

Charles Darwin on Religion

What did Darwin have to say about religion? What were his religious, or anti-religious, beliefs? Did he believe that his theory of evolution by natural selection was incompatible with belief in a Creator? Was it his revolutionary science that turned him into an agnostic? These questions have a special urgency in 2009, the year that marks the bicentenary of Darwin's birth and the 150th anniversary of his most celebrated book, *On the Origin of Species* (1859). It is important to answer them in a balanced way because Darwin's authority and example are continually invoked to justify metaphysical and theological claims that go far beyond the details of his evolutionary biology and that of his scientific successors. Darwin's great gift to science was to show how an explanation could be given for what had been described as the mystery of mysteries, the successive appearance of new species discernible in the fossil record. If new species could emerge from pre-existing species by a process of natural selection, it was no longer necessary to suppose there had been what Darwin called independent acts of creation. For atheists and scientific materialists the plausibility of Darwin's theory was a particularly welcome gift because it could be used to dispel the notion of divine intervention in nature and to challenge the long-cherished belief that each species had been separately and meticulously designed by its Creator. Not surprisingly, there was much apprehension and some downright hostility among religious believers, which in ultra-conservative religious circles still continues today. Darwin's theory has certainly proved divisive within Christendom; but a long tradition of assimilation and accommodation suggests that some at least of Darwin's insights have been received as a gift by religious thinkers as well as scientists. As the nineteenth-century Anglican theologian Aubrey Moore put it, under the guise of a foe Darwin had done the work of a friend, liberating Christianity from a false image of the deity in which God was only present in the world when intervening like a *deus ex machina*.

Darwin and the insufficiency of sound bites

There is no simple answer to questions about Darwin's religious sympathies. This is partly because they changed over time. To a first approximation, his trajectory was from the Christian orthodoxy of his Cambridge years to a non-biblical deism at the time the *Origin* was published to a more thoroughly agnostic position in later life. This makes a neat and ironic story, given Darwin's initial training to become an Anglican priest and given the clerical attacks on his theory that he had to endure. But it means that what was credible for him at certain times in his life was not at others. For example, the sensitivity with which in the early 1830s he responded to the sublime beauty of the Brazilian rain forest, and which he said had been associated with his belief in God, faded in old age. In 1859, at the age of fifty, he could still believe that the laws governing the evolution and diversification of life had their origin in a Creator.

A second reason why Darwin is difficult to pin down concerns the fluctuation of belief. In private correspondence he admitted that his beliefs often fluctuated, even within his most agnostic phases. There were times when, in his own words, he supposed he deserved to be called a theist. At other times the strength of his belief in an ultimate Creator waned. He did, however, insist that he had never been an atheist in the

sense of denying the existence of God – a point sometimes overlooked by his fundamentalist critics and his atheistic champions.

The attempt to capture in sound bites such a subtle, honest and imaginative thinker as Darwin is bound to fail. He frequently confessed his conviction that this wonderful universe could not be the product of chance. But, typically, he would add a nuance. He could not think the universe the product of chance alone, but nor could he look at its many life forms and see in them evidence of design. He was caught in a conundrum and in self-effacing mode would say he was in a hopeless muddle. Just as it was necessary to believe both in determinism and free will, despite the problem of reconciling them, he looked for a way of embracing both chance and design. During the early 1860s he toyed with the formula that the great diversity of living things was the result of “designed laws” with the details left to chance.

A further complication concerns the privacy of religious belief. Darwin once reproached all would-be interrogators by saying that he could not see why his beliefs should be of interest to anyone but himself. The complication here is that his writings did contain remarks calculated to cause least offence. He knew there were things he should say and not say, particularly concerning the human mind, if he wished to retain public sympathy. He was also keenly aware that his views, particularly on the evolution of the moral sense, would be distressing to his wife Emma. The upshot is that there are degrees of ambiguity in Darwin’s remarks about religion that can make them difficult to interpret. To suggest, however, that his references to a Creator in the *Origin of Species* concealed a private atheism and were simply contrived to placate his audience would be an extreme interpretation. As he confided to the Harvard botanist Asa Gray in a letter of May 1860:

