

# *Darwinism's Deeper Implications*

## *Reflections on the Faith–Reason Synthesis*

Peter A. Pagan

---

Recently, the debate over whether science and religion are mutually compatible has intensified. These battles have been fueled by certain strong claims made on behalf of the theory of evolution advanced in Darwin's celebrated work *On the Origin of Species*.<sup>1</sup> Since it has been construed in various ways, the term "Darwinism" requires some clarification.<sup>2</sup> In one sense it is used broadly to refer to the idea of common biological ancestry or descent with modification (D<sub>1</sub>). In another sense it is employed more narrowly to denote the mechanism of natural selection acting on random variation (D<sub>2</sub>).

Having accepted an extremely literalistic reading of *The Book of Genesis*, many persons of religious persuasion denounce the idea of common ancestry, for, according to their view of the matter, evolutionary science contradicts the revealed word of God. If one admits nothing but a purely literalistic interpretation of every section of sacred scripture, then the deliverances of evolutionary science would certainly seem inconsistent with the truth contained in special divine revelation.<sup>3</sup>

---

Peter A. Pagan, Ph.D., is professor of philosophy at Aquinas College in Nashville, Tennessee.

<sup>1</sup> In addition to Darwin's famous work, the various editions of which are now available online, a useful selection of writings by Darwin and about his work was edited by Philip Appleman, *Darwin*, 3rd ed. (New York: W.W. Norton, 2000).

<sup>2</sup> Unless stated otherwise, I use the term "Darwinism" generically to denote any evolutionary theory of Darwinian provenance.

<sup>3</sup> Special divine revelation is distinguished from general divine revelation, i.e., the "book of nature," which supplies the concrete basis of philosophical theology. As it happens, proponents of extreme biblical literalism are not always consistent in their adherence to such literalism.

Here I shall devote little space to discussing what I consider to be an unnecessary conflict between biblical texts and the idea of common ancestry.<sup>4</sup>

As regards Darwinism in the narrow sense, some, including believers (e.g., Michael Behe and William Dembski) and nonbelievers (e.g., Richard Dawkins, Daniel Dennett, and William Provine), claim that Darwinism and belief in intelligent design are inherently incompatible. Others, including believers (e.g., Stephen Barr, George Coyne, S.J., and Kenneth Miller) and agnostics (e.g., Stephen Gould), deny that a necessary conflict obtains between Darwinism and religious belief. It does seem fair to note, however, that, as the theory is commonly understood, Darwinism in the narrow sense lends itself to the process of secularization of both public education and political discourse. Here persons of faith may agree that reversing the trend toward secularization and overcoming the marginalization of rational theological discourse in the social arena require that many begin questioning the ideology of scientism and supporting an evolutionary theory that does not scorn but remains open to the notion of global teleology.<sup>5</sup>

---

For they not infrequently prefer a clearly nonliteral interpretation of one or another disputed passage of sacred scripture, e.g., John 6:52–58: “If any man eat of this bread, he shall live for ever; and the bread that I will give, is my flesh, for the life of the world. The Jews therefore strove among themselves, saying: How can this man give us his flesh to eat? Then Jesus said to them: Amen, amen I say unto you: Except you eat the flesh of the Son of man, and drink his blood, you shall not have life in you. He that eateth my flesh, and drinketh my blood, hath everlasting life, and I will raise him up in the last day. For my flesh is meat indeed, and my blood is drink indeed. He that eateth my flesh, and drinketh my blood, abideth in me, and I in him. As the living Father hath sent me, and I live by the Father; so he that eateth me, the same also shall live by me” (Douay-Rheims 1899 American Edition). In this example, however, a nonliteral reading of the text leads to other exegetical problems. From the perspective of divine faith, the real issue is not whether sacred scripture should ever be taken literally, but precisely when one needs to adopt something more than a purely literal interpretation of the texts under consideration, and this issue has proved to be a divisive one in the history of Christianity.

