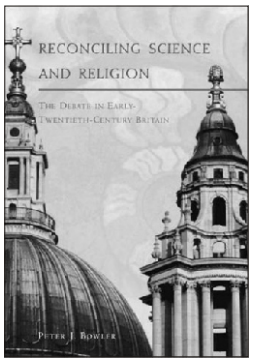


Deconstructing the Story of Early-Twentieth-Century British Views on Science and Religion

Peter J. Bowler, *Reconciling Science and Religion: The Debate in Early-Twentieth-Century Britain* (Chicago and London: University of Chicago Press, 2001). 479 pages, biographical index, bibliography, index. Hardcover; $40.00. ISBN: 0226068587.

The conventional account of the status of British science and religion in the early part of the last century assumes that the conflicts of the Victorian period were largely resolved by 1900. It holds that an erosion of interest in religion and a tacit agreement that peace had been assured had turned the interests of scientists and theologians to other matters—unlike the USA where the confrontation between fundamentalists and evolution evoked highly sensational outbursts during this period.

Belfast University historian of science Peter Bowler has turned from his studies of Victorian and early-twentieth-century biology to examine the science-religion literature of this period. Rather than peaceful somnolence, he has uncovered evidence of a "lively discussion" and constructs a more detailed (and more inclusive) picture than previously has been drawn.

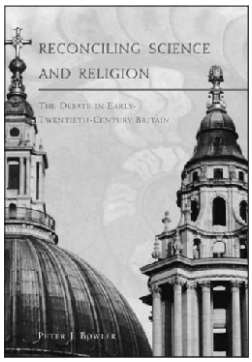
A body of intellectually conservative scientists, liberal religious thinkers, and popular writers sought to convince the reading public that science had turned its back on materialism while religion had become more open to the kinds of changes that were consistent with the new understanding of nature. This attempted reconciliation was promoted most actively in the 1920s, but it fell apart in the course of the 1930s. Many conservative Christians, both Catholic and evangelical, reacted with suspicion to the claim that their faith could be adapted to the idea that human beings were the product of a natural process, even when that process was portrayed as the unfolding of a divine plan. It was the resurgence of this more conservative attitude that did most to undermine this reconciliation in the late 1930s (p. 3).

For Bowler:

> The tensions of the Victorian era have thus been sustained throughout the twentieth century, each episode of challenge being followed by one of attempted reconciliation. These episodes seem to reflect the fluctuating balance of power between secularizing and traditional forces within our society, and if this is so, we can surely learn something of value from the debate—if only the futility of expecting the underlying issues ever to be resolved (pp. 4–5).
>
> The argument developed in this book depends on the point [that] the reconciliation proposed between nonmaterialistic science and liberal Christianity was based on a continued belief in progress and in the purposefulness of the material universe. It was taken seriously only because a large proportion of the educated public—to say nothing of the scientists and the Modernist clergy—still hoped for progress. Curiously, the literary elite paralleled the more traditional Christian thinkers, both evangelical and Catholic, in rejecting this faith, although for very different reasons (p. 23).

Rather than peaceful somnolence, [Bowler] has uncovered evidence of a "lively discussion" and constructs a more detailed (and more inclusive) picture than previously has been drawn.

John W. Haas, Jr. *served as Professor of Chemistry at Gordon College from 1961–1995. Following ten years as editor of* PSCF, *he became editor of the ASA web site. A physical chemist with research interests in electrochemistry and carbohydrate reaction mechanisms he was inspired to work on historical aspects of science and Christianity at a 1987 seminar led by Ronald Numbers and David Lindberg. His publications in this area include studies of the response to science of British Methodists from the eighteenth to the early twentieth century. He is elder, organist, web page editor, and Sunday school teacher at First Presbyterian Church, Ipswich, MA.*



Essay Review

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The twentieth century has seen the professionalization of scientists and clergy and the emergence of journalism and popular writing as professions. The result has been a sharp reduction in the polymaths of the past able to expound on both science and religion with equal understanding. Bowler takes a broad view of religion—including views from liberals and conservatives in the Church of England and free churches of many stripes.

