Myth, Mutual Interaction, and Poetry

with John Hedley Brooke, "Darwin and Christianity: Truth and Myth"; Andrew Robinson, "Creative Mutual Interaction in Action"; Richard Skinner, "A Sonnet for Christopher"; and Margaret Boone Rappaport and Christopher Corbally, "Tracing Origins of Twenty-First Century Ecotheology: The Poetry of Christopher Southgate."

DARWIN AND CHRISTIANITY: TRUTH AND MYTH

by John Hedley Brooke

Abstract. In recent years many historical myths about the relations between science and religion have been corrected but not always with sensitivity to different types and functions of "myth." Correcting caricatures of Darwin's religious views and of the religious reaction to his theory have featured prominently in this myth-busting. With the appearance in 2017 of A. N. Wilson's depiction of Darwin himself as a "mythmaker," it is appropriate to reconsider where the myths lie in discourse concerning Darwin and Christianity. Problems with Wilson's account are identified and his provocative demeaning of Darwin is contrasted with an image gleaned from Darwin's friend and colleague George Romanes. The article concludes with a brief reference to the problem of suffering and to the work of Christopher Southgate.

Keywords: agnosticism; argument from design; Charles Darwin; Darwinism; myth; naturalism

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In this brief essay, I wish to focus on the subject of myth and I have at least three reasons for doing so. One is that over the last ten years the history of science has been hit by a wave of myth-busting and it may be time to take stock. A second is that clarification of different meanings of the word "myth" has become a pressing desideratum for a sound education, whether in science or religious studies. A third stems from the controversy following the recent publication of A. N. Wilson's biography of Darwin, the very title of which (*Charles Darwin: Victorian Mythmaker*) put "myth" in neon lights (Wilson 2017).

In a public lecture delivered at Washington and Lee University in May 2014, John Heilbron counted as many as seventy-five historical myths

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about science that had recently been exploded (Heilbron 2014). Another twenty-five or more were due for demolition during the conference at which he was speaking. Two titles now account for more than fifty such explosions: *Newton's Apple and Other Myths about Science* (Numbers and Kampourakis 2015) and its predecessor, *Galileo Goes to Jail and Other Myths about Science and Religion* (Numbers 2009). A few of the "myths" will give the flavor, each briefly deconstructed by an authoritative scholar. They include the claim that there was no scientific activity between Greek antiquity and the sixteenth century; that, before Columbus, geographers and other educated people thought the Earth was flat; that the Copernican revolution demoted the status of the Earth. On the theme of science and religion, there is the myth that Galileo was imprisoned and tortured for advocating Copernicanism; that Isaac Newton's mechanistic cosmology eliminated the need for God; that Einstein believed in a personal God; and so on. More than ten of the fifty myths relate to some aspect of Darwin and Darwinism. These include the mythology that Lamarckian evolution relied largely on use and disuse and that Darwin rejected Lamarckian mechanisms; that Darwin worked on his theory in secret for twenty years, his fears causing him to delay publication; that Darwin destroyed natural theology; that Huxley defeated Wilberforce in their debate over evolution and religion; and that Darwin and Ernst Haeckel were complicit in Nazi biology.

I have given these few examples because both texts feature the editorial claim that the term "myth" is not being employed in any sophisticated sense, merely to designate a common error (Numbers 2009, 7; Numbers and Kampourakis 2015, 2). This is important because the number of falsehoods in the history of science must be close to infinite and one might ask, as Heilbron did in his lecture, whether there was not a danger of flooding the field with errors in order to indulge in their correction. For a myth to be a myth in a stronger sense it has to be persistent and widespread; the caricature useful or even inspiring as an illusion. Many questions then arise, whether for example the myths just enumerated are *merely* falsehoods or whether some survive precisely because they offer support to broader meta-narratives. As an obvious example, the alleged imprisonment and torture of Galileo has been a favorite resource for critics of the Roman Catholic Church (Brooke and Cantor 1998, 107–38).

