

RALPH WENDELL BURHOE IN HISTORICAL PERSPECTIVE

by John C. Godbey

Abstract. Ralph Burhoe has sought to preserve “traditional religious wisdom,” but he emphasizes science as a new revelation. His relation to philosophical positivism and his insistence on including in a scientific theology only views that reflect the scientific worldview constitute major philosophical and theological problems. This essay considers the influence of several historical precursors—Francis Ellingwood Abbot, George Burman Foster, and Shailer Mathews of the “Chicago School” of theology, Douglas Clyde Macintosh, and, especially, Henry Nelson Wieman—which has contributed to a favorable reception of Burhoe’s ideas. Social problems such as the youth revolution of the 1960s and indifference to the lack of intellectual credibility of religious beliefs have, however, hindered reception of his ideas. The conclusion notes some tasks that must yet be accomplished in order to continue Burhoe’s work, particularly that of increasing the general level of education in the sciences.

Keywords: Chicago School of theology; natural selection; positivism; process theology; science as a new revelation; scientific worldview; traditional religious wisdom.

Placing Ralph Wendell Burhoe and his thought in historical perspective involves acknowledging both influences that have aided his work and influences that have hindered it. In this essay we shall consider some historical precursors whose influence has contributed to a favorable reception of his ideas, some philosophical and theological problems concerning those ideas, and some social problems that have hindered their reception. We shall note, in conclusion, some tasks that must yet be accomplished in order to continue his work.

In *Yoking Science and Religion: The Life and Thought of Ralph Wendell*

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Burhoe (Breed 1992), David R. Breed has given a helpful account of the origins and structure of Burhoe's thought. Breed described the influences on Burhoe of his very religious Baptist family; of his inquiries at Harvard, at Andover Newton Theological School, and during his employment as executive secretary of the American Academy of Arts and Sciences; of the formation of the Institute on Religion in an Age of Science (IRAS); and of the more specific inquiries undertaken by Burhoe among the Unitarians and Universalists, both as a member of the Commission on Theology and the Frontiers of Learning and following his appointment as Professor of Theology and Science at Meadville/Lombard Theological School. Although we shall, of necessity, refer to some of these influences in considering the historical context of Burhoe's thought, our purposes will be to amplify and to place in a different perspective some of the themes that Breed described. Our thesis will be that, given the magnitude of the problems that have hindered his work, it is surprising how much Burhoe has accomplished.

Burhoe is an unusual phenomenon in the history of Christian thought. He has placed himself in that general historical context by comparing himself, in his address on receiving the Templeton Award, with Paul:

I feel I am engaged in a task somewhat akin to that of Saint Paul and others, who sought to make the Jesus cult of first-century Judaism credible in the sophisticated but religiously inadequate culture of the Roman Empire. (Burhoe 1981, 21-22)

When viewed in the context of the history of Christian thought, it is clear that Burhoe's theology is very unusual. It is not modeled after the thought of Origen, the first major systematic theologian of the Christian church, nor after that of Aquinas, Luther, Calvin, or Schleiermacher. The most likely comparison that one might make is with an extreme deist of the eighteenth century, who held that God's revelation in the Book of Nature is much more adequate than the revelation in the books of Scripture. But even this comparison needs to be qualified, for Burhoe's conception of God differs markedly from that of any eighteenth-century deist.

HISTORICAL PRECURSORS

If we look at the nineteenth and twentieth centuries, we find some helpful predecessors of Burhoe and his theology. Another Unitarian, Francis Ellingwood Abbot, was one such predecessor. Burhoe has referred to him (Burhoe 1981, 79; 1972, 35), but the historical comparison is more apt than Burhoe disclosed. Like Burhoe,

Abbot regarded evolution as a basic concept. Ahlstrom and Mullin note that Abbot “carried the motif of evolution into the very fundament of his system” (Ahlstrom and Mullin 1987, 144). Like Burhoe, Peden notes, Abbot equated Nature with God and held that “humans must cooperate with nature.” “This standard [i.e., requirement] of Nature is but another name for the standard of God” (Peden 1990, 14). Abbot, however, believed that God, whom he conceived of in a pantheistic sense, was personal (Ahlstrom and Mullin 1987, 146).