Bowler takes a broad view of religion—including views from liberals and conservatives in the Church of England and free churches of many stripes.

The Victorian era was crucial for the debates that extended into the twentieth-century confrontations among advocates of materialism, idealism, various shades of biblical religion, spiritualism, and occult religions such as Theosophy. The one constant was an ever-changing scientific landscape that was used for different purposes by participants in the discussion.

Bowler frames his book in three sections dealing successively with the scientists, theologians and clergy, and leaders of public discussion. This allows the figures in each division to attack the same issues from a particular perspective, although there was wide variation in viewpoint within each perspective. His account is littered with names great and small; particular individuals rose to the top because of professional prominence or voluminous literary output. A "Selected Biography" provides sixty short sketches of the more notable participants of the 285 names listed in the index.

The Sciences and Religion

The latter part of the nineteenth century saw a reaction against the scientific naturalism espoused by T. H. Huxley and John Tyndall by scientists who sought ways to accommodate natural knowledge with their religious beliefs. Sorting out the landscape is made difficult by the reticence of some to reveal their views in public (J. J. Thompson, Lord Rayleigh) and by the religious diversity represented—ranging from evangelicals and conventional Anglicans to those with vague individualized beliefs who seldom darkened a church door. What Bowler dubs the "new Modernism" diminished the place of Christ to a moral teacher and ransacked the Bible for scientifically acceptable beliefs. W. H. Bragg saw the scientific quest for understanding and the religious search for faith as similar. Religion was no longer simply a collection of dogmas. Now it could "borrow from science a method … that would transform it to a flexible and progressive view of the purpose of human life" (p. 52).

Scientists with roots in the nineteenth century included Robert Bloom, J. S. Haldane, Oliver Lodge, Conway Lloyd Morgan, E. W. McBride, William McDougal, and J. Arthur Thompson. Figures prominent in the 30s and beyond included Julian Huxley, Richard Gregory, J. D. Bernal, Charles Raven, R. A. Fisher, Arthur S. Eddington and James Jeans. Biochemist Anglican Joseph Needham called himself "an honourary Taoist"; he was committed to both free thought and Marxism. In this later period, some younger scientists scoffed at the dated science of some of the older group (Thompson and Haldane) as those "whose watches stopped forty years ago" (p. 28). Others were suspect because of their participation in the spiritualism craze of the day (Oliver Lodge, William Crookes).

Eddington saw the new physics of quantum mechanics and relativity as supporting the possibility of God. Evangelical Victoria Institute leader J. Ambrose Flemming made an extended attack on evolution. Presbyterian paleontologist Robert Bloom believed that "evolution unfolded in accordance with a divine plan" (p. 37).

Some surveys seemed to argue that most scientists were sympathetic to religion. In one case, the question: "Is belief in evolution compatible with belief in a Creator?" drew 142 positive responses out of 147 votes cast.

Many scientists believed in a creator God able in some ways to interact with the universe but were not willing to accept the need for *regeneration*—moral theists but not Christians. Many Gifford lecturers held this position using a national platform from which to promote the values of science for *modern* religion. The venerable Darwinist Alfred Russell Wallace, J. Arthur Thomson, C. Lloyd Morgan, and E. W. McBride were among those who opposed materialism and sought to link some sort of spiritual progress with evolution. For some, the new physics of the 1920s brought new hope for the argument from design. Yet "the wave of enthusiasm for Jeans's and Eddington's books were the last major boost that the proposed reconciliation between science and

religion would receive. Few other contemporary physicists took up the theme, and there were no younger biologists following in the footsteps of Haldane, Thompson, and Morgan" (p. 50).

During this period, the rigid certainty of science became tempered by a more flexible scientific model that recognized the role of the *observer* in making judgments about data. A more "provisional" science was not that far from the notion of a more "flexible" religion. William Bragg's 1941 Riddell Memorial lecture married the two.

> Bragg … presented Christianity as an experimental religion that was also willing to learn from experience, with dogma now being treated in the same way as scientific hypothesis. The demands for the absolute acceptance of definite items of faith were no longer acceptable (p. 52).

