

IAN RANDALL**Charles Raven (1885-1964): Professor of Divinity and Promoter of Science**

Charles Raven (1885-1964) was an outstanding theologian and preacher of the first half of the twentieth century. Raven had a fascination with and a deep appreciation of nature. His Christian faith, which developed during and after his years as a student at Cambridge University, gave a further dimension of meaning to this engagement. This article examines a number of aspects of Raven's contribution in the area of science and faith. He was a passionate advocate of the importance of careful observation of the natural world as a crucial aspect of the spiritual life. As a theologian – he became Regius Professor of Divinity at Cambridge – he argued that Christian theology was enriched by an understanding of evolution and that this message of science and faith belonging together should be taken into the public square. Perhaps his most important scholarly contribution in the field of science was as a historian. But he always wanted to be someone who had an influence far beyond the scholarly world. In this he had considerable success, speaking to varied audiences, in universities, in schools and in broadcasting. Raven was concerned that the Christian message should be communicated in an authentic way and his deeply-held belief was that engagement with science was an essential part of that task. His view was that the scientific method had given a new point of approach to every subject of intellectual enquiry. As a Christian thinker this was a development he embraced with enthusiasm.

Keywords: nature, evolution, determinism, public theology; History of Science.

Charles Raven was an outstanding theologian and preacher of the first half of the twentieth century. He was born in 1885 in London, to John Raven, a barrister, and his wife Alice. In 1904 Charles Raven began as a student what was to be a long association with Cambridge, having gained an open classical scholarship. He became editor of *The Granta*, the best known of Cambridge's literary reviews, and F.W. Dillistone, his biographer, noted that already in this period his writing and involvements gave attention to what would be his lifelong interest in science.¹ After his undergraduate studies he left Cambridge to take up a post in education, but returned in 1910 to Cambridge. For the next ten years he was predominantly in academic life, although chaplaincy experience during the First World War was significant for him. Following the War he had four years in parish ministry and eight years, from 1924, in a strategic role at the new Liverpool

¹ Dillistone, F.W. *Charles Raven: Naturalist, Historian, Theologian*, London: Hodder and Stoughton (1975), p. 43.

Cathedral. In 1932 he was offered the Regius Professorship of Divinity in Cambridge, remaining in that post until retirement in 1950. Raven was a very prolific and wide-ranging writer. In the area of science and faith, his convictions are summed up in a book published in 1936, *Evolution and the Christian Concept of God*. Speaking of the process of God working in the world, he wrote: 'For myself I believe that the scientific movement and its research into the evolutionary process are a contribution of quite priceless value to religion.'² This study explores aspects of that theme.³

Raven's life and faith

Christian faith had little impact on Raven in his early life. During his first eighteen months as a student at Cambridge, he later recalled in his autobiographical *A Wanderer's Way*, he was 'a pure pagan', but he then experienced, as he put it, the unveiling of 'eternal reality'.⁴ He felt that he had found God in nature. This was to lead subsequently to specifically Christian conversion. In this period he transferred his university studies from Classics to Divinity – church history and philosophy. After completing his undergraduate studies, with a double first, there were suggestions of research in Germany, but Raven had a conviction that 'if I was ever going to be of any use in the world I must break away from the public school and university tradition and get a wider experience'.⁵ He moved to work in Secondary Education in Liverpool and his encounter with social inequality there fostered what would be a major and continuing interest in Christian Socialism. The nineteenth-century thinker, F.D. Maurice, was an important influence in this area. Raven's first significant historical book was a history of nineteenth-century Christian Socialism (1920).⁶

Raven's Christian conversion was something he always regarded as decisive. Years later he recalled: 'I was myself "converted" – the old term is alone fit to describe what happened.' He spoke of a 'vivid consciousness of the living presence of Christ, an intense and releasing devotion to Him... a resolve to let this experience control all my activities, a desire to share it

2 Raven, C.E. *Evolution and the Christian Concept of God*, London: Oxford University Press (1936), pp. 21-22. This book is based on Raven's delivery of the 1935 Riddell Memorial Lectures, Durham University.

3 I am not dealing here with other aspects of Raven's work. For a more wide-ranging study, see Randall, I.M. 'Evangelical Spirituality, Science, and Mission: a study of Charles Raven (1885-1964), Regius Professor of Divinity, Cambridge University', in *Anglican and Episcopal History*, Vol. 84, No. 1 (2015), pp. 20-48.