I had no intention to write atheistically....I can see no reason, why a man, or other animal, may not have been aboriginally produced by other laws; & that all these laws may have been expressly designed by an omniscient Creator, who foresaw every future event & consequence. But the more I think the more bewildered I become.¹

Darwin’s inheritance of a Christian natural theology

The gradual process whereby Darwin abandoned Christianity was certainly complete by the time he composed the *Origin of Species* in the late 1850s. Some of the seeds of doubt were sown during his voyage on HMS Beagle, when he witnessed a degree of violence and instability in nature that jarred with the stable, “happy world” of William Paley’s *Natural Theology* (1802). Darwin had been captivated by this book with its detailed descriptions of the adaptations to be found in plants and animals. For Paley they testified to the wisdom and power of their Creator, who had lavished care on even the lowliest creature. For his lifelong fascination with the study of adaptation, Darwin remained indebted to Paley, using him as a sounding board to test his naturalistic theory of how such adaptations could have been accomplished through the perfecting action of natural selection working on random variations.

In South America Darwin saw the devastating effects of an earthquake; he observed nature red in tooth and claw on a grandiose scale; he registered the staggering numbers of species that had become extinct; and he witnessed the terrible struggle for existence faced by the natives of the Tierra del Fuego. Such experiences, when combined with philosophical reflection, eventually made it difficult for him to discern in nature the workings of a beneficent deity. He was particularly struck by the fact

that neither the Fuegians nor the aborigines of Australia appeared to have an innate sense of God. This caused him to question one of the most basic assumptions of his day, namely that humans could be sharply differentiated from animals by their possession of that religious sense.

It is commonly supposed that Darwin's science was responsible for his rejection of Christianity. A less common, subtler view is that the rejection of Christianity was a precondition of his innovative science. Both interpretations, however, trade on the same assumption – that of an inherent conflict between science and religion. The reality was more complex. There were features of an emerging scientific naturalism that did contribute to new forms of scepticism on religious matters and Darwin's writings reveal them. The main reasons for his rejection of Christianity, however, lay elsewhere. While his science did play a role in disposing him against an intervening deity, the loss of his earlier Christian beliefs had more to do with issues common to all humanity than with conclusions entailed by his theory of natural selection. The claim that it was his renunciation of Christianity that made his science possible suffers the inconvenience that his theory began taking shape in 1837 and 1838 before he abandoned belief in divine providence.

The relevance of Darwin's science to his rejection of Christianity

Darwin's science did have a bearing on his thoughts about religion in several respects. As his wife, Emma, had perceived before their marriage, a sceptical mentality cultivated in the rigorous examination of evidence could corrode beliefs that were inconclusively attested. The great strides made by Darwin's fellow naturalists in astronomy and the Earth sciences encouraged in him the view that "the more we know of the fixed laws of nature the more incredible do miracles become."² The fact that the variations on which natural selection worked appeared randomly, and could not be immediately correlated with a prospective use, predisposed him against the view proposed by Asa Gray that novel variations were micro-managed by the deity.

As many religious commentators would recognise, an emphasis on natural selection and a competitive struggle for existence accentuated the problem of suffering. Darwin himself considered that the presence of so much pain and suffering in the world was one of the most powerful arguments against belief in a beneficent deity - and yet it was to be expected on his theory of natural selection. And in one other crucial respect Darwin's science did contribute to his eventual agnosticism. It even provided a justification for it. If the human mind is itself the product of evolutionary processes, can it be trusted to reach definitive conclusions on metaphysical and theological matters? On the big questions of meaning, purpose and the existence God, Darwin finally became unsure whether he should trust even his own convictions.

Moral and existential issues

When Darwin wrote that he could not see how anyone could wish Christianity to be true, he was not thinking about a supposed incompatibility with science. The issue was rather coherence with a civilised morality. He was thinking about the doctrine of eternal damnation for the unregenerate as it was commonly preached at the time. Freethinkers outside the Christian fold – and these included his grandfather Erasmus Darwin, his father and his brother Erasmus - were destined for eternal perdition if

this doctrine were true. For Charles it was the doctrine that was "damnable", not they.