This line had nothing to offer the (mostly silent) evangelicals or the new generation of indifferent scientists whom, finding religion irrelevant, kept their focus on the lab, avoiding the broader implications of their work.

Psychic research, spiritualism, and interest in the occult were popular at the dawn of the twentieth century—and along with religion, each represented a metaphysical domain open to attack by materialists. Staunch materialists in the Tyndall/Huxley mold like E. Ray Lankester, Karl Pearson, and J. D. Bernal railed against any traditional idea of God and the pseudo-science of natural theology and metaphysics. Others, like Julian Huxley, sought to redirect the purpose of religion. "God was, in effect, humanity's conception of the universe as a whole and our sense of involvement in that whole" (p. 71).

Many late-nineteenth-century physicists (J. Clerk Maxwell, Lord Rayleigh, and J. J. Thomson) were deeply religious. Some were influenced by the then fashionable theory of the "ether." Oliver Lodge's linking of an ethereal universe with the human spirit offered a convincing counter to materialism in the early twentieth century.

> There was a complex relationship among science, religion, and ideas about the paranormal within the [ether physics] group. Rayleigh and Thompson seldom spoke on religious matter in public, but their religion almost certainly upheld their faith in the reality of the ether, and there seems little reason to deny that this vision of nature helped to shape their very real scientific discoveries. It is paradoxical that Thompson should discover what became known as the electron, thereby doing much to precipitate the revolution that would destroy the paradigm within which he worked (p. 89).

The rise of relativity theory destroyed the notion that the "ether [was] credible as a basis for a belief in a parallel 'spiritual' world existing on a material plane higher than that of everyday matter" (p. 101). The new quantum world, dependent on the observer, left the idea of a unified cosmos in disarray. James Jeans, however, found unity in the mathematical relationships of quantum mechanics. Scientists became philosophers to the disgust of their peers and the professionals. Vicars flocked to the new ideas—not recognizing that "the new idealism did not merely introduce spirit into the material world—it replaced the material world with a purely mental universe" (p. 113).

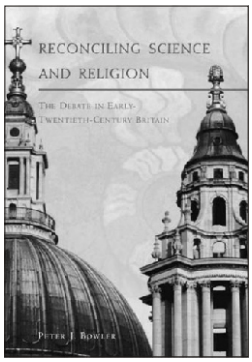
Evolution

Public understanding of the wider implication of evolution had fluctuated since Darwin's cohorts sought to base life in a purposeless materialism of chemistry and physics. As the nineteenth century closed, the mood had shifted to a new natural theology where evolution was nothing more than the "unfolding of a divine plan" (p. 123). Oliver Lodge, Henri Bergson, Julian Huxley, Robert Broom, and R. A. Fisher were among those who saw humanity as the ultimate purpose—even as E. Ray Lankester and other old-line Darwinians fought this new line. Most early evolutionists were *not* Darwinists in the sense that they did not accept natural selection as the operative mechanism. Many years later, a new generation of scientists won the day for the Darwinian synthesis aided by the new genetics.

Bowler identifies a "small but vociferous antievolution movement [that] … emerged in the 1920s, paralleling the far more active crusade in America" (p. 124). British scientists, for the most part, shook their heads at the Scopes trial and the influence of a literal view of Scripture. Others wondered if the ordinary British citizens were any more convinced of evolution than their American counterparts.

Sir Ambrose Fleming, an Anglican evangelical, spoke out against many aspects of evolution in his role as president of the Victoria Society. A major 1935 anti-evolutionist rally at Essex Hall in London led to the founding of the Evolution Protest Movement. Other scientist supporters included ornithologist Douglas Dewar and paleontologist A. Morley Davis (*Evolution and Its Modern Critics,* 1937). Catholic anti-evolutionists included anatomist Sir Bertram Windle (*The Evolutionary Problem as It Is Today,* 1927). Windle found no actual proof of evolution and denied the possibility of the natural origin of the human soul yet felt that a believer could view "organic transformations as God's method of creation" (p. 129).