4 Raven, C.E. *A Wanderer's Way*, London: Hopkinson (1928), pp. 46-47. Prior to this, he had an experience of ecstasy in the Lake District, in August 1905. See Raven, C.E. *Musings and Memories*, London: Hopkinson (1931), p. 148.

5 Raven *op. cit.*, (4), pp. 78-79.

6 Raven, C.E. *Christian Socialism, 1848-1854*, London: Macmillan (1920). Raven's book was the first to examine this movement historically.

with others'. Raven affirmed that 'I am more sure of it as a thing not only real in itself but abiding and most effective in its results than I am of any other event in my life.'⁷ He decided in 1909, partly as a result of involvement in interdenominational youth work in Liverpool, to apply for ordination in the Church of England, and was anticipating a parish curacy, but he was offered the position of Dean of Emmanuel College, Cambridge. He took up this post at Emmanuel in 1910, at age twenty-four. As a lecturer, Raven soon demonstrated his ability and indeed magnetism as a communicator. For many who heard him lecture – often without notes – he was essentially a preacher. He was remembered as 'spell-binding'.⁸ Also in 1910, Raven married Margaret (always known as Bee) Buchanan Wolleston. Bee's ancestors included seven Fellows of the Royal Society. The couple had four children – Mary, Betty, John and Margaret.

During the First World War, Raven volunteered as an army chaplain in France. His letters from the Front show the profound effect of his experiences.⁹ Later he was to become a leading pacifist.¹⁰ After the War he served for four years in parish ministry in Betchingley, Surrey, and was appointed a chaplain to the King. He was also busy with theological writing and lecturing, and was awarded a Cambridge DD for a ground-breaking early church study, published in 1923.¹¹ Another of Raven's achievements was to plan a major national Conference on Christian Politics, Economics and Citizenship (COPEC).¹² At Liverpool Cathedral, where he was a canon, he attracted large numbers of mainly young people and had an influence on Anglican missional thinking. To his own surprise, Raven was offered the Regius Chair of Divinity in Cambridge in 1932. He also became a Fellow of Christ's College. He was elected Master of Christ's in 1939, following Charles Galton Darwin, grandson of Charles Darwin. A fictionalised account of this period at Christ's College was offered by C.P. Snow in *The Masters*.¹³ By this time Raven's written output was extensive and he was lecturing in various countries, especially in Europe and North America. For two years he was the University Vice-Chancellor. He was at the forefront of a number of national and international movements, including international development, particularly in Africa, and the campaign for the

7 Raven, C.E. *Good News of God*, London: Hodder & Stoughton (1943), pp. 70-73.

8 Dillistone *op. cit.*, (1), pp. 74-75; Butler, F.H.C. 'Charles Earle Raven', *The British Journal for the History of Science* (1965) 2, 254-255.

9 Lipscomb, J. (ed.) *Charles Raven: Letters from the Western Front, 1917-1918*, Privately Printed (2007).

10 See e.g. Raven, C.E. *Is War Obsolete?*, London: Allen and Unwin (1935).

11 Raven, C.E. *Apollinarianism: An Essay on the Christology of the Early Church*, Cambridge: Cambridge University Press (1923).

12 Parker, L. "Shell-shocked prophets": Anglican army chaplains and post-war reform in the Church of England', in Snape, M., & Madigan, E. (eds.) *Clergy in Khaki*, Aldershot: Ashgate (2013), p. 192.

13 Snow, C.P. *The Masters*, London: Macmillan & Co. (1951).

ordination of women in the Church of England.¹⁴

In retirement in Cambridge, from 1950, Raven travelled extensively, taking on many opportunities that were offered for lecturing and preaching. He maintained his theological involvements and also his scientific concerns up to his death in 1964. The last sermon preached by Raven (delivered in 1964 in Oxford) found him still wrestling with faith and science. It was entitled 'Christ in the Laboratory'. Arthur Peacocke, who heard the sermon, described how Raven 'expressed with characteristic eloquence his vision of the unity of Christian insight and aspiration with a perspective on the cosmos that was deeply informed by the natural sciences and above all that of evolution'.¹⁵ In this article, which looks at Raven's approach to science and faith, I explore the themes that were most important to him and seek to make some evaluation of his contribution. The themes are: Raven's exploration of nature, his approach to the process of evolution, his commitment to public theology, his contribution to the history of science and the link with the function of science, and finally his influence.