In an educational context, it is surely important that students become familiar with the distinction between myths as erroneous statements and myths as narratives that may be historically or scientifically false, but the purpose of which is nevertheless to convey some deep truth about the world and the place of humankind in it. The topic is surely inescapable in religious education where references to Creation "myths" invite discussion of the ulterior meanings they might convey. In *God, Humanity and the Cosmos*, the comprehensive textbook on science and religion over the three editions of which Christopher Southgate has generously presided,

it is clearly explained that the stories of creation in *Genesis*, however inappropriate as science or history, convey what for many religious believers are profound truths about the ultimate dependence of the world on a divine being who made it, sustains it, and interacts with it (Southgate 2011, 46–48). The parables of Christ would afford obvious examples of stories that are fictitious but, as with that of the Good Samaritan, designed to inculcate a profound moral truth.

Although examples of science fiction may spring to mind, the idea that a story can be simultaneously true and false is less likely to be encountered in a conventional scientific education where the boundaries between truth, understood as correspondence to physical reality, and falsehood are heavily patrolled. And yet one of the myths scrutinized in *Newton's Apple* is that the scientific method accurately reflects what scientists do. An education in the sciences that glosses over this disparity and ignores the diversity of scientific methodologies can be seriously impoverished. A primary issue in the Darwinian debates was the clash between a conventional inductivist methodology, with its long Baconian pedigree, and the hypothetico-deductive structure of Darwin's argument (Moore 1979, 193–216). As Darwin informed his Harvard correspondent Asa Gray in July 1857, "I *assume* that species arise like our domestic varieties with *much* extinction; & then test this hypothesis by comparison with . . . established propositions . . . in geography, distribution, geological history . . . etc" (Darwin 1990, 432).

In a world where fake news goes viral, there is much to be learned from the study of myths, much that would engage a student audience. It is often said that myths usually contain an element of truth. As Heilbron observed in the lecture to which I have referred, when demythologizing the Galileo story about his torture and imprisonment the story is false if by torture one means physical torture, but not if one includes the psychological torment Galileo suffered as a result of the restrictions, including house arrest, placed on him. While literally wrong the story is psychologically right.

My third reason for considering mythology a topical subject is the prominence given to it by A. N. Wilson in the specific context of Darwin biography. Despite the brilliance of much of Wilson's writing, he has successfully alienated scientific commentators through his seeming obsession with what Darwin got wrong almost to the exclusion of what he got right. Wilson cannot deny that Darwin, more than anyone, demonstrated the scientific legitimacy of belief in biological evolution, but he presents Darwin as mythmaker and plagiarist. His book offers ample scope for examining multiple levels on which myths can operate and interconnect. At the most basic level Wilson does use the word myth to denote simple falsehoods. He refers to a "Darwinian mythology" about the Galapagos Islands. Historians of science know that the standard story of a *eureka* moment during Darwin's time on the Galapagos archipelago is false and

Wilson delights in advertising the common error. Darwin did not infer, certainly not immediately, that each island had its own distinct species of finch. Not until he finally returned from his voyage on *HMS Beagle* did he learn, with the expertise of the ornithologist John Gould, that his specimens (many of which had not even been labeled according to their island of origin) included finch varieties that were truly distinct species (Sulloway 1982).

Myths that are merely falsehoods may, however, graduate into meta-level myths of greater moment. The story of Darwin's epiphany on the Galapagos has undoubtedly persisted because it reinforces the image of Darwin the archetypal empiricist, constructing his theory directly from observational data. It was not that simple and Wilson is correct to point this out. Darwin was deeply dependent on a vast array of observations, but he was also indebted to his reading, especially of Thomas Malthus (La Vergata 1985, 953–58). His methodology was eclectic, involving detailed study of the scope of artificial selection, as practiced by breeders seeking to accentuate particular characteristics of species under domestication (Secord 1985). By his own admission, as we have seen, Darwin's scientific reasoning was far more complex than inductivist models would imply.

