for controversy, especially anti-religious polemic like that expressed by Royer, might have

kept him away from using the term "deist." Nevertheless, Darwin did employ the word "theist," and he often referred to the omnipotence and omniscience of God. And since he was aware of the word "deist," I will suggest that he embraced a generalized or nonreligious (meaning not associated with traditional religions, such as Christianity) form of theism.

<sup>22</sup>Darwin to Fordyce, 7 May 1879, DCP Letter 12041; *LLD*, I:304. Agnostic and famed paleontologist Stephen Jay Gould holds a similar view. He claims, "Evolution [is] both true and entirely compatible with Christian belief—a position I hold sincerely" (Gould, "Non-overlapping Magisteria," *Natural History* 106 [1997]: 16). Of course, Richard Dawkins is not enamored with Gould. Writes Dawkins, "The belief that religion and science occupy separate magisteria is dishonest" (Dawkins, "Snake Oil & Holy Water: Illogical Thinking Is the Only Thing Joining Science & Religion Together," *Forbes ASAP* [4 Oct. 1999]: 237).

<sup>23</sup>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: Cambridge University Press, 1979), 306. For the views of Asa Gray, see David N. Livingstone, Darwin's Forgotten Defenders: The Encounter between Evangelical Theology and Evolutionary Thought (Grand Rapids, MI: Eerdmans, 1987), 60–4.

<sup>24</sup>ACD, 82.

<sup>25</sup>Ibid., 85.

<sup>26</sup>I am not philosophically opposed to this view of divine action, but history reveals that it has consistently failed. Purported gaps in nature are, in reality, gaps in scientific knowledge. Instead of widening the gaps with the advance of science indicative of direct divine action, the gaps always close with the discovery of new natural processes. See *EC*, 60–2.

<sup>27</sup>On early nineteenth-century catastrophism, see Davis A. Young, *The Biblical Flood: A Case Study of the Church's Response to Extrabiblical Evidence* (Grand Rapids, MI: Eerdmans, 1995), 99–117. See also Henslow's caution to Darwin regarding Lyell's geology in *ACD*, 101.

<sup>28</sup>Progressive creation asserts that the earth is old and that God created different living organisms intermittently across the eons of time.

<sup>29</sup>Charles Darwin, *Diary of the Voyage of H.M.S. Beagle* in *The Works of Charles Darwin*, ed. Nora Barlow (London: William Pickering, 1986), I:348. Dated 18 Jan. 1836.

<sup>30</sup>Charles Darwin, B Notebook (February 1837 to January 1838), 101. See the Complete Work of Charles Darwin, accessed January 11, 2011, http://www.darwin-online.org.uk. Hereafter cited as CWCD. The clause "such are inevitable consequences" certainly aligns well with a teleological evolution envisioned by Simon Conway Morris. "[T]he constraints of evolution and the ubiquity of convergence make the emergence of something like ourselves a near-inevitability" (Conway Morris, *Life's Solution: Inevitable Humans in a Lonely Universe* [Cambridge: Cambridge University Press, 2003], 328). Frank Burch Brown notes examples throughout Darwin's career of a teleological or progressive element in his view of evolution (Brown, "Darwin's Religious Views," 43–5).

<sup>31</sup>In a similar historical argument, Darwin notes that attacks against evolution "will be as powerless to retard by a day the belief in evolution as were the virulent attacks made by divines fifty years ago against Geology, & the still older ones of the Catholic Church against Galileo" (Darwin to H. N. Ridley, 28 Nov. 1878, DCP Letter 11766).

<sup>32</sup>D Notebook (July 1838 to October 1838), 36-7. CWCD. <sup>33</sup>Ibid., 37.

<sup>34</sup>C Notebook (February 1838 to July 1938), 196–7. CWCD. <sup>35</sup>M Notebook (July 1838 to October 1838), 136. CWCD. My italies

<sup>36</sup>Bruce A. Demarest defines general revelation as humanity's awareness "that there is a God and in broad outline what He is like," and that this knowledge is "mediated through [1] nature, [2] conscience, and [3] the providential ordering of history" (Demarest, General Revelation: Historical Views and Contemporary Issues [Grand Rapids, MI: Zondervan, 1982], 14). For this two-part article, I will employ the term "natural revelation" and limit it to Demarest's first two mediating factors.