The study of nature

Raven had a lifelong love of nature. He wrote three books on ornithology in the 1920s, the first his widely acclaimed *In Praise of Birds*, in 1925.¹⁶ This book contains a highly engaging series of chapters describing Raven's explorations. He was a pioneer bird photographer. He also became a leading expert on wild flowers, moths and butterflies. As can be seen from his books, over the years Raven gained extraordinarily detailed knowledge through observation, collection, sketching and photography. Raven felt that it was important to seek to get 'inside' nature by patient and accurate study, and he considered that this was not done enough, with too many people simply looking for what was beautiful in the natural world. He was, however, characteristically hopeful of change for the better, and was especially happy when he discovered others who were genuine fellow-enthusiasts. According to Ian Ramsey, in an obituary of Raven which reflected Ramsey's own interests, when Raven was a royal chaplain his most memorable conversations with King George V were about ornithology rather than theology.¹⁷

Theologically, Raven argued in lectures which he delivered in the USA in 1939, and which were published as *The Gospel and the Church*, that

14 For this see Raven, C.E. *Women and Holy Orders* London: Hodder & Stoughton (1928).

15 Peacocke, A. *Evolution: The Disguised Friend of Faith?* West Conshohocken, PA: Templeton Press (2004), p. 34.

16 Raven, C.E. *In Praise of Birds*, London: Hopkinson (1925); *The Ramblings of a Bird Lover*, London: Hopkinson (1927); *Bird Haunts and Bird Behaviour*, London: Hopkinson (1929).

17 Ramsey, I.T. 'Chares Earle Raven', *Proceedings of the British Academy* (1965), pp. 51, 472.

there had been a misguided renunciation of nature over centuries in Christian history, although he accepted that there were outstanding exceptions, such as St Francis. Perhaps 'renunciation' was too strong a word to use of the Church's attitude to nature and Raven overstated his case, but he argued persuasively that, where there was renunciation, it was untrue to the Old Testament, to Jesus's teaching and to the outlook of Paul and the Apostolic Church.¹⁸ Here Raven was echoing what he had said in lectures at Durham University, in which he highlighted how the teaching of Jesus offered a high valuation of nature which was lost by 'later orthodoxy'.¹⁹ Raven spoke of how the sixteenth-century Reformation as a whole had brought people back to the scriptures, with their 'testimony to the worth of nature'.²⁰ However, he was well aware that since the Reformation much had happened in the complex relationship between science and religion. In these 1939 lectures he brought his own proposal for a way ahead. He argued:

If we are to learn the lessons that nature can teach, it must be by recovering the sense of its wholeness and its value, the humility and the wonder which science in its conflict with religion too largely lost ... Such scientists as are more than specialists and technicians are ready to welcome a wider and more synthetic attempt to interpret the nature and significance of the universe.²¹

Charles' son, John, who became a fellow of King's College, Cambridge, suggested to Charles in 1942 that they could co-produce a 'collection of essays and illustrations' of plants. A wonderful collection, containing essays and splendid paintings of wild flowers by Charles and John was put together. They painted over 2,000 species of wild flowers.²² As an investigator of nature and a Christian believer, Raven was always excited as he saw God in the unfolding variety of creation, in its amazing living organisms. In 1952, delivering the prestigious Gifford lectures in Edinburgh, Raven argued that creation was 'a process not an act, continuous not complete'.²³ Raven became President of the Botanical Society of the British Isles. For him such involvements were integral to his vision of his task as a Christian theologian. When anyone was looking closely at nature, Raven believed that person was observing God at work. He saw the natural world

18 Raven, C.E. *The Gospel and the Church: A Study of Distortion and its Remedy*, London: Hodder and Stoughton (1939), p. 89.

19 Raven *op cit.*, (2), p. 10.

20 Raven *op. cit.*, (18), pp. 172-173.

21 Raven *op. cit.*, (18), pp. 193-195.

22 Raven, J. & C., with Noltie, H.J., (ed.) *Wild Flowers: A Sketchbook*, Edinburgh: Royal Botanic Gardens (2012). I am grateful to Faith Raven, the widow of John Raven, for my copy of this book.