<sup>4</sup>I would note, however, that it is far from evident that an intelligent and defensible exegesis of the Old Testament, a reading consistent with classical Christian orthodoxy, necessarily precludes the idea of common ancestry. A strictly and exclusively literalistic interpretation of sacred scripture, one that contradicts the scientific idea of common ancestry, leads to serious exegetical difficulties easily exposed by theological experts who recognize that theological faith and natural reason are entirely complementary, not contradictory, cognitive potencies. A detailed critique of fideism (<http://www.newadvent.org/cathen/06068b.htm>), which is opposed to such complementarity, exceeds the scope of this discussion.

<sup>5</sup>See, for example, Richard Dawkins, *The God Delusion* (Boston: Houghton Mifflin, 2006), and Sam Harris, *The End of Faith* (New York: W.W. Norton, 2004) and *Letter to a Christian Nation* (New York: Knopf, 2006). By “scientism” I mean the view that the whole of reality can, at least in principle, be fully explained within natural science’s proper limits, which limits are all-inclusive. By “global teleology” I mean the classical view that all things, whether consciously or otherwise, tend toward or are inclined by nature to some end or perfection. Since the advent of modern natural science, the notion of global teleology has been commonly abandoned as nothing more than a useless artifact of cultural history. See, for instance, Stephen M. Barr, *Modern Physics and Ancient Faith* (Notre Dame, IN: University of Notre Dame Press, 2003), 138–139.

## The Mechanism of Evolution

In his book *The Evolution–Creation Struggle*, Michael Ruse includes the following claim: “Although Pope John Paul II has insisted that the arrival of the immortal soul demands a miracle, he has been explicit in his endorsement of an evolutionary view of nature. Catholicism has embraced even Darwin, but it was a long time coming.”<sup>6</sup> In support of this claim Ruse cites John Paul II’s message on evolution delivered to the Pontifical Academy of Sciences on October 22, 1996. Ruse is not alone in reading that message as a clear affirmation of Darwin’s theory of evolution.

Is Ruse correct in holding that Roman Catholicism has endorsed Darwin’s theory? A critical examination of the issue would suggest that the affirmation or denial of an inevitable clash between Darwinism and religious belief depends on one’s understanding of Darwinian and religious conceptions of life. Moreover, one can hardly make any real progress on the task of integrating faith and reason, an effort supported eloquently by John Paul II and Benedict XVI, without recognizing certain important distinctions. First, one needs to be clear about what Darwin intended by his theory. As mentioned earlier, Darwin proposed the mechanism of natural selection acting on random variation to explain common ancestry.<sup>7</sup> But what precisely did Darwin mean by “natural selection” and by “random variation?” Upon studying the work of scholars such as Timothy Shanahan, one soon realizes that answering the preceding question is no simple matter, inasmuch as such scholarship forces one to contend with various competing interpretations of Darwin’s influential hypothesis.<sup>8</sup> For purposes of the discussion to follow, I will simplify and offer a few possible readings of the proposed mechanism underlying biological evolution as Darwin understood it.

Regarding natural selection, the basic idea is that some individuals of any given biological species are more fit than other individuals of the same species with respect to the perpetual struggle to survive, a struggle resulting from a limited supply of natural resources insufficient to meet the needs of every member of any given species. In consequence, those organisms better fit for the daily contest of survival are more likely than their co-specific competitors to preserve their biological traits (or, in the modern synthesis, genetic inheritance) via reproductive success. Environmental pressures favor the better fit in a contest that tends to promote the good or long-term survival of species without really intending this result. For many, this evolutionary process illustrates teleonomy, the natural tendency toward ends apart from intelligent purposes.<sup>9</sup> Natural selection is, in effect, the triumphant

---

<sup>6</sup>Michael Ruse, *The Evolution–Creation Struggle* (Cambridge, MA: Harvard University Press, 2005), 145.

<sup>7</sup>Charles Darwin, *On the Origin of Species*, chaps. 1–4. See Appleman, *Darwin*, 82–87, 98–135.

<sup>8</sup>Timothy Shanahan, *The Evolution of Darwinism: Selection, Adaptation, and Progress in Evolutionary Biology* (Cambridge, U.K.: Cambridge University Press, 2004).