<sup>37</sup>William Whewell, Astronomy and General Physics Considered with Reference to Natural Theology (London: William Pickering, 1833), 356.

<sup>38</sup>OS, 488. Interestingly, Galileo's view of nature is remarkably similar to Darwin's.

For the Holy Scripture and nature derive equally from the Godhead, the former as the dictation of the Holy Spirit and the latter as the most obedient executrix of God's orders ... [N]ature is inexorable and immutable, [and] never violates the terms of the laws imposed on her. (Galileo Galilei, "Letter to the Grand Duchess Christina," in *The Galileo Affair: A Documentary History*, ed. and trans. M. A. Finocchiaro [Berkeley, CA: University of California Press, 1989], 93)

<sup>39</sup>In his so-called "long version" of the *Origin of Species*, Darwin writes, "By nature, I mean the laws ordained by God to govern the Universe" (Charles Darwin, *Darwin's Natural Selection, Being the Second of his Big Species Book Written from 1856 to 1858*, ed. R. C. Stauffer (Cambridge: Cambridge University Press, 1975), 224.

<sup>40</sup>Darwin writes,

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. (*OS*, 488)

To Wallace he comments,

I think I shall avoid [the] whole subject [human evolution], as [it is] so surrounded with prejudices, though I fully admit that it is the highest & most interesting problem for the naturalist. (Darwin to A.R. Wallace, 22 Dec 1857, DCP Letter 2192)

<sup>41</sup>Charles Darwin, *The Descent of Man, and Selection in Relation to Sex*, 2<sup>nd</sup> ed. (London: John Murray, 1874 [1871]), 613. Hereafter cited as *DM*.

<sup>42</sup>I am grateful to an anonymous reviewer of the journal *Christian Scholar's Review* for pointing out that "it's a bit problematic to describe Erasmus Darwin's views as 'Lamarckian,' though technically they were in a scientific

### Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism – Part I

sense almost identical views. Historically, Lamarck almost certainly did not influence the elder Darwin, however, since his works post-date those of Erasmus Darwin." It is for this reason that I have added quotation marks to Lamarckian in the text.

43DM, 61.

44Ibid.

45Ibid.

<sup>46</sup>Darwin to H. N. Ridley, 28 Nov. 1878, DCP Letter 11766.

<sup>47</sup>Commenting on *Origin of Species*, Darwin states, "I had no intention to write atheistically ... Certainly I agree with you [Gray] that my views are not at all necessarily atheistical" (Darwin to Asa Gray, 22 May 1860, DCP Letter 2814).

<sup>48</sup>My debate, or more accurately my nondebate, with the father of the ID movement, Phillip E. Johnson, is indicative of how little this debate deals with scientific issues. Phillip E. Johnson and Denis O. Lamoureux, *Darwinism Defeated? The Johnson-Lamoureux Debate on Biological Origins* (Vancouver, BC: Regent College Publishing, 1999).

<sup>49</sup>Interventionism in origins is clearly evident in the work of leading ID theorist Michael Behe, who coined the term "irreducible complexity." He argues,

An irreducibly complex system cannot be produced directly (that is, by continuously improving the initial function, which continues to work by the same mechanism) by slight, successive modifications of a precursor system, because any precursor to an irreducibly complex system that is missing a part is by definition nonfunctional ... [I]f a biological system cannot be produced gradually it would have to arise as an integrated unit, in one fell swoop, for natural selection to have anything to act on." (Michael J. Behe, Darwin's Black Box: The Biochemical Challenge to Evolution [New York: Free Press, 1996], 39. My italics.)

See my "A Box or a Black Hole? A Response to Michael J. Behe," *Canadian Catholic Review* 17, no. 3 (July 1999): 67–73. <sup>50</sup>Dawkins, *Blind Watchmaker*, xiii, xvi, xv. My italics.