The pre-Darwin Lamarckian theory of the inheritance of acquired characters was long associated with the claim that evolution was a *purposeful* process directed by the *mental powers* of animals. This kept design in the picture. The new science of genetics, however, stood the argument from design upon its head by insisting that change *is* directed by *environmental stress*. Some scientists fought a rear-guard action by incorporating vague holistic and organismic concepts prompted by the exercise of mind that could not be completely excluded from a hereditary



Essay Review

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[Bowler] provides a convincing case for the strong engagement of scientists in the public debates on science and religion in the first half of the twentieth century. Evangelicals were little represented.

impulse. A mixed bag of scientists employed scientific experiments and logic to argue against the notion that the "regulating and directing powers of life could arise from the chance encounters of atoms" (p. 144). Later the genetic theory of natural selection would gain the day.

In the chapter "Matter, Life, and Mind," Bowler deftly draws together the mix of conflicting ideas that get to the heart of the British evolution debate. The historical path and mechanisms of evolution embodied in a materialist world view were pitted against views which saw "life and mind as active agents, capable of taking decisions and actions that had a real effect on the world … actions [transcending] the laws of chemistry and physics and were thus in some sense free" (p. 160). Religious thinkers offered various strategies to ground God's actions in this innovative behavior. Vitalism was revived.

> The various [specialized] areas of science came at these problems with different expectations and prejudices, but their claims were likely to be taken up by outsiders wanting to see a message coming from science as a whole. Such outsiders were equally likely to seize upon the writings of a particular group of scientists whose work appealed to them and hail their views as indications of a new direction of thought, even though the majority of scientists in the same or related fields were indifferent or even hostile to those views (p. 161).

The stakes were high for Christians and rationalists—either the world was created and is sustained by a God who "offers a transcendental source of values and belief" or it randomly emerged "as an essentially amoral and purposeless system" (p. 162). Bowler provides a wealth of detail on the ways that representatives of the polarities and those in-between went about handling the "the origin of life," "vitalism and organicism," and "mind and body." He provides a convincing case for the strong engagement of scientists in the public debates on science and religion in the first half of the twentieth century. Evangelicals were little represented.

The Churches and Science

Outsider Bowler bravely tackles the place of Christianity in British life.

> The involvement of the churches in the debate over the implications of science has to be understood in light of the threat of declining membership and the disagreements within the religious community over how best to present their case to an increasingly indifferent public. The Modernists, who were anxious to forge a new theology purged of ancient dogmas, thought that the only way forward was to make Christianity compatible with science and other aspects of modern thought—even if this meant abandoning what most traditionalists saw as the essential foundations of their religion … traditionalists, whether Catholic or evangelical, felt that there was no point in preserving a church that was no longer truly Christian. If faith in science and progress had obscured the awareness of sin and the need for redemption, then it was the Church's duty to keep the ancient flag flying and rally what few converts it could to the cause … The failure of modern science and thought to solve humanity's problems would become apparent. And the need for redemption might again become obvious to all. Both of these approaches were expounded with enthusiasm, but neither was ultimately successful" (pp. 192–3).

Orthodox Christians had long struggled with the implications of the biblical higher criticism for the creation accounts, "Mosaic geology," and miracles. The evangelical faithful decried the compromise that pulled them from a literal account of the "inerrant" Word of God or to abandon the traditional view of the Fall and need for redemption. Their clergy seemed more inclined to accept allegorical treatments of Scripture than the constituents.

> Evangelicals in both the Anglican and the Free Churches faced this dilemma when confronting the new science and the new biblical scholarship, and as in America, it was from the evangelicals that the antievolution movement was drawn … on the defensive during the early decades of the century, evangelicalism in both the Anglican and the Free Churches revived in the 1930s as

> the optimism that sustained more liberal interpretations of Christianity faded (p. 208).

Disunity among and within all churches—Modernist and conservative, Catholic and Protestant, Anglicans and Nonconformists—was a distraction for those seeking to cope with science. Bowler offers much detail on the many attempts by clerics to fashion a synthesis. He provides overviews of denominational movements and details of prominent spokesman within these communions. Dean W. R. Inge, Rev. J. M. Thompson, Hastings Rashdall, Bishop E. W. Barnes, Rev. F. R. Tennant, Rev. R. J. Campbell, J. Y. Simpson, Rev. E. Griffith-Jones, Rev. J. Warschauer, Rev. John Oman, J. H. Morrison, Rev. B. H. Streeter, Archbishop Charles D'Arcy of the Church of Ireland, and Rev. Charles Raven (an anti-Darwinian with a preference for the Lamarckian view of evolution) represent attempts of Modernists to reconcile religion and science.