Abbot greatly influenced the philosophical context in which Burhoe worked, for he turned modern philosophical thought away from subjectivism toward a realistic recognition of relationships as discerned in experience. Charles Sanders Peirce acknowledged this when he wrote that Abbot, in the introduction to *Scientific Theism* (Abbot 1888), “put his finger unerringly . . . upon the one great blunder [subjectivism] of all modern philosophy” (Peden 1990–91, 59). Abbot wrote that “just so far as things are known in their relations, they are known both phenomenally and noumenally, and the possibility of experimentally verifying at any time their discovered relations is the practical proof of a known noumenal cosmos” (Abbot 1888, 40; Ahlstrom and Mullin 1987, 142). Thus, as Peden has observed, “For Abbot real relations are the ultimate ground of intelligibility; things do not exist apart from relations nor do relations exist apart from things related” (Peden 1990, 5; Abbot 1888, 128 ff.). Abbot shared with Peirce, William James, and others in developing this understanding of relations as known in experience, which has become a basic part of process thought (Peden 1990–91, 55). This is immediately relevant to our present concern, for persons influenced by process philosophy have been among those who have expressed interest in Burhoe’s thought.

In the early decades of the twentieth century, certain members of the “Chicago School” of theology pursued themes that constitute important aspects of Burhoe’s historical context; in fact, some may be said to be his predecessors. This is true to some extent of Shirley Jackson Case and Shailer Mathews, who included use of the social sciences in the social-historical method they advocated and pursued, but it is more specifically true of other members of the Chicago School, particularly those influenced in varying ways by Darwin’s theory of evolution and by the radical empiricism of William James. The tradition of the Chicago School continued in Henry Nelson Wieman, who brought to a focus themes that contributed to a receptivity for Burhoe’s thought.

George Burman Foster, whom Chicago School historian Charles

Harvey Arnold called “the ‘primal’ theologian of the whole school” (Arnold 1966, 28, 30), contributed to the historical context of Burhoe’s thought and is a real predecessor of Burhoe, not so much for his *The Finality of the Christian Religion* (1906) as for his *The Function of Religion in Man’s Struggle for Existence* (1909). Like Burhoe, Foster was profoundly influenced by Darwin’s theory of evolution by natural selection. Foster asserted that “if we take the idea of evolution seriously we must apply it thoroughly and consistently” (Foster 1909, 82); in seeking to do so he applied the idea of evolution to religion. Burhoe argues that religion, in making possible social cohesion among groups based on relations other than kinship, also makes civilization possible; similarly Foster, in 1909, argued for the importance of religion based on its functional usefulness in human adaptation to the environment. There are differences between their views, yet the similarities are greater. For Foster, “The word God is a symbol to designate the universe in its ideal-achieving capacity” and the context of the symbol “God” is the following: “Religion is the conviction that cosmic existence is such that man is an ideal-achieving being, and that the achievement of his ideals is possible” (Foster 1909, 109, 181). Foster’s concept of cosmic existence was such that he would have understood what Burhoe means in interpreting evolution in terms of a relationship among cosmotype, genotype, and culturetype.