23 Raven, C.E. *Natural Religion and Christian Theology, Vol. II*, Cambridge: University Press (1953), p. 13.

as 'a world alive, transparent, sacramental, the work of God, the object of His love'.²⁴

The process of evolution

Within his overall delight in nature, Raven had a particular interest in the evolutionary process. *The Creator Spirit*, published in 1927, was Raven's first major study addressing issues that had confronted him through his voracious reading of developments in biology and psychology. In pursuing his theme of integration, especially in relation to evolution and God's activity, Raven proposed that 'woven into the very woof and warp of the universe is the pattern of the Cross'.²⁵ Christopher Southgate, in *The Groaning of Creation* (2008), in a footnote, says that Raven was the first to propose this concept.²⁶ Peter Bowler, in *Reconciling Science and Religion: The Debate in Early Twentieth-Century Britain*, sees *The Creator Spirit* as Raven's most original contribution to the new natural theology.²⁷ Raven paid tribute in his own work to the work of scientists and philosophers such as Lloyd Morgan, Professor of Psychology and Ethics in the University of Bristol, and Joseph Needham, an embryologist and biochemist in Cambridge. *The Creator Spirit* included an appendix on biochemistry and mental phenomena written by Needham. Raven's view was that on the whole theologians had not grappled with the contemporary challenges posed for Christian thought. He hoped, in the light of what he saw as this lack, to formulate a 'Christ-centred view of the Universe in such a wise as to heal the breach between science and religion'.²⁸

Raven returned on many occasions to themes he formulated in the 1920s. In 1931, in *Jesus and the Gospel of Love*, Raven argued that modern science had 'destroyed the conception of a God who acts on the world only from the outside ... Either God works in all, or he works in none'.²⁹ Giving a London lecture some years later, Raven spoke of how St Paul wrote (in Romans 8) of the 'incompleteness and frustration of the creative process' and saw this as 'the prelude to the manifestation of the family of God'. For Raven, Paul was drawing a picture that was 'congruous with modern evolutionary theories'. Raven argued for this understanding as against 'the randomness of the Neo-Darwinians or the mechanistic analogies

24 Raven *op. cit.*, (7), p. 49.

25 Raven, C.E. *The Creator Spirit*, London: Hopkinson (1927), p. 124. This work is taken from the Hulsean Lectures, Cambridge, 1926-7; and the Noble Lectures, at Harvard, 1926.

26 Southgate, C. *The Groaning of Creation: God, Evolution and the Problem of Evil*, Louisville, KY: Westminster John Knox Press (2008).

27 Bowler, P. J. *Reconciling Science and Religion: The Debate in Early Twentieth-Century Britain*, Chicago: University of Chicago Press (2001), p. 279.

28 Raven *op. cit.*, (25), p. vii.

29 Raven, C.E. *Jesus and the Gospel of Love*, London: Hodder and Stoughton (1931), p. 441. This book came out of lectures delivered in the University of Glasgow.

of Dr Paley'.³⁰ Dillistone notes that the Anglican Bishop Charles Gore's influential *The Reconstruction of Belief* (1926) had seen God's purpose being slowly realised on the stage of the world, whereas for Raven the universe was not to be viewed as a theatre in which God was 'playing out the drama of redemption'; rather Raven saw the activity of God 'being witnessed through every manifestation of light and life and love' that was to be found and indeed 'revealed' in the whole of the world of nature, and in humankind.³¹

In 1943 Raven delivered eight lectures in Cambridge on 'Science, Religion and the Future' - lectures that were highly acclaimed and which were published at the time and then re-published in 1994, with an introduction by the novelist Susan Howatch. She found Raven a very significant figure – as seen in her novel *Ultimate Prizes* in the Starbridge series about the Church of England in the twentieth century, in which Raven is quoted at the start of each chapter.³² Raven pressed home in his 1943 Cambridge lectures his developed vision of God working in the evolutionary process. He saw the world as 'in the making, incomplete, frustrate, becoming pregnant with creatures which can only be produced through the age-long agony of trial and error, defeat and endurance. These creatures', he continued, 'must be free in their choices – hence the fact of evil; they must be fully sensitive to joy and therefore to pain.'³³ In these lectures Raven addressed the challenge posed by those who could not see morality in the struggles of the evolutionary process. He noted that this was true for some, but others saw co-operation at work. His observation of those who had 'most deeply entered into a disciplined study of nature' was that, broadly speaking, they appreciated 'the worth of life', while recognising 'the elements of struggle and seeming amorality'. He opposed, he said, any 'shallow or easy optimism' about the evolutionary process. For him, God was involved, 'indeed embodied'.³⁴

Public theology

Charles Raven had a strong commitment to engaging in what today would be called public theology. He wanted to open up dialogue between people from different disciplines and with differing views, especially between theologians and scientists. During his student days in Cambridge he made a point of attending lectures by William Bateson, a leading genetic determinist. He spoke of 'the deterministic theories of heredity championed

30 Raven, C.E. *Organic Design: A Study of Scientific Thought from Ray to Paley*, London: Oxford University Press (1954), p. 14.