The manner in which myths may become sub-myths for higher level generalization is clearly visible in popular discourse on relations between science and religious belief. The endlessly repeated story of the public humiliation of Bishop Samuel Wilberforce by Thomas Huxley at the 1860 Oxford meeting of the British Association is certainly delicious. But the idea that Huxley scored a victory for Darwin's science over religious obscurantism is false on several counts (Livingstone 2009; Brooke 2011). As Huxley's son Leonard conceded, given the time and place the majority of the audience would almost certainly have been on the bishop's side. It is not even clear whether Huxley's voice carried when he responded to the bishop's ill-judged jibe about his simian ancestry. Archival research suggests that, far from a portentous event, their exchange largely disappeared from public awareness for almost thirty years until, in the late 1880s and early 1890s, it was resurrected to enliven the *Life and Letters* of Darwin, of Joseph Hooker, and of Huxley himself (James 2005). The myth then survived precisely because it could be seized retrospectively as a foundation myth of scientific professionalism. It supported the meta-level myth that evolution and creation were fundamentally incompatible concepts, which then enriched the super-myth that science and religion must inevitably conflict. Wilson is at his best when introducing nuances concerning matters of religion. He insists, correctly, that Wilberforce was no scientific ignoramus. In his review of Darwin's *Origin of Species* the bishop identified what, by Darwin's own admission, were the weakest points in his theory (Wilberforce [1860]1874). But then Wilson goes over the top in claiming that Wilberforce's scientific objections—such as a dearth of transitional

forms in the fossil record—were not only unanswerable at the time but have effectively remained so (Wilson 2017, 259).

Wilson's contention that Darwin himself was a mythmaker takes us deeper into the landscape of myth. By an injudicious conflation of "theory" with "myth," Wilson presents Darwin's crucial insight as something other than science, reductively a branch of political economy. After reading Malthus in September 1838 Darwin did have something of a *eureka* moment. He suddenly saw that, in a competitive struggle for existence, favorable variations would tend to be preserved, the unfavorable destroyed. In his own words, he had at last got a theory to work by, a theory that might explain how new species emerged from preexisting forms through the gradual accumulation of variation. Wilson writes, "another word for a 'theory by which to work' would be a myth" (157). This surely muddies the water. Once the theory had been expanded to embrace human evolution and, as in the monistic philosophy of Ernst Haeckel, inflated into a popular surrogate religion, the word "myth" becomes appropriate. But to apply the word to the bare bones of Darwin's theory at its inception is potentially misleading. It smacks of the language used by Darwin's religious detractors when they disparage serious science as "only a theory."

Darwin, says Wilson, was a "self-mythologizer," one who remorselessly concealed his debt to precursors and contemporaries who were also speculating about biological evolution. Darwin is seen as a man "incapable of remembering, at some visceral level, that anyone beside himself had ever believed in evolution before 1859" (53). Worse, says Wilson, Darwin had actually stolen his core idea from a poor pharmacist in Tooting, Edwin Blyth, who in the *Magazine of Natural History* for January 1835 had speculated along prescient lines:

> As man, by removing species from their appropriate haunts, superinduces changes on their physical constitution and adaptation, to what extent may not the same take place in wild nature, so that, in a few generations, distinctive characters may be acquired, such as are recognized as indicative of specific diversity . . . May not, then, a large proportion of what are considered species have descended from a common parentage? (cited by Wilson, 136)

The resemblance to Darwin's thinking is too much for Wilson who, irrespective of the fact that Blyth rejected his own speculation, irrespective of the fact that Darwin required twenty years compiling cogent evidence to give the idea credibility, sees a straightforward case of plagiarism. To demean Darwin in this way when we know how generous he could be, to the geologist Charles Lyell for example, seems unduly provocative.