There were philosophical as well as ethical considerations. Darwin was well aware that to posit a first cause for the universe invited a rebellious question concerning the cause of that cause. In common with the sceptical eighteenth-century philosopher David Hume, Darwin also attached weight to the consideration that false religions, notoriously, often spread quickly. He did not find the miracle stories in the New Testament gospels sufficiently compelling to authenticate the Bible as a divine revelation and his general antipathy to claims for revelation was often accompanied by remarks about the ignorance of the biblical writers.

For some scholars, notably Darwin's biographer James Moore, the death of Darwin's favourite daughter Annie, early in 1851, marked the real watershed in Darwin's engagement with Christianity. One cannot read the letters that passed between Charles and Emma at this desolate time, without shedding tears with them. Why should so innocent a child suffer? What pattern could possibly be discerned in such human tragedies? Annie's death was the most heart-rending example, and the one closest to home, of a more general problem Darwin experienced in seeking to rationalise particular events. After the *Origin of Species* was published he entered into a revealing correspondence with Asa Gray in which the question of design in nature was explored in depth. For Gray, natural selection was not inconsistent with a Christian natural theology; Darwin was more sceptical. He asked Gray whether he believed that if a man stood under a tree and was struck by lightning there was design in such an event. In pressing Gray for an answer, Darwin acknowledged that many did believe it; but he could not. By the early 1860s Darwin was sure that the accidents of life (and by extension the countless contingencies in evolutionary processes) should not be ascribed to the immediate control of a divine agent.

This did not mean, however, that an ultimate Creator and designer of the universe was deleted from his philosophy of nature. He did not believe that the universe was self-explanatory and in the late 1850s and early 1860s was still willing to describe the laws of nature as ordained by the Creator in such a way that the highest good we can conceive – namely the production of the higher animals – would be brought about. In his large book on natural selection, of which the *Origin* was a summary, he explicitly defined what he meant by 'nature' in order to make this clear: "By nature, I mean the laws ordained by God to govern the Universe."⁴ This is not Darwin the atheist of popular caricature.

Darwin's deism

It is often said that Darwin's science excluded all sense of purpose in nature. This is not strictly correct because the deistic philosophy of nature with which he was comfortable still allowed what his popularizer Thomas Henry Huxley described as a "higher teleology". It was possible to see the creation of the higher animals, and humans in particular with their capacity for appreciating goodness and beauty, as implicit in the way the universe was first set up. It was for this reason that Huxley could say that Darwin's theory had no more to do with theism than the first book of Euclid – meaning nothing at all. It was inappropriate to argue for design from the minutiae of organic structures, but progressive trends in a creative evolutionary process could form the basis of a revised natural theology.

Darwin's references to "laws impressed on matter by the Creator" featured even more prominently in the second edition of the *Origin* than in the first, and he appears genuinely to have believed that this way of looking at the question of design ought to mean that his views on the mutability of species would be exempt from theological criticism. In the second edition he could see "no good reason why the views given in this volume should shock the religious feelings of anyone."⁵

The fact that they did, and the fact that his theory was often attacked for its theological implications rather than judged on the quality of its science, meant that during the 1860s Darwin became increasingly irritated by those who had a religious axe to grind. His frustration is often visible in his correspondence, as in a letter written to Joseph Hooker in September 1868: "I am not sure whether it would not be wisest for scientific men quite to ignore the whole subject of religion."⁶ Not that he was able to do so himself. When he addressed the subject of human evolution in *The Descent of Man* (1871), he hypothesised about the origins of religion and the development of the moral sense. He speculated that in primitive human societies a propensity to ascribe natural phenomena to invisible spirits might not be so different from the behaviour of his barking dog, which, Darwin surmised, had imagined an invisible intruder responsible for the movement of an open parasol swayed by the breeze. The moral sense had developed as a consequence of a basic human desire to enjoy the approval of others. Selfish acts risking, or leading to, the loss of that approbation would induce feelings of anxiety and unease, preconditions of the emergence of conscience. Despite this prescient extension of naturalistic explanation, Darwin did not consider that he was promoting the relativity of moral values. The golden rule that we should treat others as we would wish them to treat us constituted the highest moral principle. Darwin's aim was not to impugn it but simply to explain how it had come about. His explanation gave an important role to religious beliefs in reinforcing moral precepts.