31 Dillistone *op. cit.*, (1), p. 53.

32 Howatch, S. *Ultimate Prizes*, London: HarperCollins (1989).

33 Raven, C.E. *Science, Religion and the Future*, Cambridge: University Press (1943), republished by Mowbray and with an introduction by Susan Howatch (1994), p. 111.

34 *ibid.*, pp. 101-104, 112.

so vigorously' by Bateson. The philosophy advocated by Bateson was one which Raven came to see as profoundly antithetical to Christian faith. For Raven, if 'our struggles and hard-won virtues have no effect whatever upon the course of development' then to see God as 'in any real sense Father is impossible'.³⁵ Raven's public debates quite often returned to the topic of determinism, whether in the scientific realm or as he perceived the approach present in the predestinarianism of some Reformed theology. In lectures Raven gave to medical audiences in 1958, which were published as *Science, Medicine and Morals*, he recalled William Bateson's inaugural lecture fifty years before when Bateson became Professor of Biology in Cambridge. In this lecture Bateson's determinism was applied to human behaviour in an all-encompassing way. Some of Bateson's phrases were still vivid in Raven's memory. Towards the end of his lecture Bateson had asked, in the light of the incontrovertible (as he saw it) process of genetic determinism, 'What then will happen to your laws of Moses?' Striking a personal and slightly jocular note, Bateson, who was a large man, had asked the audience: 'You would not think it fair to sentence [condemn] a man of my shape if having received the shape from my ancestors I cannot run a hundred yards in 10 seconds.' Raven noted that this finale was omitted from the printed version of the lecture. For Raven such deterministic thinking left no room for moral change, and it was a view which he was convinced called for public debate.³⁶

Raven was disappointed, however, by the quality of the debates taking place. In particular he lamented the paucity of helpful books on science and faith. When Bryan Green, a gifted Anglican evangelist, wrote to Raven in 1949 asking for books to answer a 'scientific humanist's position', Raven replied that it was 'tragic' how little could be recommended in this area. In part, he commented trenchantly, he blamed Anglican leaders – especially in his view those who had studied in Oxford – 'whose philosophy represents a bygone age'.³⁷ In the same year Raven reviewed, in the journal *Nature*, R.E.D. Clark's *Darwin Before and After*, published the previous year. This was a popular-level piece of writing which, Raven noted, assigned to Charles Darwin 'psychological and religious conflicts', and treated 'his ill-health and his theory of evolution as the outcome of the sense of guilt'. Clark made Darwin responsible for 'irreligion and "big business"', for racial oppression and the glorification of war, for Marx and Nietzsche, Hitler

35 Raven *op. cit.*, (4), *Wanderer's Way*, p. 62.

36 Raven, C.E. *Science, Medicine and Morals: A Survey and a Suggestion*, London: Hodder & Stoughton (1959), p. 91. Raven referred to Bateson, B. *William Bateson, F.R.S., Naturalist*, Cambridge: University Press (1928), pp. 317-333. Bateson's inaugural lecture, which was delivered on 23 October 1908, was also published separately: Bateson, W. *The Methods and Scope of Genetics*, Cambridge: University Press (1908).

37 Bryan Green to C.E. Raven, 28 July 1949; C.E. Raven to Bryan Green, 6 August 1949. Letters in the possession of Faith Raven, a daughter-in-law of Charles Raven. My thanks to Faith Raven for her help.

and Mussolini'.³⁸ Clark's book, which became well-known in some circles, was described by Raven in a letter as 'philosophically impossible and religiously destructive', as 'confused and confusing'.³⁹ By contrast, Raven commended books about evolution and faith by Teilhard de Chardin, a French Roman Catholic. In 1962, in the last book Raven wrote on science and religion, he spoke of Teilhard and the Reformed theologian Karl Barth as contemporaries who responded to their times in very different ways. Barth emphasised, Raven claimed, human 'sin and folly' and the 'otherness' of God, while (for Raven) Teilhard saw not two opposing worlds, but a single evolutionary story. Raven was saddened that 'the Protestant world had enthroned Barth while the Vatican ... did its best to silence Teilhard'.⁴⁰