Douglas Clyde Macintosh, who studied under Foster at the University of Chicago (Hutchison 1976, 215), published *Theology as an Empirical Science*, an important work in the development of empirical theology, in 1919. Although there are significant differences between Macintosh’s and Burhoe’s thought, the influence of Macintosh’s empirical emphasis surely contributed to the growth of interest in projects such as Burhoe’s attempt to build a theology using insights and knowledge gained from the sciences. The similarity of intent is striking. For instance, Macintosh wrote:

The scientific theologian, therefore, will have to select from the manifold of religious experience those elements which give knowledge of God, just as the physicist selects from the multitude of the elements of sense-experience those which are of importance for the understanding of the nature of matter and energy. (Macintosh 1919, 26)

But their differences should be noted. Burhoe would probably acknowledge the potential usefulness of the term “religious experience,” but he would not accept Macintosh’s reliance on a special kind of religious experience presumed to provide knowledge of God. Furthermore, the differences between Macintosh’s conception of

God as morally and metaphysically absolutely sufficient to meet all human religious needs (Macintosh 1919, 162–63, 176–77) and Burhoe's conception are too numerous to be described here. But, although Macintosh's methodology differed from that of Burhoe, he had as much respect in 1919 as Burhoe has now for science and the scientific method (Cauthen 1962, 177; Hutchison 1976, 213–15). He is another precursor, and his influence is surely an aspect of the historical context in which Burhoe works.

Shailer Mathews served as dean of the Divinity School of the University of Chicago from 1908 to 1933, during which time he was, with Shirley Jackson Case, one of the leaders of the Chicago School of theology. Mathews clearly believed that the results of scientific research constitute data for theology (Peden 1990, 11). He was the author of four important essays in *Contributions of Science to Religion*, a volume he also edited, which appeared in the same year as his famous work *The Faith of Modernism*. Two aspects of Mathews's thought should be noted. First, he relied on the natural and social sciences, rather than on philosophy, for the foundations of his thought (Cauthen 1962, 149). Second, he thought of God in terms of a conceptual theism:

For God is our conception, born of social experiences, of the personality-evolving and personally responsive elements of our cosmic environment with which we are organically related. (Mathews 1931, 226; emphasis in original)

This view differs significantly from that which Burhoe described in "Natural Selection and God." Despite these differences, however, Mathews's interest, as a theologian, in the sciences, justifies his inclusion among those who contributed in important ways to Burhoe's historical context.

Henry Nelson Wieman represented both a continuation and a modification of the Chicago School. In some respects, he is one of the most important contributors to the historical context in which Burhoe works; he is certainly a precursor, and Burhoe's work might even be regarded as a continuation of Wieman's. (Wieman retired from the University of Chicago in 1946, although he taught in later years at other schools. Burhoe retired from Meadville/Lombard in 1974.) The relations between the thought of Wieman and that of Burhoe are so important that a comparison of their views could well be the theme of a separate paper. Only a few major points can be noted here.

First, Wieman's entire lifework, like that of Burhoe, shows his high regard for science as the best method of attaining to religious truth. In his first book, *Religious Experience and Scientific Method*,

Wieman wrote: "The knowledge of God must be ultimately subjected to scientific method" (Wieman 1927, 23). He developed this theme in his subsequent books. Indeed, toward the end of his life, he continued to argue that one of the problems in contemporary theology is that "present day theology interprets faith in such a way that scientific inquiry is irrelevant to it" (Wieman 1963, 105, "Reply to [Daniel Day] Williams"). Wieman argued for a close relationship between scientific knowledge and religious symbolism (Wieman 1963, 114). Second, Wieman in his later years moved away from seeing the divine reality in forms of evolution that preceded human symbolic intercommunication. He acknowledged that some persons would object to the way he currently stated the question guiding religious inquiry because the way he stated it

speaks only of what operates in human existence. Why not ask about what operates in the total universe, or in the totality of all being, or in being itself? The previous analysis should make plain why we ask only about what operates in human existence and not primarily about the universe or the fullness of all being or about the power of being or about a supernatural God or other being. (Wieman 1968, 18-19)

Third, Wieman was aware of and was distinctly supportive of Burhoe's projected program in theology and the sciences at Meadville/Lombard. Indeed, Wieman was in 1966-67 one of the first fellows of Meadville/Lombard's Center for Advanced Study in Theology and the Sciences (Breed 1992, 117). Wieman's interest in a scientific approach to theology meant that he was a precursor of Burhoe, and his work was a very important factor in Burhoe's historical context.