Bowler concludes:

> Driven by an increasingly [1930s] harsh economic and political situation, the churches turned away from liberalism and Modernism, stressing once again humanities innate sinfulness and need for redemption … Modernism was eliminated from the Anglican Communion, and along with it, the only party that was seriously interested in making the changes to the faith that would have made it more credible to the majority of contemporary scientists (p. 286).

The 1930s saw the rise of Karl Barth's neo-orthodoxy—a system that rejected natural theology and downplayed science in general. One development of interest to ASA readers was the emergence of a group of Christian intellectuals—C. S. Lewis, T. S. Elliot, J. R. R. Tolkei—whose popular writings attracted many. Lewis adopted Barth's antiscientism and downplayed the notion of reconciliation with Christianity.

A further complication for reconciliation came from developments in psychology. Initially seen as a friend, by the 1930s, it would be seen as a threat to the survival of Christianity. An earlier psychology had maintained the importance of free will and moral awareness. The new theories of behaviorism and Freudian analytical psychology were based on inductive methods and were essentially determinist—in conflict with the Christian view of human nature. Curiously, "the new psychology [was] denounced more in the press than in the pulpit … the effect of psychology on the value of religious experience was less in Britain than in America because, outside Nonconformist circles, the churches stressed the ethical message of religion rather than its emotional impact" (p. 310).

Bowler notes that opposition to evolution was less strident among British evangelicals than with their American counterparts. James Orr, Charles H. Vine, P. T. Forsyth, and Albert Goodrich characterized those who may have been sympathetic to a form powered by God but spoke out against a reconciliation that excluded major themes of Scripture. Others took up the torch against evolution on the grounds of an insufficient mechanism or as the source of such evils as "feminism, socialism, pacifism, and unnecessary surgical operations to remove organs deemed no longer useful to humans" (p. 294). Bernard Acworth (1929) "promoted a catastrophist geology that undermined the monotonous chant of evolutionary fanatics who demand periods varying from one hundred thousand to one thousand million years for the working out of their mutually destructive theories" (p. 294).

The *Journal of the Transactions of the Victoria Institute,* the *Evangelical Quarterly,* the *Baptist Times,* and the Evolution Protest Movement all contributed to what Bowler calls "a minor resurgence of popular doubts about evolution" (p. 295). Bowler argues that few evangelicals insisted on a thorough, literal reading of Scripture; most were more concerned with the loss of freedom of the will, a concern for salvation, and the "need for a return to the old Christian principles" (p. 296).

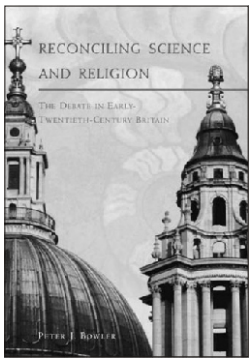
Anglo-Catholics Charles Gore and William Temple resisted anything more than a superficial dose of evolution. As with the evangelicals, the major objection was to *modernist* theology. Loss of the miraculous creation of humanity, Christ's divine nature, his miracles, the Eucharist, and a pervasive naturalism were insurmountable barriers.

Roman Catholics, though small in numbers, had a disportionate influence in British intellectual life. C. G. Chesterton, Hillarie Bullock, W. E. Orchard, Martin D'Arcy, C. W. O'Hara, and Henri de Dorlodot offered influential responses to the new physics and evolution. In 1909, the Pontifical Biblical Commission removed the necessity of reading the Genesis creation account literally. Bowler notes:

> Like the Anglo-Catholics … the Roman Church could go some way with the new natural theology's effort to found a nonmaterialistic view of nature, provided always that certain clear boundaries were marked around the territory in which the idea of creation by law can be applied could be applied. In the heat of debate, though, it is difficult to be sure whether popularizers such as Belloc believed in evolution at all, and there is no doubt that many Catholics remained opposed to the theory in even its most non-Darwinian forms (p. 322).