As evidence of Raven's varied contribution to public theology, three examples can be chosen that relate to science. First, from his time in Liverpool, where Raven addressed a large Free Church gathering mostly consisting of lay people on the 'Changed Intellectual Outlook', stating: 'The scientific method ... has radically altered our whole outlook upon the universe and its development.' The church had the challenge of 'reinterpreting its whole presentation of the faith'.⁴¹ Secondly, at his inaugural lecture as Regius Professor in Cambridge in 1932 in which he made clear his priorities. He stated that an inaugural lecture was commonly regarded as an opportunity to expound the 'highly-skilled mystery' of the lecturer's own special subject – in his case what he called the intricacies of the doctrinal controversies of the Patristic period. Instead of this 'interminable' topic, as he put it, he used the occasion to argue for attention to be given in theological exploration to science, communal relationships, and the work of the Spirit.⁴² As he often did, he highlighted the contemporary lack of theologians with 'first-hand knowledge of modern science'.⁴³ Thirdly, in 1946 Raven delivered the Hobhouse Memorial Trust Lectures, which had a sociological focus, taking as his topic 'Religion and Science', and arguing that there were important historical instances of those who had bridged the divide between the two. He cited the story of Conrad Gesner, 'one of the most remarkable and least-studied' of sixteenth-century Protestant figures, whose commitments included the classics, biblical studies, botany, medicine and membership of the Alpine Club.⁴⁴ Here was a sixteenth-century exemplar of public theology. Raven did not consider that his public engagement in the twentieth century represented anything new, but he

38 *Nature*, 2 April 1949, pp. 509-510.

39 Charles Raven to F.L. Coutts, 24 February 1949. In the possession of Faith Raven.

40 Raven, C.E. *Teilhard de Chardin: Scientist and Seer*, London: Collins (1962), p. 29.

41 *Baptist Times*, 8 May 1930, pp. 323-324.

42 Raven, C.E. *Signs of the Times: Some Reflections upon the Scope and Opportunity of Theology*, Cambridge: University Press (1932), pp. 5-6.

43 *ibid.*, pp. 29-30.

44 Raven, C.E. *Religion and Science: A Diagnosis*, London: Oxford University Press (1946), pp. 9-10.

did feel that he was engaging in ways which had become much less common.

The history and function of science

It was probably as a historian of science that Raven made his greatest contribution to science and faith. Raven's outstanding work in this area was his *John Ray, Naturalist: His Life and Works* (1942). Peter Bowler describes Raven's volume on Ray as 'a classic' in the field.⁴⁵ John Ray, a seventeenth-century thinker who was a fellow of Trinity College, Cambridge, before resigning and becoming a private tutor, in *The Wisdom of God Manifested in the Works of Creation* (published in 1691, towards the end of his life) looked at the form and function of adaptation in nature. Raven argued that this book 'initiated the true adventure of modern science' and was the ancestor of Darwin's *Origin of Species*.⁴⁶ Ian Ramsey highlighted the Ray-Raven connection. Ramsey wrote that John Ray was a figure 'whose deepest loves and concerns were shared by Raven in full measure'.⁴⁷ Clearly Raven found much to admire in Ray – the son of a blacksmith, then a Cambridge academic, and later a Nonconformist. Raven was fascinated by Ray's philosophy, for instance the way he urged that people should 'converse with Nature as well as with books'. Ray had in Raven's view been overshadowed: 'imitated, and extensively plagiarised, by Paley'.⁴⁸ Alongside his reading of Ray's work and of derivative material, among those Raven consulted in Cambridge in the course of his research was Agnes Arber, the first woman botanist elected a Fellow of the Royal Society.⁴⁹ *John Ray, Naturalist: His Life and Works* was followed by a broad-ranging study by Raven starting with Alexander Neckham in the twelfth century, *English Naturalists from Neckham to Ray* (1947).⁵⁰ *The British Journal for the History of Science* talked of Raven making 'outstanding contributions to our subject'.⁵¹

Pursuing some of these interests further, Raven took up the theme of 'Natural Religion and Christian Theology' when he delivered the Gifford lectures (1951-52). In a splendidly ambitious undertaking, he analysed the vision of nature in the Bible, the early church, the Middle Ages, and from the Reformation onwards. A historical study like this had not been

45 Bowler *op. cit.*, (27), p. 84.

46 Raven, C.E. *John Ray, Naturalist: His Life and Works*, Cambridge: University Press (1942), p. 452.

47 Ramsey *op. cit.*, (17), p. 475.

48 Raven *op. cit.*, (46), p. 452.

49 C.E. Raven to Agnes Arber, 3 October 1940, in Box 131, 'Miscellaneous material belonging to Dr Charles Earle Raven', Christ's College, Cambridge.