<sup>9</sup>As already suggested, the idea of teleonomy includes the recognition of natural tendencies toward specific ends or goals, but precludes any underlying guiding mind, whereas teleology affirms the need for a *logos* or reason behind the goal-oriented tendencies of finite beings

self-selection of the more fit over the less fit. The evolutionary process that favors the strong over the weak seems like a rather callous affair, but one that exhibits a remarkable elegance suggestive of design. According to Darwin's theory, however, the design is not real but only apparent.

As for random variation, it is conceived as the creative source of morphological novelty. Most biological mutations are harmful to the individual host, and malignant variants tend toward self-extinction. Some biological variations, however, are not harmful. Through the gradual accumulation of a sufficient number of nonmalignant variations over vast expanses of geological time, novel biological species surface on the evolutionary landscape.

Here I shall not pursue the fascinating and spirited debate over whether the "orthodox" idea of phyletic gradualism defended by Richard Dawkins, among others, should be abandoned and replaced by the more recent "heterodox" concept of punctuated equilibrium championed by Stephen Gould and Niles Eldredge. Nor shall I tarry over the important question of whether species in the Darwinian sense are distinct only nominally or accidentally rather than different essentially. Instead, I wish to draw attention to Darwin's understanding of randomness. According to one interpretation, which currently seems to be the most favored interpretation, a variation is random insofar as it is unplanned, unforeseeable, and without intelligible cause. I shall refer to this ontological reading of Darwinian randomness as the acausal interpretation. According to another interpretation, a variation is random insofar as its underlying causal explanation exceeds the range of human cognition; the assertion of randomness is merely an admission of human ignorance. I shall refer to this epistemological reading of Darwinian randomness as the ignorance interpretation.

I find myself agreeing with scholars such as Stanley Jaki, Bruce Weber, and David Depew that Darwin accepted scientific determinism in the sense that every effect depends necessarily on an ontologically antecedent intelligible cause. In this respect Darwin seems to have stood on firm scientific ground, insofar as determin-

---

of nature, whether living or nonliving. See Thomas Aquinas, *Summa theologiae*, I-II, Q 1.2. According to a different way of stating the distinction, teleonomy recognizes order in nature based on physical laws without presupposing an intelligent giver of laws, whereas teleology includes the implicit admission of a personal legislator as an indispensable precondition of the very possibility of laws of nature. One should emphasize that the legislator in question cannot belong to the same order of existence as those beings that fall within the investigative competence of modern physical sciences, which study empirically observable and mathematically measurable phenomena. One might add that even the human mind is beyond the investigative reach of empiriometric sciences, including physics and biology, although such disciplines or modes of inquiry into material nature would be impossible were it not for the prior exercise of human reason. Needless to say, the idea of teleonomy makes no allowance for philosophical theology, inasmuch as teleonomy does not admit the direction or telic rule of mind in any sense, and the exclusion of divine intellect contradicts any sound philosophical theology, not to mention the Christian deposit of faith.

ism constitutes a key methodological assumption of purely physical science.<sup>10</sup> It seems hardly possible to reconcile sound experimental science with the opinion, defended by thinkers such as David Hume, that there can be an intelligible effect without an underlying intelligible cause. Is not modern science, at least in part, the search for natural causes? To abandon the universal principle of causality is to compromise the very foundations of natural science, a point not fully appreciated by neo-Darwinian scientists such as Kenneth Miller, a Catholic biologist who accepts a radically indeterministic interpretation of quantum theory in the name of freedom.<sup>11</sup> Granted that Darwin accepted scientific determinism, Darwin could hardly have endorsed an acausal interpretation of randomness. The ignorance interpretation seems more in accord with Darwin's worldview.

