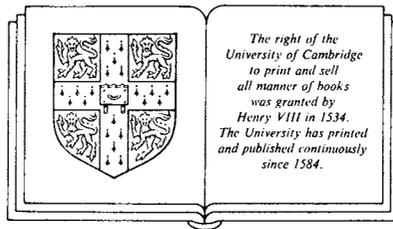


*Science and Religion*  
*Baden Powell and the Anglican*  
*debate, 1800-1860*

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## BIOGRAPHICAL INTRODUCTION

The aim of this study is to assess the contribution of Baden Powell (1796–1860) to debates on the methodology of science, natural theology and the question of species, within the context of contemporary Anglican debates. The three topics have been selected out of a wide range of issues with which Baden Powell was concerned in the course of his life. His intellectual career covered many fields of inquiry. He devoted attention to experimental research on optics and radiant heat, to ecclesiastical history, the history of science, educational reform and theological and philosophical debates. He was an extremely prolific author, the great majority of his works being anonymous contributions to periodicals. Secondary sources have made only incidental reference to Baden Powell, usually confining themselves to consideration of his last publications. There is no systematic analysis of Baden Powell's contribution to nineteenth-century culture available. The most significant comment on his ideas is the Cambridge doctoral dissertation by John David Yule on the 'Impact of science on British religious thought' (1976). Yule's reconstruction of the early phases of Baden Powell's career will be examined in detail. Reference to relevant secondary literature will be given when appropriate.

The issues selected for detailed examination in this study represent Baden Powell's main concerns. It will be shown that his consideration of the philosophical foundation of scientific and religious knowledge guided his approach to the wide spectrum of specific issues upon which he touched. The present monograph is mainly concerned with illustrating significant phases of Baden Powell's intellectual biography with an emphasis on the relevance of some neglected features of English, and specifically Anglican, intellectual life for the understanding of our author's ideas. Biographical details will be mentioned only when relevant to appreciating the importance of personal events in Baden Powell's intellectual development. It is therefore appropriate to provide the reader with an annotated synopsis of Baden Powell's life and to specify in some detail the criteria which have guided the choice of the issues selected for analysis.

Particular attention will be devoted to Baden Powell's family background. None of the biographers or historians who have written on Baden Powell

mentions the close links of his family with the group of High Church activists known as the 'Hackney Phalanx' or 'Clapton Sect'. Baden Powell's early outlook was profoundly influenced by the Hackney standpoint. He was educated privately in Hackney and absorbed the views of his relatives respecting the means best suited to revive the declining fortunes of the Anglican Church.

Baden Powell's early education focused on the liberal disciplines required for admission to the English universities. On 24 April 1814 he became a commoner of Oriel College, though he started his period of residence in January 1815. The teaching of the Oriel dons, known as the 'Oriel Noetics', represented the second major influence on Baden Powell's intellectual development. It is emphasized that in the early phase of his contribution to contemporary debates the young author attempted a synthesis of Hackney and Oriel views. In later years, however, he abandoned the Hackney standpoint, and became an original interpreter of the Noetic theological and philosophical approach.

On 12 December 1817 Baden Powell obtained his B.A. with first class honours in mathematics. His manuscript journal, kindly put at my disposal by his descendants, records the increasing interest of the young student in scientific subjects, geometry and experimental researches on light in particular. Baden Powell also attended lectures on geology by William Buckland, and on chemistry by Charles Daubeny. His ecclesiastical career started on 19 December 1819, when he was ordained Deacon of the Church of England and appointed Curate to the parish of Midhurst, Sussex. The incumbent of the living, the Reverend Richard Lloyd, was an ally of the Hackney leaders.

In October 1820 Baden Powell took his M.A., and was shortly afterwards introduced to the Reverend William Rowe Lyall, then editor of the *British Critic*, the journal financed by the Hackney Phalanx. The manuscript notes in Baden Powell's journal permit the identification of several of his contributions to the *Critic* and to the *Christian Remembrancer*, another journal sponsored by the Phalanx. Baden Powell's early writings have been overlooked by historians, and the author himself never mentioned his involvement with the Hackney editorial activities for reasons which will be examined in some detail.