50 Raven, C.E. *English Naturalists from Neckham to Ray*, Cambridge: University Press (1947).

51 Butler, *op. cit.*, (8), p. 254.

undertaken before and Raven once more showed his ability to grasp and to present historical details in a vivid way. The Reformation figure to whom he devoted particular attention was Gesner, who produced over seventy scholarly volumes. Gesner corresponded with William Turner, the British botanical and ornithological pioneer. Raven argued that Gesner achieved in a quite remarkable fashion 'what most scholars did not venture upon until a century after his time', that is to study nature for himself.⁵² Ten historical lectures by Raven in 1951 were followed by ten theological lectures in the following year which drew together in a nuanced way themes with which he had wrestled: evolution was a 'demonstrable and omnipresent aspect of life' and God's activity in the ongoing process was not as 'a sculptor or watchmaker'. Development and environment were crucial. God was not interfering in the realm of nature 'from outside it', nor was he to be 'fitted into the gaps'. Rather he was the divine agent whose significance nature discloses, with Christ as the ultimate revelation of God in creation. Raven did not want to be limited by a neo-Darwinian understanding of evolution. As evidence of his independence in this area, he stated: 'Probably when biologists have grown out of the fear of being accused of following Lamarck or Bergson they will be less anxious to insist that they are good neo-Darwinians.'⁵³

Raven's work on history included an analysis and appreciation of efforts by the Churches at various times in history to create a Christian social order, and especially when they did that in the context of in an increasingly industrially-orientated society. In this connection, he was critical of those who told the story of the relationship between science and faith in a slipshod manner, and he alleged that there were scientists who never applied the rigour to history that they did in their laboratory. Indeed Raven spoke of one book, a standard work, as having footnotes marked by 'monumental inaccuracy'.⁵⁴ For Raven this was to demean science as well as history. Raven applauded the application of science to industry, since he saw science and invention as great gifts of God which could be used to enrich human life. But these gifts could also be misused. It was disastrous if the 'worth of life' was forgotten.⁵⁵ He wrote this in 1930 and in the same year he became a pacifist. In a warning which he was to repeat, Raven spoke of the danger that societies that lacked a moral and spiritual dimension might well employ science to destructive ends. Bowler notes that in the 1940s there was an awareness that science could produce not only

52 Raven, C.E. *Natural Religion and Christian Theology*, Vol. I, Cambridge: The University Press (1953), p. 89.

53 Raven *op. cit.*, (52), Vol. II, pp. 130-131, 143.

54 Raven *op. cit.*, (33), p. 87. Raven was speaking of the work of Edwin Lankester on John Ray, undertaken for the Ray Society.

55 Raven, C.E. 'The Church's Task in the World', in Bethune-Baker, J.F. (ed.) *The Christian Religion: Its Origin and Progress*, Vol. 3, Gardner-Smith, P., Burkitt, F.C.; and Raven, C.E. *The Church of Today*, Cambridge: University Press (1930), p. 359.

what helped humanity to flourish but also what was destructive – notably in that period the Atomic bomb. Raven’s warnings that science was not neutral could be seen as prophetic.

The influence of Raven

There are a number of individuals who acknowledge their indebtedness to Raven. In addition to Ian Ramsey, Arthur Peacocke and Susan Howatch, who have been mentioned, Sam Berry, who was Professor of Genetics at University College London, when writing about John Ray as the father of Natural Historians, spoke of Raven, and expressed his personal gratitude to Raven for teaching him to challenge authority and think for himself. Also, Berry said, ‘Raven made me realise that Biology comes from hedgerows and seashores’, although textbooks and learned papers are needed.⁵⁶ Raven often spoke on science and faith in university settings – university missions – and to school sixth-formers, and it is clear from feedback he received that what he said had considerable impact. At Bristol Grammar School, which was one of a considerable number of schools that Raven visited, a ‘C.E. Raven Prize for field work in Biology’ was established.⁵⁷ When Raven visited a school he would often stay for two or three days, to speak, preach in the chapel and answer questions. Someone who heard Raven at Winchester College in 1952 recalled three decades later that Raven spoke about John Ray and recalled more generally ‘the sense of confidence’ that Raven had inspired in the boys who heard him lecture.⁵⁸