Now, in relation to Darwin's worldview, the question of God is central to the present inquiry. To appreciate more deeply Darwin's conception of the divine after his renunciation of Christianity, one must recall how his perception of evil affected his theological ruminations. It is clear that the perennial challenge of evil had a profound impact on Darwin's idea of God. As his personal correspondence reveals, Darwin did not see how the enormity of evil in nature could be reconciled with a traditional Christian conception of God, an omniscient, all-good, and omnipotent God, a transcendent Creator intimately involved in every aspect of His creation.<sup>12</sup> Only by adopting the concept of a distant, uninvolved deity could one reconcile the presence of horrendous evil with the existence of a God worthy

---

<sup>10</sup>“Physics can take no account of Divine intervention or of acts of free will, so in the course of scientific research the world is assumed to be strictly determined.” Peter Hodgson, *Science and Belief in the Nuclear Age* (Ann Arbor, MI: Sapientia Press, 2005), 127. One should note that not all scientists recognize this methodological assumption. See, for instance, Stephen M. Barr, “Faith and Quantum Theory,” *First Things* 171 (March 2007): 21–25. I have expressed elsewhere my reservations concerning Barr's rejection of determinism as a methodological assumption of physical theory and his associated attempts to support the Copenhagen interpretation of Heisenberg's principle of uncertainty, but I shall not rehearse my philosophical criticism here.

<sup>11</sup>Kenneth R. Miller, *Finding Darwin's God: A Scientist's Search for Common Ground between God and Evolution* (New York: HarperCollins, 1999); Peter A. Pagan, “Darwin and Design: Exploring a Debate,” in *Truth Matters: Essays in Honor of Jacques Maritain*, ed. John G. Trapani, Jr. (Washington, D.C.: American Maritain Association, 2004), 103–125. In this respect Miller's position closely resembles that of Stephen Barr, a Catholic physicist, although their views differ on other fundamental points.

<sup>12</sup>The theological conception of God to which I refer has been defended ably by various Christian writers, including Augustine of Hippo, Anselm of Canterbury, and Thomas Aquinas, each a renowned doctor of the Catholic Church. I say “traditional Christian conception of God,” because today there are not a few authors who favor something other than the traditional conception of an atemporal, immutable, absolutely simple God—*Ipsum esse subsistens*—an alternative conception fully in keeping with a thoroughly Darwinian vision of nature. See, for instance, John F. Haught, *Deeper Than Darwin: The Prospect for Religion in the Age of Evolution* (Boulder, CO: Westview, 2004), 161–175.

of the name, or so Darwin thought. Such reconciliation is accomplished through Darwin's naturalistic theory of evolution, according to which all life unfolds on its own in conformity with the laws of nature, without divine intervention.

In view of the foregoing, may one legitimately infer that Darwin's theory is compatible with religious belief? According to one arrangement, if one accepts the acausal interpretation of randomness and maintains that God is not directly involved in the physical evolution of life in nature, including the advent and history of mankind, then it would not be hard to unite Darwinism with religious belief. According to a second arrangement, if one affirms the ignorance interpretation of randomness and holds that God is not entirely in control of the evolutionary process, then one could avoid the conclusion that Darwinism and religious belief are mutually incompatible. According to a third arrangement, if one recognizes the ignorance interpretation of randomness and embraces the doctrine of God's universal providence and intimate involvement in every aspect of nature, then one will find it difficult to accept Darwin's theory without substantive qualifications that Darwin would have deemed inconsistent with his thoroughly naturalistic conception of evolution. In point of fact, the ignorance interpretation of randomness in conjunction with the classical doctrine of God's universal providence is what mainstream Darwinists<sup>13</sup> find hard to concede. Not surprisingly, despite their best efforts, they have failed to allay the deep concerns of many Christians, including those believers who accept theistic evolution based on the doctrine of God's universal providence. The recognition of such providence depends on the cosmic principle of finality or global teleology, but this principle appears inherently foreign to Darwin's theory (D<sub>2</sub>), not to mention a prevalent view of modern science.<sup>14</sup> His theory does not preclude the idea of teleonomy, but it cannot be reconciled with the far more robust concept of global teleology, which depends necessarily on the immediate rule of a transcendent Mind. Darwin's theory is supposed to eliminate the need for final causality as understood by distinguished Christian thinkers, such as St. Thomas Aquinas, John Paul II, and Benedict XVI. The fundamental need for final causality, however, is not something one can deny without compromising the integrity of faith and reason.