Darwin's legacy in the religious sphere

The religious controversies surrounding Darwin's science have been well documented for the Christian churches, rather less fully for other religious traditions. Attention has been paid, correctly, to the problems.

that were posed for those who still wished to read the Genesis creation narratives literally or who recognised that the principle of natural selection required, at the very least, a revision of natural theology. For Christianity a distinction has to be drawn between the understandings to be found within popular religion and those of a Christian intelligentsia, which, even before Darwin published, had come to appreciate the many different literary genres to be found in the Bible. One of Darwin's legacies was to reinforce recognition that attempts to harmonise science with Scripture on the premise that the Bible had authority on questions of natural science were inappropriate and counter-productive.

There were other legacies welcomed by Christian commentators. One of Darwin's earliest converts was the Christian socialist Charles Kingsley who in his popular novels could be said to have done more than almost anyone to transmit evolutionary ideas to an English-speaking public. Kingsley delighted Darwin when he concurred that it was "as noble a conception of Deity, to believe that he created primal forms capable of self development ... as to believe that He required a fresh act of

intervention to supply the lacunas which he himself had made." Kingsley implied that he found the former the "loftier thought".⁷

Darwin's most able defender in North America, Asa Gray, also commended the new theory from a Christian point of view. In common with Darwin and with the co-founder of the theory of natural selection, Alfred Russel Wallace, Gray valued the conclusion that all living things were linked together by a single evolutionary story. In contrast to the view that the distinctive human races had been separate creations, which could easily underpin racial prejudice, Gray rejoiced that all humankind constituted a single species united by a common ancestry. Recent research has shown how Darwin's own abhorrence of slavery affected his thinking on the origins and unity of the human species.⁸ Gray also believed that Darwin had provided a new resource for addressing the theologians' problem of suffering. While there was a real sense in which Darwin's theory put the spotlight on pain, struggle, cruelty and waste in the works of nature, Gray believed that if they were preconditions of the possibility of a creative process that eventuated in humanity, their presence could be better understood. This line of argument, in which Darwin's theory became a resource for the construction of theodicies still finds expression today among evolutionary biologists with religious sympathies. To the question why there were so many displeasing, even devilish creatures in the world, Darwin himself had answered that this was a problem of greater magnitude for those who believed in the direct and separate creation of each species – for the deity would then be immediately responsible for vile molluscs and the wasps that lay their eggs in the bodies of caterpillars. But if the only world in which the evolution of human beings had been possible was a world in which the production of these other beings was also possible, might there be a sense in which the deity could be exonerated?

Darwin's repeated appeal to *laws* of nature, with their origin in an ultimate Creator, did resonate with the thinking of the most open-minded religious thinkers. A striking example is Frederick Temple who, as early as 1860, preached a sermon in Oxford in which he welcomed the expansion of scientific explanation and chided those who tried to make theological capital out of phenomena that the sciences could not yet explain. This was an early recognition of the dangers for religious apologists who pinned their hopes on a god-of-the-gaps, whose jurisdiction would forever shrink as the sciences advanced. Temple was a convert to evolution, finding in Darwin's theory a welcome unification of nature and a licence to believe that the history of life on Earth had been progressive and not directionless. The fact that Temple became Archbishop of Canterbury in the 1880s symbolizes the acceptance of Darwin's achievement by the English Church. When Darwin died in April 1882 he was buried in Westminster Abbey, the national newspapers finding no religious obstacle.⁹ *The Times* declared the clash between Huxley and Bishop Wilberforce in 1860 a piece of "ancient history"; the Liberal *Daily News* adding that Darwinian doctrine was quite consistent "with strong religious faith and hope."

That reference to the Wilberforce-Huxley debate at the 1860 meeting of the British Association for the Advancement of Science is a reminder of the diversity of religious reaction. The Bishop of Oxford had found Darwin's theory offensive with its postulation of continuity between humans and their animal ancestors. Wilberforce's contention that a graduation from primate to human was incompatible with Christian claims for human uniqueness overlooked the fact that to say humans were derived from ape-like ancestors was not to say they were nothing but apes. To regard his

intransigent reaction as fully typical of the religious response is, however, another common mistake.

A further legacy?