<sup>51</sup>Based on these passages, intelligent design in nature is a divine revelation that has the following features: (1) the creation powerfully impacts humans, (2) the revelation in nature is intelligible, (3) natural revelation is incessant, (4) similar to music, everyone "hears" the nonverbal revelation in nature, (5) the creation reveals some attributes of the Creator, (6) humans are free to reject natural revelation, but (7) they are accountable and "without excuse" if they do (*EC*, 65–9).

<sup>52</sup>ACD, 59.

<sup>53</sup>*ACD*, 59; *DM*, 61. My italics.

<sup>54</sup>For the sake of argument, I present only these three premises. Walter F. Cannon notes that Darwin had actually absorbed ten of these. "The Bases of Darwin's Achievement: A Revaluation," *Victorian Studies* (December 1961): 128. Dov Ospovat underlines the importance of the concept of perfect adaptation in biology at that time. He observes,

Naturalists in the mid-nineteenth century commonly believed that adaptation is perfect. In this they were guided by a number of considerations, not the least of which was their respect for the opinion of the greatest biologist of the first third of the century, Georges Cuvier. Cuvier held that every type of organism is perfect, in that its parts are functionally coordinated and the whole and all its parts are constructed in the best possible manner for the functions they are to perform and for the situation in which the organism is to live. The idea of perfect adaptation, in Great Britain especially, was a cornerstone not only of biology, but of natural theology as well. The perfect adaptation of structure to function and of the whole organism to its environment was evidence of purposeful design and hence of an Intelligent Creator. (Dov Ospovat, "Perfect Adaptation and Teleological Explanation: Approaches to the Problem of the History of Life in the Mid-Nineteenth Century," in Coleman and Limoges, eds., Studies in the History of Biology 2 [1978]: 33)

I am grateful to an anonymous reviewer at *Christian Scholar's Review* for introducing me to this valuable paper. <sup>55</sup>For the impact of perfect adaptation on Darwin's biology, see Dov Ospovat, *The Development of Darwin's Theory: Natural History, Natural Theology, and Natural Selection, 1838–1859* (Cambridge: Cambridge University Press, 1981), 33–40; John Hedley Brooke, "The Relations between Darwin's Science and His Religion," in John Durant, ed., *Darwinism and Divinity* (Oxford: Basil Blackwell, 1985), 43–4, 57–8.

<sup>56</sup>Darwin to Gray, 26 Nov. 1860, DCP Letter 2998; *LLD*, II:353. My italics.

<sup>57</sup>Darwin to J. F. Herschel, 23 May 1861, DCP Letter 3154. My italics. These thoughts are repeated to Julia Wedgwood in a letter dated 11 July 1861. "The *mind refuses* to look at this universe, being what it is without having been designed; yet, where one would most expect design, viz. in the structure of a sentient being, the more I think on the subject, the less I see proof of design" (*LLD*, I:313–4). My italics.

<sup>58</sup>Darwin to Hooker, 12 July 1870, in Francis Darwin, ed., *More Life and Letters of Charles Darwin*, 2 vols. (London: John Murray, 1888), I:321. My italics. In a letter three years later to a Dutch student, Darwin's confusion on design seems to give way to resignation.

But I may say that the impossibility of conceiving this grand and wondrous universe, with our conscious selves, arose through chance, seems to me the chief argument for the existence of God; but whether this is an argument of real value, I have never been able to decide." (Darwin to N. D. Doedes, 2 Apr. 1873, DCP Letter 8837; *LLD*, 1:306)

<sup>59</sup>ACD, 90–1. My italics. The journal passage that is mentioned comes from Charles Darwin, *Journal of Researches* (London: John Murray, 1845), 26. It is dated 18 Apr. 1832. In the final entry of the *Beagle Diary*, 25 Sept. 1836, Darwin records similar thoughts of the impact of nature upon him.