Wilson sees Darwin as a mythmaker in a further respect. Darwin's naturalistic account of human evolution, eventually published in *The Descent of Man* (1871) provided a "consolation myth" for increasingly affluent and

ascendant strata within Victorian society. Their consolation came in the form of liberation from the moral demands of Christian tradition, which had placed a psychological burden on the privileged to help those less fortunate than themselves (186). That it was *natural* for the fittest to survive could release one from the guilt of failure to respond to those demands. As Wilson puts it, members of the social class to which Darwin belonged "had to persuade themselves that there was something inexorable, natural, about their superiority to the working class on whom their wealth in point of fact depended" (160). The racial superiority of white Europeans, the British in particular, was endemic in Victorian culture and Darwin certainly subscribed to that belief. But Wilson himself becomes the mythmaker when he implies that Darwin's provision of the consolation myth was the real reason for his theory's success. On the subject of superiority and inferiority, it would be possible to read Wilson's biography without recognizing that for Darwin, as for his fellow evolutionists Alfred Russel Wallace and Asa Gray, one of the attractions of the idea of common descent was that it could provide ammunition against the practice of slavery. For them, it underwrote an ultimate unity of humankind (Desmond and Moore 2009, 293–96).

Social Darwinism could take many forms and, in that respect, Darwin's theory was multivalent, but his reputation has suffered from the insinuation that he supplied the science for Hitler's manifesto. Unfortunately Wilson does nothing to rescue Darwin from this favorite jibe of religious fundamentalists. He concedes that Darwin was no proto-Nazi but he is held responsible for preparing the ground. Myth enters the story here for two reasons: Darwin's Malthusian image of intense warfare in nature is said to be a legitimating myth for racial discrimination, but in linking Hitler directly to Darwin Wilson is guilty of a myth in the elementary sense of error. As Nicolaas Rupke has argued, it was an alternative, indigenous Germanic tradition of evolutionary thought on which Nazism drew. In fact "through the period of the Third Reich, Darwinism became thought of as 'un-German'" (Rupke 2015, 310). Robert Richards has similarly protested that to implicate Darwin and Ernst Haeckel in Nazi ideology overlooks the evidence that the racial notions of Nazism were rarely connected with conceptions of species transformation and the animal origin of all human beings. Among material explicitly *condemned* by the Third Reich was what it dismissed as "the superficial scientific enlightenment of a primitive Darwinism and monism," such as that advocated by Haeckel (cited by Richards 2009a, 176–77).

Wilson's biography is instructive in its display of different kinds of myth. It is also flawed in reducing later modifications of Darwin's theory to refutations of it. He appeals to Stephen Jay Gould's model of punctuated equilibrium to bolster his case without acknowledging Gould's fury at its appropriation by creationists who advertise it as fundamentally

anti-Darwinian. So, I leave Wilson's mythology here. It is time to look for some truth in discourse about Darwin and Christianity. It is a truth that Darwin's religious beliefs are difficult to pin down. This is because they changed over time, from Christian orthodoxy in his Cambridge years when he was preparing for the Anglican ministry, to a deistic position when writing the *Origin*, to the agnosticism of his later years. He is also difficult to pin down because, by his own admission, his views often fluctuated and because he was anxious not to cause unnecessary offence. It is true that he renounced Christianity, also true that he denied ever having been an atheist (Brooke 2010). As one of the founders of the anthropology of religion, his science was a major challenge for Christian thinkers, compounding uncertainties already set in train by historical criticism of the Bible (Pleins 2013). But it is also true that his idea of common descent was welcomed by adventurous Christian thinkers seeking liberation from naïve models of divine intervention in nature. Was not more wisdom required to make a world that could make itself? The consequence would be that biological evolution proved divisive within Christendom but not immediately destructive (Brooke 2012). The challenge was multifaceted, impinging on an unprecedented range of issues, from the interpretation of *Genesis,* the historicity of Adam and the meaning of the Fall, to the status of arguments for design and to the role of Providence in a universe permeated by random events (Johnson 2015; Harrison 2016). There were issues concerning human uniqueness on which Samuel Wilberforce expatiated and associated problems with what was meant by the human "soul." The bloodstained trail of evolution jarred, as it would for George Romanes, with belief in divine beneficence (Pleins 2014, 207–63). The reinforcement Darwin gave to a naturalistic methodology for the sciences was perfectly expressed by Romanes when he insisted that "whether we be theists, atheists, or agnostics in our religion, in our science we *must* all be naturalists" (Pleins 2014, 274).