Baden Powell contributed several papers on optics and radiant heat to various scientific journals. It is noted that his early experimental work represented his only original contribution to science. Even though Baden Powell published in his life more than one hundred and twenty papers on scientific subjects, as well as several surveys of scientific debates, his work was increasingly devoted to popularizing the result of current research. Theological polemics, educational reform and the defence of scientific pursuits against epistemological and theological criticism characterized his publications from the early 1820s. Baden Powell's inability to update his scientific notions to meet the growing specialization of physical sciences will be documented and discussed in detail.

He married his first wife, Eliza Rivaz, on 17 July 1817. In January 1821 his relatives offered him the living of Plumstead, Kent, and on 4 May 1821 he was ordained Priest of the Church of England. At his vicarage Baden Powell pursued his experiments on light and heat. On 29 May 1824 he became a Fellow of the Royal Society. He also devoted much time to philosophical and theological studies. In June 1824 he held a meeting with the editor of the *Critic* and became a regular reviewer for the journal. In February 1825 he conceived the project of a book against theological rationalism. *Rational Religion Examined* appeared on 11 March 1826. Only a few months earlier Baden Powell's views on the sabbath, printed in the *Christian Remembrancer*, aroused criticism and suspicion concerning the reliability of his theological standpoint. The synthesis of Oriel and Hackney approaches published by him in March 1826 rehabilitated the young author.

With the help of the Hackney and Oriel influence, Baden Powell was appointed Savilian Professor of Geometry in February 1827. He immediately concentrated his efforts on raising the standards of mathematical studies at Oxford and took an active part in the debate on the reform of the statutes. His involvement in academic politics was of crucial relevance to Baden Powell's intellectual development. He was persuaded that the Anglican Church was reluctant to come to terms with new intellectual trends. He also realized the limits of the reforming impulse of his Oriel colleagues and friends. Baden Powell did not take part in the debate on the reform of the Royal Society, nor in the debate on the decline of science in Britain. He held views on both subjects, but he was too absorbed in the dramatic events at Oxford to play a major rôle in those issues.

The debate on the reform of the curriculum and the heated controversy over the admission of Dissenters into English universities were two key issues in Baden Powell's development. His apologetic stance changed into a severe criticism of the university and the conservative factions of the Anglican Church. He found the theological approach of his Noetic friends particularly effective in dealing with the intellectual advances of the time, even though several members of the Oriel group refused to subscribe to all the conclusions deduced by Baden Powell from their standpoint. By the early 1830s the basic elements of his later approach to philosophy, theology and science were fully developed.

Baden Powell became an active supporter of the Ashmolean Society, the Oxford organization for the promotion of scientific studies which he helped to establish in 1829. He also took an active part in the proceedings of the British Association for the Advancement of Science (1831) and of the Society for the Diffusion of Useful Knowledge (1826). He wrote for the *Journal of Education*, the magazine sponsored by the S.D.U.K., and edited by the mathematician Augustus de Morgan, a lifelong friend of Baden Powell. In 1832 he published his lecture on *The Present State and Future Prospects of Mathematical and Physical Studies in the University of Oxford* and in 1833 his sermon *Revelation and Science*. In 1834 he contributed *An Historical View of*

the *Progress of the Physical and Mathematical Sciences* to the *Cabinet Cyclopaedia*. The three works forcefully emphasized Baden Powell's belief that the development of modern science was obstructed by well-meaning but misguided theologians, who were afraid of the impact of scientific advance on religious feelings. Baden Powell found himself under attack from the *British Critic* and his Hackney relatives. His family ceased to give him financial support, and he thus found himself forced to multiply his literary efforts.

In 1837 he contributed several papers to and edited the shortlived *Magazine of Popular Science*. In 1838 he discussed with the publisher Parker the possibility of launching a new quarterly, open to the forward-looking factions of the Anglican Church and the laity. The project failed, even though Baden Powell was powerfully supported by his former Oriel teacher, Richard Whately, Archbishop of Dublin since 1832. The links between the two men were reinforced by Baden Powell's second marriage, Eliza, his first wife, having died on 13 March 1835. On 27 September 1837 he married Charlotte Pope, the younger sister of Whately's wife Elizabeth.