Now, when we view Burhoe's thought in relation to such predecessors, some major features of his historical context become clear. One major factor, the separation of science from religion, has been developing throughout recent centuries. Breed has rightly observed that there is a widespread perception of science and religion as so diverse that they are viewed as "independent domains of human activity" or as "separate language games" (Breed 1988, 343). One effect of this separation has been the loss in credibility of traditional religious views, or even of religion as such, however conceived. Breed wrote that Burhoe's thought is directed to two ends: "1) the restoration of the credibility of traditional religious wisdom and 2) a demonstration that religion serves an essential function in human evolution" (Breed 1988, 330).

One aspect of Burhoe's work to heal this separation has been his focus on "the translation of traditional religious concepts into the language of the sciences" (Breed 1988, 330). This translation can be

viewed from two different perspectives; indeed, it appears that we should view it from both perspectives to see what Burhoe is doing. From one perspective, we can acknowledge that he definitely intends “to preserve traditional religious wisdom”—as his favorable remarks about Donald Campbell’s image of the historical winnowing of traditional religious views demonstrate. Burhoe has, however, been selective in what he preserves. He has emphasized, from the Hebrew scriptures, images of God as Creator, Deuteronomic concepts of God presenting humans with a choice (whether to choose life or death), and images of God as judge but has used very few concepts, if any, from Hosea, and very few from the Christian New Testament. Nonetheless, from this first perspective we might conclude that concepts and images from Hosea and the New Testament are at least held in reserve, not abandoned.

A second perspective on Burhoe’s preservation of traditional religious wisdom can be based on the observation that, in his writing, Burhoe draws almost entirely on works by natural and social scientists; although he is familiar with the writings of many theologians, he does not cite them. From this we may infer that Burhoe intends his scientific theology to be built from concepts drawn from the sciences and that his project entails translating traditional religious concepts into the language of the sciences. This second perspective emphasizes science as a new revelation. On several occasions, and even as late as his address on receiving the Templeton Award, Burhoe has referred to science as “a new gift of revelation” and “a more detailed revelation” (Burhoe 1981, 22–23).

A useful hypothesis is that Burhoe uses both perspectives. From one perspective, he preserves traditional religious wisdom in its own right, as winnowed through history, and translates its concepts and images into the language of the sciences. In this sense, Burhoe is like those who translated the Christian faith into Aristotelian terms, wherein its concepts could be stated more precisely and, hence, more credibly than in the previous Platonic (or Neoplatonic) terms. From the second perspective, he starts with a theology derived from the sciences and selects from traditional religious wisdom images that can be translated into its language. In this interpretation, he would be like someone who has found a new, more credible revelation that becomes the standard by which to evaluate all previous revelations. Indeed, the new revelation supersedes all previous revelations.

There is no doubt, given his agreement with Campbell, that Burhoe intends to be understood in terms of the first perspective. But there is also good reason to understand him in terms of the second perspective, at least on some occasions. First, we should note

evidence in Breed's cautious account of the disagreements among Burhoe, John Hayward, and Robert Tapp in 1965 when they sought to plan a team-taught, three-course sequence in theology and the sciences for Meadville/Lombard's 1966-67 academic year. Breed's account contains quotations from Burhoe's memoranda which show that he insisted on limiting the range of data to be considered to "the formulation of a viable theology for a community which accepts the scientific worldview." He excluded examinations of "the doctrines of the sciences" or of "traditional theologies in the light of the sciences." Burhoe's exclusion of such areas meant that Hayward's resources in the areas of art, aesthetics, and theology could not be included in the conversation. Tapp was prepared to examine the scientific worldview from the perspectives of liberal theology and of philosophy of science, but these perspectives also were excluded (Breed 1988, 266-67). Breed wrote: "One might wonder why Burhoe was not amenable to compromise and did not encourage a variety of different approaches" (Breed 1988, 254). He noted that some persons agreed with Burhoe's position that the scientific worldview should not itself be under examination, but should be assumed, with religious concepts to be drawn from that area and evaluated from that perspective.