For Bowler:

> It was Belloc and Chesterton, far more than the Evolution Protest Movement, who sustained the popular myth that Darwinism was dead even with science … their views paralleled those of Gore and the Anglo-Catholics, but they were articulated in a far more popular format (p. 327).



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The 1930s "marked a final departure from the optimistic liberalism of the late nineteenth century, which had been prolonged by the attempted synthesis of religion and anti-mechanistic science" (p. 317). The depression and the brutality in Russia, Germany, and Italy signaled the moral failures of industrial capitalism and Marxism. A return to religious faith by many intellectuals was accompanied by indifference to, if not an active suspicion of, a synthesis of Christianity and science. The theologies of Reinhold Neibuhr and Karl Barth fueled the new orthodoxy leading to controversy with advocates of Modernism such as Charles Raven, who saw the Student Christian Movement turn back toward orthodoxy.

The new orthodoxy produced converts who had the skills to reach a wide audience in Britain (and America)—C. S. Lewis and Dorothy L. Sayers among them. Lewis' writings often maintained a dim view of science with a particular dislike of evolution. At the same time, an aging Raven became isolated from both students and scientists at Cambridge because of his advocacy of the old liberalism and lack of understanding of modern biology.

The Wider Debate

Participants in the science-religion discussion as far back as Huxley realized the need (and profit) in sending their message to a wider audience than upper-class intellectuals. Newspapers, books, magazines, and radio brought the debates to the masses. Bowler reminds us that social class provided wide differences in cultural values and interests. Idealism might still be found in the churches and the popular literature even if "banished from Bloomsbury and Oxbridge" (p. 335).

Bowler laments the

> difficulty of defining the culture of a [1930s] generation divided by class and other loyalties, let alone changes from one generation to another … The same decade saw a reinvigoration of concern for social democracy and the rise of the Marxist alternative to Fascism. Meliorism still fought in its own corner, and for the Marxists it took on the messianic overtones once characteristic of religion. The rise of Christian orthodoxy was also real enough—but was only one facet of a complex response to ever more stressful national and international problems (pp. 335–6).

"Salvationist ideology" (the conviction that we can only be saved by appealing to a force outside this world) became a staple as one response to the national problem brought on by depression and an impending war. Jeans and Eddington sold well. Yet, attacks on religion and controversial sermons on evolution would be fodder for the mass media. Bertrand Russell's "Why I Am Not a Christian" was aimed at a general audience. Logical positivist A. J. Ayer joined the popular assault on religion.

A giant in this period, H. G. Wells (a student of T. H. Huxley in 1884–1885) was hostile to organized religion. He advocated a materialistic biology and science as a vital component in the transformation of society—one controlled by an educated elite. Popular through his early science fiction, his later writings included *The Shape of Things to Come (*filmed in 1933), which offered various images of science and technology, notably a space gun able to send people to the moon. His monumental *Outline of History* popularized an out-of-date version of Darwinism, which became a norm for the readers of its many editions.

Hilarie Belloc, G. K. Chesterton, and C. S. Lewis were able popular exponents for the Christian faith. Other writers were content to offer a generalized theism or a truncated theology—even creative evolutionism as an alternative religion (G. B. Shaw). Oxford chaplain Ronald Knox was an effective debunker of those who embraced spiritualism and the new materialism. Bowler's analysis of Lewis rightly places his critique of the modernizing spirit. He writes:

> The idea of progress is a force for evil, hence the encouragement we have given to all these schemes of thought such as Creative Evolution, Scientific Humanism, or Communism, which fix men's affections on the Future, on the very core of temporality … The danger was not science itself, but the priests of science who were trying to turn an honorable but limited institution into the basis for a new civilization" (p. 399).

Evangelicals six decades later face the struggles of their grandparents in fashioning a world view that that gave due weight to nature and Scripture. R. E. D. Clark's *The Universe and God* (1939) argued that human life could only derive from a designing power, in light of what he saw as the inadequacy of models of spontaneous generation and the failures of natural selection.