More widely, we might ask to what extent Raven influenced currents of thought. Susan Howatch, while seeing Raven as prophetic, also describes him as holding to an ‘optimistic evolutionary theology, rooted in nineteenth-century liberalism’.⁵⁹ Adrian Hastings, the leading historian of twentieth-century Christianity in England, suggests that in the late 1930s, with the pace being set by theology which took account of the dark experiences of Europe, Charles Raven ‘for all his brilliance and pursuit of relevance, found himself regarded as irrelevant’.⁶⁰ However, these judgements seem to be something of a misreading of Raven. He had been part of the dark experiences of the trenches, confronting horrors at first hand. Indeed Raven said that in the First World War he had been ‘down to hell’ and ‘found God there’, and he believed God was ‘involved in the struggle’ with evil. God had taken humanity into partnership in the incarnation,

56 Berry, R.J. ‘John Ray, Father of Natural Historians’, *Science & Christian Belief* (2001) 13 1, 32.

57 Dillistone *op. cit.*, (1), p. 337.

58 *ibid.*, p. 338.

59 Howatch *op. cit.*, (33), p. ix.

60 Hastings, A. *A History of English Christianity, 1920-2000*, London: SCM (2001), p. 294.

with all that that involved.⁶¹ Raven's idea, that in evolution a 'Cross-pattern is woven into the whole fabric of our world', with death and resurrection present at all stages, has been taken up by others.⁶² Mark Richardson, in 2010, explored how Raven pictured 'the jagged lines of ascent' as God worked within the evolutionary story and notes that Raven anticipated work by Holmes Rolston.⁶³ This raises the question as to whether Raven's high view of God in nature verges on pantheism. But there is no evidence that that was the case. Rather, Raven said that God becoming his creation, 'would be pantheism in its crudest form'.⁶⁴

One further example of wider influence is Raven's work in broadcasting. Dillistone suggests that Winston Churchill and Raven were two masters in speaking to audiences and projecting their message through radio. Raven was helped in this by his 'remarkable memory and his inborn sense of timing'.⁶⁵ He became a sought-after broadcaster. This work stopped abruptly during the Second World War. In 1940 the BBC's director of Religious Broadcasting, wrote to Raven to say: 'There does remain the implicit injunction that our religious broadcasting should be in accordance with the national effort.'⁶⁶ Raven was banned as a war-time broadcaster, on the grounds that the BBC could not give air space to such a high profile pacifist. But in the 1950s Raven was again asked to broadcast. On one occasion an hour's lecture to the Royal Institution on the history of science was transmitted in full and reviewed enthusiastically in the *Radio Times*. In 1952 Raven gave six BBC broadcasts on 'Science and Religious Experience', relating science to creation, to Christian doctrines and to the historical process. The lectures were demanding in their content. They offered a wider audience much of the thinking that had shaped his Gifford lectures.⁶⁷ Here was a remarkable communicator, working in a field which he loved.

Conclusion

From his early years Charles Raven had a fascination with and a deep appreciation of nature. His Christian faith gave a further dimension of meaning to this engagement. He was a passionate advocate of the importance of careful observation of the natural world as a crucial aspect of the spiritual

61 Raven *op. cit.*, (18) , pp. 219-221.

62 Raven *op. cit.*, (2), p. 20.

63 Richardson, M. W. 'Evolutionary-Emergent worldview and Anglican theological revision: case studies from the 1920s', *Anglican Theological Review* (2010) 92 2, p. 331. See also the comments above by Christopher Southgate. I am grateful to Dr John Polkinghorne for drawing my attention to the work of Holmes Rolston.

64 Raven *op. cit.*, (2) p. 31.

65 Dillistone *op. cit.*, (1), p. 340.

66 J. W. Welch to C. E. Raven, 11 September 1940. In the possession of Faith Raven.

67 Dillistone *op. cit.*, (1), pp. 341-342.

life. He believed Christian theology was enriched by an understanding of evolution and that this message of science and faith belonging together should be taken into the public square. Perhaps his most important scholarly contribution in the field of science was as a historian. But at all stages in his life he wanted to be someone who had an influence far beyond the scholarly world. In this respect he had considerable success, speaking to varied audiences, in universities, in schools and in broadcasting, for example. Throughout his life as a Christian, Raven was concerned that the Christian message should be communicated in an authentic way and his deeply-held belief was that engagement with science was an essential part of that task. He argued in 1930 that the scientific method has 'given us a new point of approach to every subject of intellectual enquiry'.⁶⁸ As a Christian thinker this was a development he embraced with enthusiasm: he was a creative Professor of Divinity and a deeply committed promoter of science.

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68 *Baptist Times*, 8 May 1930, p. 323.