Second, Breed has noted recent criticisms of Burhoe's thought "for not giving sufficient attention to the aesthetic dimension, the dimensions of the demonic, and history" (Breed 1988, 232). Breed clearly favored the inclusion of "the so-called non-scientific approaches." Although Burhoe claims to have included them, responsible critics disagree. This underscores the validity of viewing Burhoe's work from the second perspective. For him, the scientific perspective has priority.

There is value in viewing Burhoe's translation of religious wisdom from these two perspectives. It appears that he does mean both. Viewed in historical perspective he is the leading scientific theologian. He is also both the prophet of a scientific theology, because he believes science will help and sustain both religion and theology, and the prophet of a new, scientific revelation of religious truth, a revelation having greater credibility and validity than any previous revelation.

Another major feature of Burhoe's historical context has been the influence of Darwin's theory of evolution, which posits a mechanism referred to as natural selection. Burhoe's relation to this concept is important. Like Darwin, Burhoe is aware that the term "natural selection" is metaphorical and that one should be wary of viewing it as an entity (Breed 1988, 341). Unlike Darwin, Burhoe has used the metaphor to write God = Nature, thereby being able to suggest

that religion, interpreted as an evolutionary phenomenon selected by God, could account for the evolution of human cultures. Breed notes that Burhoe was thus enabled to portray "even the so-called prebiological, physical entities . . . as being produced by Natural Selection" (Breed 1988, 341). Jacob Bronowski's concept of stratified stability, a mechanism that issues in more complex, stable structures, greatly aided Burhoe at this point (Bronowski 1970). Burhoe viewed the concept of stratified stability as "a generalized and physical model of how the natural selection process works at all levels" (Burhoe 1970, 40).

As Breed notes, Burhoe could now assume a "similarity of function and structure" among genotype, culturetype, and cosmotype (Breed 1988, 344). He argued that religion, as an essential aspect of the culturetype, provides "a socially cooperative behavior that genes alone cannot accomplish," a behavior that is necessary for survival (Breed 1988, 312). Burhoe developed the important concept "coadaptation," which indicates the way in which selections by cosmotype, genotype, and culturetype are linked. Burhoe stated this succinctly: "The human brain is the integrating mechanism within which three levels of nature are coadapted to produce human nature" (Burhoe 1981, 173). He used the concept of coadaptation to show how religion even elicits the behavior known as altruism, a phenomenon seen in *Homo sapiens* for which sociobiology could not give an account. What Burhoe has accomplished is historically important. Breed stated that "Burhoe has a nascent biocultural evolutionary theory of religion pregnant with possibility for establishing a bona-fide new field of science" (Breed 1988, 349).

PHILOSOPHICAL AND THEOLOGICAL PROBLEMS

Granted this important success, we must note also that Burhoe has encountered problems in relation to certain philosophical and theological views. There is no doubt, for instance, about the influence of positivism on his views, for Burhoe has acknowledged it and then qualified it.

I might suggest [that] the single reference which I think is most pertinent to my point of view is Richard von Mises' *Positivism: A Study in Human Understanding*. I have added the more recent biological understandings of how information was accumulated in the genotype, and how for man this is revealed or made conscious by the biochemical mechanism of the central nervous system or brain. (Burhoe 1966)

In particular, Breed has shown that positivism has influenced Burhoe's concept of God (Breed 1988, 235-36).