---

<sup>13</sup> For example, George V. Coyne, S.J., Stephen J. Gould, Kenneth R. Miller.

<sup>14</sup> For instance, consider the following: "Almost all scientists are instinctively and professionally suspicious of anything that smells like 'teleology.' ... For almost two millennia this kind of [teleological] thinking prevailed in the physical sciences, and it is generally agreed that it led nowhere. *Teleology was found to be a sterile approach to understanding the physical world.* Many accounts of the history of science emphasize that the Scientific Revolution occurred only when scientists abandoned teleology in favor of investigating the physical mechanisms that underlie phenomena. That is why any talk about how certain features of the physical world are necessary in order for human life to exist seems to many scientists like a giant step backward, an attempt to smuggle *discredited teleological notions* back into science. They sincerely worry that people will be led astray from the high road of scientific thinking into the *barren wastelands of fruitless metaphysical speculation.* ... Teleological thinking can indeed be a showstopper as far as doing real scientific research is concerned. For many centuries it was." Barr, *Modern Physics and Ancient Faith*, 138–139 (emphasis added).

Moreover, the view that God rules and is immediately involved in every aspect of the evolving universe is certainly not embraced by those committed to the radical secularization of public education and of political discourse, by those who perceive Darwinism as a useful ally in the effort to push all thought of God outside the periphery of ordinary human affairs. Furthermore, from the perspective of countless Christians, it is hardly credible to deny that Darwinism as it is commonly conceived and promulgated by prominent evolutionary scientists lends itself to the atheological designs of those who would set aside the good of mankind's supernatural destiny for the sake of some temporal political utopia. As one who had forsaken the Christian faith for several years, I can understand the seductive temptations of political utopianism.

### **Integrating Faith and Reason**

The foregoing is not to say that Darwinism is altogether beyond theological re-prieve. A reformed Darwinism amenable to Christian orthodoxy, however, will require openness to universal or global teleology. As a replacement of global teleology, teleonomy is insufficient from a Roman Catholic perspective.<sup>15</sup> The requisite transformation of Darwinian theory is not likely to occur, however, as long as our tax-funded schools remain captive to an uncompromising secularist ideology reflected in the currently dominant interpretation of the establishment clause of the First Amendment to the U.S. Constitution. According to that interpretation, inspired by a rationalistic mentality, there exists an impermeable wall of separation between church and state, that is, between religion and culture. In other words, the public domains of law and politics are to be completely insulated from any and all nonsecular purposes; as a potentially divisive human weakness, religious faith must remain a strictly personal affair without public display. Such a negative view of religion implies a relatively new and, from a Catholic viewpoint, dubious understanding of the phrase "free exercise of religion."<sup>16</sup>

That currently dominant interpretation of the establishment clause is blind to the crucial datum that religion constitutes the very heart of culture, and that no culture can survive the loss of its religious roots, a point stressed by Catholic thinkers such as Christopher Dawson, Josef Pieper, and James Schall, S.J.<sup>17</sup> Indeed, the human person is a religious animal by nature, and this truth, like the truth of human freedom, exceeds the methodological limits of natural science. This fundamental religious orientation of human nature finds its exemplar in Jesus, the central character in the thought-provoking book by Stanley Jaki, O.S.B., *The Savior of Science*.<sup>18</sup> It was Jesus who drew with such remarkable clarity the necessary line of demarcation between church and state, when he instructed his would-be accusers that they ought to render to Caesar the things of Caesar, and to God what belongs to God (Matt. 22:21). While affirm-

---

<sup>15</sup> See note 9 above.

<sup>16</sup> See, for example, *Dignitatis humanae* (December 7, 1965), the Second Vatican Council's declaration on the question of religious freedom.

<sup>17</sup> See, for example, Josef Pieper, *Leisure, the Basis of Culture*, 50th anniversary ed. (South Bend, IN: St. Augustine's Press, 1998).