These are truths about Darwinism and Christianity. On descending into detail on Darwin's beliefs and the reception of his ideas, the myths begin to appear. I referred earlier to the super-myth that science and religion must necessarily conflict and how this has been served by the sub-myth that the ideas of creation and evolution are essentially incompatible. It was not clear to Darwin that the latter was the case. In his large unpublished text on natural selection, he gave his own definition of what he meant by "nature": "By nature, I mean the laws ordained by God to govern the Universe" (Richards 2009b, 61). There was still a Creator on whom the laws of nature depended for their existence. Late in life, in a letter to John Fordyce, he declared that it seemed "absurd to doubt that a man may be an ardent Theist and an evolutionist" (Spencer 2009, 83). Darwin had friends and colleagues, including Asa Gray, who readily embraced both. Evolution was a creative process, in its broad outlines

progressive. The production of what Darwin called the higher animals was the greatest good he could conceive. In correcting the myth that clerical reactions were uniformly hostile, the geneticist Steve Jones once replaced it with another—that the Anglican Church "soon accommodated Darwin's ideas, which as most clerics realized, have no relevance to religion" (Jones 2009, 2). That surely goes too far, given the impetus Darwin gave to secularist movements (Ruse 2017). It all depended on which of Darwin's ideas was in the frame. Scientists and churchmen could be amenable to a theory of common descent, while far less so to the prominence Darwin gave to natural selection as the primary mechanism of species transformation.

What of the story that Darwin delayed publication of his theory for twenty years in fear of social and religious recrimination? Is this another sub-myth regulated by the master narrative of inexorable conflict? Darwin scholarship is actually divided on why he published only when in danger of losing his priority to Wallace. He knew, of course, that his theory would be offensive to many, and it would be unwise for us to discount consideration for the feelings of his wife Emma with her genuine piety. As Adrian Desmond and James Moore underlined in their biography, theories of biological evolution had been associated with radical political activists and not with respectable country gentlemen (Desmond and Moore 1991). But the balance in recent scholarship has rather shifted from fear of religious opprobrium to fear for his scientific reputation should his argument be perceived as insufficiently plausible. It was not until the mid-1850s that Darwin saw why natural selection would favor divergence from common ancestors, the more extreme variants developing further as they gradually occupied different niches. There had been problems concerning the social insects, particularly how the characteristics of neuters were perpetuated when they themselves were infertile. Nor could he forget the censorious reaction to the anonymous *Vestiges of the Natural History of Creation* (1844), in which Robert Chambers's vision of organic development over time, despite its popularity, had been derided by the Anglican scientific élite (Secord 2000). Darwin needed the security of knowing that he had the authority to publicize his theory, and in the most recent study of the "delay" it is argued that it was the appreciation of his exhaustive study of barnacles (from 1846 to 1854) that gave him the necessary confidence to do so. Insofar as Darwin experienced "fear" it was for his scientific reputation, a fear that he had inadequate evidence, that he would be unconvincing (Buchanan and Bradley 2017).

Because myths usually do contain an element of truth, they are especially resilient when valued for the support they give to meta-myths that attract emotional as well as intellectual attachment. The myth that Darwin destroyed the argument from design provides a telling example. It certainly does contain elements of truth. In his *Autobiography* Darwin declared that "the old argument of design in nature, as given by Paley . . . fails now

that the law of natural selection has been discovered" (Darwin 1958). It failed because there was now an immanent "natural" explanation for what looked like beautifully crafted structures in living organisms, structures like the human eye with its ability to change focus and respond to different intensities of light. Because natural selection was a perfecting mechanism it could simulate what, for William Paley, had been evidence of purpose and design in the natural world. Nature could "counterfeit" design (Gillespie 1979). But, though there is truth in the myth, there is also falsehood because Paley's argument from contrivance to a Contriver was not the only design argument in town. The Cambridge philosopher William Whewell, who first coined the word "scientist" in the early 1830s, had argued for design in the propitious combination of nature's laws that had made intelligent life possible (Brooke 1991, 151). Paley himself had looked to the laws of nature, arguing that a law presupposed an agent, a law-maker. Yet the antithesis between Darwin and Paley, sharply delineated by Richard Dawkins, has regulated much of the discussion of "science and religion" in the Victorian age, as if the credibility of the Christian faith were critically dependent on Paley's apologia.