Among the scenes which are deeply impressed on my mind, none exceed in sublimity the primeval forests, undefaced by the hand of man, whether those of Brazil, where the powers of life are predominant, or those of Tierra del Fuego, where death & decay prevail. Both 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." (Charles Darwin, *Beagle Diary*, 773)

<sup>60</sup>ACD, 91. My italics.

<sup>61</sup>ACD, 92–3. My italics. See my previous comments regarding Darwin's use of the term "theist" in endnote 21. <sup>62</sup>ACD, 93.

<sup>63</sup>In an admitted act of bad behavior, when I came to this passage in my presentation of this paper at the 150-year anniversary of Darwin's *Origin of Species* at the University of Toronto on 23 Nov. 2009, I stepped away from the podium and said, "Well, there you have it ladies and gentlemen. Tomorrow night at the gala when we toast the man and his book, we will be toasting an intelligent design theorist." For some reason no one was amused by my comment. It seems that presenting the Darwin of history instead of the skewed Darwin concocted by positivists offends academic sensibilities.

<sup>64</sup>Ibid. This argument appears in comments on William Graham's *Creed of Science* (1881). Writes Darwin,

Nevertheless you have expressed my inward conviction, though far more vividly and clearly than I could have done, that the Universe is not the result of chance. But then with me the horrid doubt always arises whether the convictions of man's mind, which

has been developed from the mind of lower animals, are of any value or at all trustworthy. Would any one trust in the convictions of a monkey's mind, if there are any convictions in such a mind?" (Darwin to William Graham, 3 July 1881, DCP Letter 13230)

Similarly, see Darwin to Grant James, 11 Mar. 1878, DCP Letter 11416.

<sup>65</sup>I am grateful to philosopher Gary Colwell for introducing me to this fallacy.

66Alvin Plantinga recognizes this problem in *Warrant and Proper Function* (New York: Oxford University Press, 1993), 216–37. Robin Attfield contends that his criticism only applies to "deterministic versions of Darwinism." Recoiling from positing "a nonmaterialist concept of free-will," he proposes a secular nondeterministic model of evolution. "Darwin's Doubt, Non-deterministic Darwinism and the Cognitive Science of Religion," *Philosophy* 85 (2010): 471.

68LLD, I:316.

<sup>69</sup>Darwin to J. Fordyce, 7 May 1879, DCP Letter 12041; *LLD*, I:304. My italics.

<sup>70</sup>ACD, 92.

<sup>71</sup>DM, 61.

**ASA Members:** Submit comments and questions on this article at www.asa3.org  $\rightarrow$  FORUMS  $\rightarrow$  PSCF DISCUSSION.

# **ASA Annual Meeting Field Trips**

FRIDAY, July 20, 2012

### **Balboa Park Museums and Gardens**



Balboa Park, located just minutes from downtown San Diego, is the nation's largest urban cultural park. It is home to fourteen museums, renowned performing arts venues, and many beautiful gardens.

San Diego Zoo



The world famous San Diego Zoo is located in Balboa Park and is home to more than 4,000 exotic, rare, and endangered animals, including giant pandas from China, koalas from Australia, and Indochinese tigers.

### **Torrey Pines State Natural Reserve**



Although Torrey Pines State Natural Reserve is located within San Diego city limits, it represents one of the wildest stretches of land on the Southern California coast. The reserve features 2,000 acres of land as they were before San Diego was developed.

### USS Midway and Seaport Village



Commissioned a week after the end of World War II, the *USS Midway* embarked on an unprecedented 47-year odyssey that set new standards in naval aviation, blazed new trails as the Navy's first carrier

that was home-ported abroad (Japan), and developed a "Midway Magic" aura of accomplishment and vigilance.



After your visit to the *USS Midway*, take a short stroll along the harbor to Seaport Village, where you can explore quaint shops and (usually) be entertained by street performers.

### Cabrillo National Park



Cabrillo National Park occupies the highest, southernmost tip of the Point Loma peninsula and offers spectacular vantage points from which to view San Diego Bay, Coronado Island, the downtown city skyline, and the Pacific Ocean.

Register at www.asa3.org