The situation in Tractarian Oxford became difficult for Baden Powell, who progressively increased his contacts with intellectual and scientific circles in the capital. On 17 May 1837 he became a member of the Geological Society and took an active part in its meetings. On 14 December 1838 he became a member of the Astronomical Society. The question of the epistemological status of geology and of its relevance to the Genesis narrative of creation attracted great attention in the 1830s. Baden Powell felt that the issue deserved a thorough investigation. He was also persuaded that the debate on geology represented a crucial test of the capacity of Christian apologists and natural theologians to adapt their arguments to the intellectual and scientific priorities of the time. From November 1836 he was engaged in writing his second major work, *The Connexion of Natural and Divine Truth*, which was published in February 1838.

The years 1838–41 were the most prolific of Baden Powell's career. In January 1839 he published *Tradition Unveiled*, a polemical examination of the Tractarian emphasis on Church authority. The book was highly successful. A *Supplement* was published in 1840, and an American edition appeared in Philadelphia in 1841. In 1840 Baden Powell also entered the debate on popular education and advocated the principle of non-denominational state education in a pamphlet on *State Education*. In 1841 he published *A General and Elementary View of the Undulatory Theory, as Applied to the Dispersion of Light*, where he surveyed the debate on the theory of light and his own contribution to the subject—mainly translations of memoirs by the French physicist Augustin-Louis Cauchy. From 1841 Baden Powell contributed a considerable number of papers to various journals.

He increasingly regarded himself as a Christian philosopher who surveyed the development of scientific, philosophical and theological knowledge. During

the 1840s he became a well-known figure in metropolitan social and intellectual circles. He was a frequent guest at soirées organized by the Marquis of Northampton, the President of the Royal Society, and at parties given by Charles Lyell, Roderick Impey Murchison and Charles Babbage. On 24 October 1844 his second wife, Charlotte, died. On 10 March 1846 Baden Powell married Henrietta Grace Smyth, daughter of Captain William Henry Smyth and sister of the astronomer Charles Piazzi Smyth. The new well-connected family circle raised Baden Powell's social status.

During his frequent visits to London, Baden Powell came into contact with representatives of liberal and radical theology. He became acquainted with the Baron von Bunsen, an active supporter of German higher criticism. He was also on close terms with the classicist and radical theologian Francis Newman. The circle of Baden Powell's new friends included the physiologist William Benjamin Carpenter, Henry Thomas Buckle, Robert Chambers and George Henry Lewes. We will discuss in detail the relationship of Baden Powell with the metropolitan radical theologians and philosophers active in the late 1840s and the early 1850s.

In the late 1840s Baden Powell took a prominent part in the campaign for the reform of the universities. He was a member of the deputation to Lord John Russell which on 10 July 1848 submitted the petition for a University Commission of Inquiry. Eventually in 1850 the Commission was established, and on 20 August 1850 the Savilian Professor was asked to become one of its members. It is appropriate to emphasize that in 1835 Baden Powell had been the first Oxford professor to insist that only Parliament was capable of overcoming the resistance to change displayed within the universities of Oxford and Cambridge. He put forward his views on university reform in the section which he contributed to the final Report of the Commission (1852). We will not expand upon Baden Powell's involvement in university politics in the 1850s, since he simply restated the arguments elaborated by him in the early 1830s, which will be examined in detail.

In the early 1850s Baden Powell discovered that his ideas were now accepted by many of his London friends. He therefore decided to give publicity to his views by publishing a series of essays on the methodology of science and the question of species. The publication of the anonymous *Plurality of Worlds* – immediately ascribed to William Whewell – forced Baden Powell to include a further essay on the astronomical controversy. The *Essays on the Spirit of Inductive Philosophy, the Unity of Worlds and the Philosophy of Creation* was published in April 1855. The book was an immediate success. The Savilian Professor was invited to preach at Kensington Palace. The sermons he delivered before the royal family were published as a second series of essays, with the title *Christianity without Judaism* (1856).

Baden Powell's last work, *The Order of Nature*, appeared in 1859. The advanced theological views put forward in his last writings provoked an open

confrontation with Whately, who severely criticized the ideas of his former pupil. Baden Powell retorted to Whately's criticism in his contribution to the *Essays and Reviews*, the collective volume which gave rise to one of the most famous theological controversies of the century. In his essay 'On the Study of the Evidences of Christianity' Baden Powell questioned the credibility of miracles and praised Darwin's *On the Origin of Species*. He had become the most outspoken representative of liberal theology and the evolutionary approach to natural history. His sudden death, on 11 June 1860, deprived him of the possibility of linking his name with the evolutionary debate as the first outspoken theological supporter of Darwin's theory.