Two affirmations of Paley himself are important here. While he did not advocate the view, he saw no reason why the deity should not have delegated to other agencies the task of producing a world (Paley [1802]2006, 27). Second, and strikingly, he had seen no injury to faith in the circumstance that many features of human life were affected by the vagaries of chance. Although it is often said that Darwin's emphasis on random variation and chance events undermined the concept of providential design (Johnson 2015), Paley had quite happily incorporated random distribution into his theology of nature. There was chance variation among human beings in the particular characteristics each enjoyed. It was, said Paley, like the "drawing of a ticket in a lottery." Much was left to chance, "without any just cause for questioning the regency of a supreme Disposer of events" (Beatty 2013, 151). As he reflected on the reception of Darwin's *Origin*, Huxley would complain that there had been excessive agitation over the question of design. He even praised Paley for having anticipated a scientific naturalism that was germane to Darwin's theorizing. Ultimately, in Huxley's view, Darwin's theory had no more to do with theism than had the first book of Euclid. There was no reason to discount the possibility that design had been incorporated into the initial configuration and laws of the universe (Huxley 1887). That Darwin destroyed the argument from design is therefore a myth both in the sense of being at least partly false and also in the sense of regulating a broader discourse of science and religion (Topham 2010, 112). Design arguments did not disappear with Darwin (Lightman 2007, 64–94; Roberts 2009) and appeals to what Huxley called a wider teleology can be found in contemporary philosophy of religion (Kojonen 2016).

A fourth myth, also congenial to advocates of the "conflict thesis," is that it must have been Darwin's science that destroyed his faith. Laying that myth to rest, the well-known Harvard biologist E. O. Wilson insisted that "the great naturalist did not abandon Abrahamic and other religious dogmas because of his discovery of evolution by natural selection." Rather, "the reverse occurred." The shedding of what E. O.Wilson describes as "blind faith" gave Darwin "the intellectual fearlessness to explore human evolution wherever logic and evidence took him" (Wilson 2005, 29–33). As with the myth-busting of Steve Jones, the correction of one caricature leads to another. Myths clearly flourish when our thinking is structured by either/or dichotomies. A balanced account of Darwin's agnosticism has to recognize that his doubts had multiple sources (Brooke 2010, 396–99). Most prominent *were* considerations that had little to do with his science. He revolted on moral grounds against prevalent Christian teaching on eternal damnation for the unregenerate, which would include his father and his free-thinking brother Erasmus. The presence of so much suffering in the world Darwin considered one of the strongest arguments against belief in a beneficent deity. His anguish on the death of his daughter Annie in 1851 would intimately reinforce that sensibility (Keynes 2001). Yet it would be wrong to ignore considerations that did arise from his science. He did see a connection between the progressive understanding of laws of nature and the incredibility of miracles. His science even provided epistemological grounds for agnosticism: If the human mind was itself the product of evolutionary processes, could it be trusted to reach definitive conclusions on metaphysical and theological matters? "Can the mind of man," he asked, "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?" (Darwin 1958, 92–93). In the last analysis, it is impossible to drive a sharp wedge between "scientific" and "religious" grounds for his skepticism. This is because the extent of both human and animal suffering that Darwin saw as inimical to religious belief was, he believed, perfectly explicable on his theory of natural selection (Keynes 2001, 250).