The discussion of science and Christianity received new force in the post-war world. Advocates for a secular foundation for morality and knowledge were vigorously countered by Christian thinkers who proclaimed orthodoxy and a return to natural theology. E. A. Milne's *Modern Cosmology and the Christian Idea of God* (1950) expanded Eddington's vision that the latest science could support a religious perspective. David Lack's *Evolutionary Theory and Christian Belief: The Unresolved Conflict* (1957) reflected the problems in maintaining design in a Darwinian world. Michael Polanyi's picture of the involvement of the observer in the creation of knowledge and the significance of unproven traditional (religious) beliefs in the foundations of all knowledge systems *(Personal Knowledge,* 1958) influenced many evangelicals.

Bowler argues the polymath Charles A. Coulson provided the most successful attempt to provide a reconciliation of science and Christianity (p. 415). His approach was methodological—one that saw each discipline providing different (but complementary) ways of gaining knowledge. An influential work with evangelicals, it sparked a discussion that marked the last half of the century.

Bowler cannot resist the temptation to draw lessons from an earlier day for today's discussion. Not unexpectedly, he finds the fields of cosmology and physics most compatible with the idea of a creator. Biology and psychology offer greater difficulty especially as one looks more closely at the details. Orthodox Christians challenged those theologies that combine a minimal theism with an evolutionary driving force. Then, as today, the discussion was influenced by cultural attitudes toward science and religion as well as the spirit of the times. Finally, Bowler is concerned with the lack of awareness on all sides of the current state of knowledge in the scientific fields that they discuss. One is tempted to say the same about theology, history, and other disciplines.

Observations

Oliver R. Barclay's *Whatever Happened to the Jesus Lane Lot* (1977) covers the story of the Cambridge Inter-Collegiate Christian Union (CICCU) during a parallel period. In describing the struggles (and triumphs) of evangelical students seeking to maintain a consistent witness in a time of aposticity and "multi-lateral theology," Barclay notes "that the baiting of CICCU men with problems about evolution, Jonah and the Flood became an entertaining pastime for many Cambridge friends" (p. 87). He provides an inside perspective of the struggles of a faithful remnant that would begin to build strength in the 1930s. Significantly, there was little interest in areas beyond evangelism, Bible study, and fellowship. Chemist R. E. D. Clark and others led a struggling apologetics discussion group in the 1930s that drew little attention from the CICCU leadership (p. 105).

There is much for the evangelical to ponder in Bowler's portrayal. It illustrates the poverty of nonbiblical religion—something that observers of the current scene might conclude from the burst of multi-cultural science-religion activity. It also illustrates the poverty of an evangelicalism that restricts its world to evangelism, worship, and living a holy life—by limiting the mind. We must respond to the challenge to build world views that reflect the state of Christianity and scientific understanding today.

Bowler has done a masterful job in opening up the multifaceted arena of British science and religion in the first half of the twentieth century. His balanced interweaving of *little pictures* within the framework of the *big picture* provides a standard on which others may build. An American counterpart would be welcome.

The addition of a biographical appendix, bibliography, and general index are valuable aids in following a story with many characters. Perhaps the greatest difficulty for this reader is that some characters reappear so regularly that one is hard put to get the chronology straight. The problem with dividing the pie into three parts is that some of the actors have a place in each—leading to some repetition. Should Whitehead and Teilhard de Chardin, or any number of other figures receive more or less attention? One missing link for this reader was the evangelical church leadership of the day—J. Campbell Morgan, Martin Lloyd Jones, F. F. Bruce, among others. Surely they had something to say about the themes of this book.

I heartily endorse *Reconciling Science and Religion* for the clarity of its telling and the evenhanded analysis drawn by Bowler. He closes with a pertinent comment:

> In biology especially, the writings of those who argued for a renewed dialogue between science and religion created a misleading impression that left most ordinary readers with an unrealistic expectation of what was to emerge from current research. The growing power of the popular press and mass-market publishing created an opportunity for particular interest groups to manipulate what was presented to the public. Whatever its significance for the debate over science and religion, this is a point that needs to be born in mind by anyone concerned with the way in which science is popularized and discussed today (p. 420).