<sup>18</sup> Stanley Jaki, O.S.B., *The Savior of Science* (Grand Rapids, MI: Eerdmans, 2000).

ing the requisite distinction between religion and politics, thereby maintaining one's guard against the perennial lure of theocracy, one must also recognize that religion is not subordinate to politics. On the contrary, politics should serve religion, in the sense that civil government should secure and preserve a religion-friendly public square in which all persons are free to pursue their innate religious aspirations, their highest good in accord with their natural inclinations. When the state subordinates these transpolitical aspirations to its own mundane ends, the state oversteps its proper boundaries and inevitably succumbs to the totalitarian temptation.

Given the deep integration of faith and reason defended by significant Christian thinkers such as John Paul II and Benedict XVI, there can be no doubt that genuine science and revealed religion are not simply logically compatible but mutually supportive approaches to intelligible reality. Two noteworthy examples of this integrative perspective on reason and faith are provided by John Paul II's encyclical letter, *Faith and Reason*, and by Benedict XVI's lecture at the University of Regensburg.<sup>19</sup> One could also recommend the prolific work of Jaki, an eminent scholar on the connections between science and theology.<sup>20</sup>

Returning to Ruse's claim that the Catholic Church has finally embraced Darwinism, it should be fairly evident that his assertion reflects a remarkable oversimplification. John Paul II clearly affirmed that the Church's fixed teaching does not preclude the idea of evolution in the sense of common ancestry, provided that one not compromise the revealed doctrine of original sin, which strongly disfavors the polygenetic theory of human evolution, and that one not deny the philosophic truth that the human person's rational soul cannot derive from living matter, but must be created immediately by God.<sup>21</sup> (Concerning the latter proviso, Ruse can hardly conceal his reservations.<sup>22</sup>) Within the conceptual framework of Darwinian orthodoxy, however, it seems impossible to concede that critical rider, which definitively rules out a purely naturalistic theory of anthropogenesis. From a Roman Catholic perspective, it would be no small mistake to overlook or minimize this crucial point concerning the problematic nature of a purely naturalistic theory of anthropogenesis. (Indeed, from the perspective of Catholic orthodoxy, a purely naturalistic theory of anthropogenesis could surely be described as a modern creation myth "incompatible with the truth about man," if one may use the very words of John Paul II.<sup>23</sup>)

---

<sup>19</sup> John Paul II, *Fides et ratio* (September 14, 1998); Benedict XVI, "Faith, Reason and the University: Memories and Reflections," lecture (September 12, 2006).

<sup>20</sup> Several of Jaki's publications are listed at <http://pirate.shu.edu/~jakistan/rvb.pdf>.

<sup>21</sup> The polygenetic theory is opposed to the monogenetic theory, which holds that all human persons can in principle be traced back to a single set of original human parents, the first man and woman.

<sup>22</sup> Eight years earlier he expressed clearly his serious reservations on this central point in his commentary on John Paul II's 1996 message on evolution. See Ruse, "John Paul II and Evolution," *Quarterly Review of Biology* 72.4 (December 1997): 391–395.

<sup>23</sup> John Paul II, "Truth Cannot Contradict Truth," address to the Pontifical Academy of Sciences (October 22, 1996), excerpted at [http://www.newadvent.org/library/docs\\_jp02tc.htm](http://www.newadvent.org/library/docs_jp02tc.htm).

Finally, one must emphasize that the Catholic Church's magisterium has not renounced the Christian doctrine of God's universal providence, and this doctrine cannot coherently be fused with Darwin's purely naturalistic theory of evolution. Official Catholic doctrine and Darwin's theory could be made compatible by means of an essential transformation of the latter, whereby the theory would be relieved of its deistic baggage and opened to the reality of global teleology. It is unlikely, however, that any champion of Darwinian orthodoxy would recognize such a substantial transmutation of Darwin's purely naturalistic theory of evolution. Moreover, one may rest assured that the Catholic Church's magisterium has not and will not endorse any evolutionary theory closed to the possibility of final causality rooted in divine Wisdom.