How the problem of suffering should be addressed in the light of evolutionary theory is a subject on which Christopher Southgate has written with distinction. Acknowledging the dissonance often deeply felt between belief in a God of love and the powerful image of violence and extinction in Tennyson's "Nature red in tooth and claw," Southgate proposed that the Christian believer must presume that a loving God would have deployed the best of all *possible* means for realizing creaturely values (of beauty, diversity, and sophistication) taking the balance between creativity and concomitant pain into account (Southgate 2008, 48). A precedent for this style of theodicy was set by Asa Gray, who did more than anyone to promote Darwinian evolution in North America. Arguing for consistency

between natural selection and natural theology, Gray presented the former as a *sine qua non* of the very possibility of a process that had produced humankind (Sollereder 2010). One of Southgate's many contributions has been to show how this "only way" or "best way" defense, incomplete in itself, requires amplification. Without invoking the co-suffering of the deity with all creatures, without seriously questioning whether lives consisting of nothing but suffering are the end for those creatures that experience them, and without acknowledging the high calling of redeemed humanity as co-redeemers with God in the drawing together of all things, the theodicy would be deficient, certainly from a Christian perspective. Importantly, there was one fundamental respect in which Darwinism conceivably eased, rather than simply exacerbated, the theodicy problem. Darwin articulated this himself, even while reflecting on the more devilish features of creation—the ichneumon wasp that laid its eggs in the bodies of caterpillars, or the mollusks he found repulsive. On a traditional model of separate creation, the deity was directly responsible for the characteristics of each and every species. That responsibility arguably diminished if the narrative of evolution was such that a world in which it was possible for humans to emerge had to be a world in which it was also possible for nature's gruesome products to appear. This was precisely how Gray developed his Darwinian theodicy (Gray [1876]1963).

In conclusion, it is noteworthy that the resilience of myths, in the sophisticated sense of regulative narratives that, irrespective of whether they are true or false, convey a valued and persistent message to their adherents, can be sustained in many ways and for many reasons. Heilbron has observed that the super-myth of inexorable and perennial conflict between science and religion has been sustained in part by the fact that it stands in close relation to the equally potent myth that scientific knowledge is uniquely value-free (Heilbron 2014). Correcting the caricatures that lend support to the master narratives, as I have done in small measure here, is a rewarding project. But historians have learned that, despite their demythologizing of the myths, facts alone will not dislodge them. Heilbron even warns that the myth that stands in opposition to the conflict thesis, namely that at some deep level there is an essential harmony between science and religion, is just as (perhaps even more) damaging because it may conceal the *potential* for conflict that is often present, given recurrent tensions between contrary systems of authority (Heilbron 2014). It may, for example, conceal instances of guilt felt by those with a religious calling who find themselves distracted from their religious life by the seductions of natural philosophy (Feingold 2002; Cantor 2010). It may also conceal the fact that assertions of harmony between theology and the latest science have often been made in urgent response to a perceived and imminent threat. When Galileo argued that there was room for both science and religion since the Bible taught how to go to heaven, not how the heavens go, he was already on

the defense. There were already rumors that Copernican astronomy was incompatible with Scripture and he had already been denounced from the pulpit (Brooke 2014, 62).

In David Pleins's recent biography of Darwin's close friend and colleague George Romanes, there is a striking image of the poet as a "presiding minister over the marriage of faith and reason" (Pleins 2014, 258–59). Given Southgate's remarkable accomplishments as poet, scholar, and educator, this seems *à propos* in relation to his own ministry in the domain of science and religion. Following Darwin's death, Romanes composed an acutely sensitive memorial poem, in which he expressed his grief and longing still for spiritual meaning. Pleins believes this quest eventuated, at the end of his life, in the recapture of his shattered Christian faith. In the poem, Romanes touches on a transcendent truth he has learned from Darwin, even from beyond the grave. From the silence of his tomb, Romanes wrote, Darwin "teachest yet one other truth—/That we shall brave the shock of doom/And find in death eternal youth?" (Pleins 2014, 311). As "bride and bridegroom of the mind" faith and reason could still join hands: "For *lo!* I cannot deem it true/ That he who changed the face of thought/ And turned its eyes on worlds made new/ Can now to nothingness be brought."

Not to nothingness because a transcendent love survived, one that Romanes had experienced in the depth of friendship with a man whose "beauty of character" had brought him overwhelming joy (Pleins 2014, 9). This is a Darwin different indeed from the scheming mythmaker of A. N. Wilson's prose.

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