The sophisticated form of positivism presented by von Mises has surely aided Burhoe in communicating with scientists about religious concepts, for Burhoe emphasized von Mises's concept of connectibility, which is, properly speaking, a concept of "connectibility with." Von Mises wrote:

We propose to call a sentence *connectible* if it is compatible with a certain totality of statements which regulate the use of words and word forms appearing in it. The statements of a branch of science are connectible with each other (in so far as they can be regarded as rules of language or give rise to such rules) and with most of the customarily accepted rules of the ordinary use of language. . . . The statements of metaphysics are often connectible among each other only within a very narrow range, and the smallness of this range makes them of relatively little use. (von Mises 1951, 73).

Although von Mises's concept of connectibility allowed only a small range of legitimacy to metaphysics, it did not classify all forms of metaphysics as meaningless. This must be granted; yet positivism was, for legitimate reasons, so little valued by many religious thinkers that Burhoe's point of view attracted only modest interest from other theologians (Breed 1988, 254). As an illustration of the difficulties this view has entailed, we note that Burhoe's positivism has impeded communication with religious thinkers who have been influenced by process thought, that is, those who one might expect would be very likely to be interested in this theologically constructive use of ideas and evidence from the sciences.

The contrast between the views of Burhoe and those of Langdon Gilkey is similarly illustrative. Gilkey maintains that "a theology based on science is still, even if its proposer be a scientist and its language made up of scientific terms, *theology* and not science" (Gilkey 1970, 39). Gilkey's reference to "the Star Island group" shows that he is aware of Burhoe's thought (Gilkey 1970, 38). Burhoe would agree with Gilkey, says Breed, but would not agree that such a theology must be defended "according to the criteria of the metaphysical and theological disciplines." Breed observes that "rather than approaching science theologically, as Gilkey does, Burhoe approaches theology scientifically." Most theologians who have shown interest in Burhoe's work, however, approach science theologically. And, like Gilkey, they regard cosmic evolution, conceived of as "a law of universal process," as a myth (Gilkey 1970, 73-74). As such, it is subject to evaluation by metaphysical and theological criteria. Thus one aspect of the historical context in which Burhoe works is the call from his theological colleagues for greater responsiveness to philosophical and theological criteria and analysis.

SOCIAL PROBLEMS

Burhoe's work at Meadville/Lombard, prior to his retirement, was impeded by the influence of social problems such as the youth revolution of the 1960s. I bear firsthand witness to this, as to other conflicts during his service at the school. As Breed has written, events in the 1960s "radicalized students into an increasing solidarity of protest, a counterculture" (Breed 1988, 271-72). Burhoe's view simply did not gain a hearing from the students and received from them a generally quite negative response.

Reception of Burhoe's thought was hindered by another, even more widespread, aspect of the social context within which he worked. As Breed has shown, two criteria have been operative in Burhoe's methodology, a criterion of scientific connectibility and a criterion of religious relevance. The latter meant that "those scientific concepts and ideas are selected which can best serve to translate what Burhoe refers to as traditional religious wisdom" (Breed 1988, 332). In terms of this criterion, his thought is effective. The greater problem relates to the first criterion. It appears that, for many persons, scientific connectibility and intellectual credibility are not greatly relevant to their basic religious needs. Even though their numbers may be decreasing, thousands of persons remain adherents to and supporters of the traditional churches and their theologies. Responsiveness to Burhoe's theology is not limited to, but is most evident among, persons for whom intellectual credibility of religious belief may be enhanced by the demonstration of the scientific connectibility of such belief.

FUTURE TASKS

In conclusion, we may observe from this historical perspective that the work of predecessors from Francis Ellingwood Abbot to Henry Nelson Wieman aided receptivity to Burhoe's thought. His thought will probably receive increased attention as several conditions develop. An increase in the general level of education in the sciences will make possible an increased willingness to hear what his thought has to offer. The development of his ideas by religious thinkers who have had more specifically philosophical and theological training than he received will ensure that philosophical and theological criteria will be responsively addressed in the future. His vision deserves serious attention and study, for it has within it the promise of a theology adequate to humans' religious needs in the twenty-first century.

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