Darwin's legacy is far from exhausted in the sciences. It is rightly celebrated in 2009. In the religious sphere it has proved more equivocal. The oppositional stance of fundamentalist groups and the equally aggressive rejoinders from exasperated atheists has contributed to a polarization that the membership of ISSR deeply regrets. There is another legacy from Darwin, which, if appropriated, could only be beneficial in contexts where dogmatism on either side prevails. The manner in which Darwin conducted himself in his dealings with friends and critics alike might still be held up as an example. There was an attractive humility in the self-deprecating way in which he declined to dogmatise on intractable questions such as the existence of God or the existence of transcendent purposes in the universe.

Darwin also displayed an impressive honesty in his rhetoric, conceding the difficulties surrounding his theory as well as underlining its strengths. One of his grievances against the evolutionary biologist St George Mivart was that, in a severe critique of Darwin's dependence on natural selection, Mivart dwelled only on the difficulties, disregarding the strengths. Mivart was a convert both to evolutionary thought and to Roman Catholicism, making it easy for Darwin and Huxley to impute a religious motivation to his critique. There were other qualities in Darwin that are often lacking among contemporary antagonists. He knew where to draw the lines on the limitations of his science, recognising that the future would bring fresh insights and a deeper understanding of the processes he sought to understand. Two presuppositions characterise much of his thinking on questions of science and religion. One was that it would be sacrilegious to suggest that the deity was incapable of achieving its creative purposes through natural causes. The other, associated with his agnosticism, was an attitude of tolerance to those whose intimate beliefs he did not share. In so far as he had a creed at the end of his life, it was that each man should hope and believe what he can.

Further reading

For more on Darwin's thinking about religion, see the 'Darwin and religion' section of the Darwin Correspondence Project website: www.darwinproject.ac.uk

Other recent discussions include Nick Spencer, *Darwin and God* (SPCK 2009) and essays by John Hedley Brooke and Robert J Richards in *The Cambridge Companion to the Origin of Species* (Cambridge University Press, 2009).

Darwin to Asa Gray, 22 May 1860, in *The Correspondence of Charles Darwin*. Vol. 8 (Cambridge University Press), 224.

The Autobiography of Charles Darwin, ed. Nora Barlow (1958), 86

Darwin, *Autobiography*, 87

Charles Darwin's Natural Selection, Being the Second Part of his Big Species Book Written from 1856 to 1858, ed. R.C. Stauffer (Cambridge 1975), 224

The Origin of Species by Charles Darwin: A Variorum Text, ed. M. Peckham (University of Pennsylvania Press), 748

Darwin to Hooker, 8-10 September 1868, in *The Correspondence of Charles Darwin*. Vol. 16, 732

Kingsley to Darwin, 18 November 1859, in *The Correspondence of Charles Darwin*. Vol. 7, 379-80

Adrian Desmond and James Moore, *Darwin's Sacred Cause: Race, Slavery and the Quest for Human Origins* (Allen Lane, 2009).

Adrian Desmond and James Moore, *Darwin*(Penguin), chapter 44

¹Darwin to Asa Gray, 22 May 1860, in *The Correspondence of Charles Darwin*. Vol. 8 (Cambridge University Press), 224.

²*The Autobiography of Charles Darwin*, ed. Nora Barlow (1958), 86

³Darwin, *Autobiography*, 87

⁴*Charles Darwin's Natural Selection, Being the Second Part of his Big Species Book Written from 1856 to 1858*, ed. R.C. Stauffer (Cambridge 1975), 224

⁵*The Origin of Species by Charles Darwin: A Variorum Text*, ed. M. Peckham (University of Pennsylvania Press), 748

⁶Darwin to Hooker, 8-10 September 1868, in *The Correspondence of Charles Darwin*. Vol. 16, 732

⁷Kingsley to Darwin, 18 November 1859, in *The Correspondence of Charles Darwin*. Vol. 7, 379-80

⁸Adrian Desmond and James Moore, *Darwin's Sacred Cause: Race, Slavery and the Quest for Human Origins* (Allen Lane, 2009).

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This article - by Professor John Hedley Brooke - was written at the request of the Executive Committee of the International Society for Science and Religion. It is not intended to be a rigorous academic article but is intended to serve as a balanced introduction to the topic of Darwin's religious beliefs by one of the leading historians of science of our time. The Society retains the copyright of the article but gives general permission to reproduce it, in whole or in part. provided that this entire paragraph is reproduced.