

## TWO TYPES OF SCIENTIFIC THEOLOGY: BURHOE AND NYGREN

by *Donald W. Musser*

In a recent issue of *Christian Century* Thor Hall reports on results of a two-year inquiry into the "present state of the discipline of systematic theology." One of his conclusions is that "theologians are obviously concerned about the relationship between religion and science," and especially they do seek to establish theology as a "credible science."<sup>1</sup> The attempt to heighten theology's credibility is nowhere more clearly illustrated than in the writings of Ralph Wendell Burhoe, senior fellow, Center for Advanced Study in Religion and Science, and research professor emeritus in theology and the sciences at Meadville/Lombard Theological School, Chicago; and Anders Nygren, retired bishop of Lund and retired professor of systematic theology at the University of Lund, a formative figure in what is called Scandinavian or Lundensian theology. In these two figures we find the somewhat strange occasion in which a Swedish Lutheran and an American Unitarian agree on a common proposal, namely, that theology should be scientific. But, as we shall see, the similarity is superficial, for there are fundamental and irreconcilable differences between these two types of scientific theology. Burhoe's scientific theology is a synthesis of "facts" from the evolutionary sciences and religious claims; in Nygren theology is scientific because of its method. Burhoe's theology is scientific because it utilizes the content and results of science. Nygren's theology is scientific because it emulates the scientific way of arguing.

Though there is but a superficial similarity in the common use of the term "scientific theology," there is value in setting the views of Burhoe and Nygren side by side. For their positions, though incongruous, represent opposite poles in the continuum of thinkers discussing the relationship of science and religion. Burhoe desires a synthesis, while Nygren wishes to maintain each in autonomous independence.

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BURHOE'S SCIENTIFIC THEOLOGY

We can understand Burhoe's scientific theology if we elevate from his "The Human Prospect and the 'Lord of History'" a brief text which contains the major concepts in his position and then provide an exegesis of this text in the light of the entire essay and of his other writings. The text reads, "It is the religions that have been doing this particular job, providing [man] with essential information evolved in the culturetype about his true nature or soul and its relation to the ultimate reality governing the world. The present moment of cultural evolution is . . . the time for a basic religious revitalization, under a scientifically informed theology, of this sacred truth."<sup>2</sup> The essential concepts requiring exposition are (1) "essential information" which is equivalent to "sacred truth," (2) "culturetype" and "cultural evolution," (3) the verb "evolved" and its cognate "evolution," (4) "his true nature," referring to the true nature of humankind, (5) "ultimate reality," (6) "religious revitalization" and "religion," (7) "the present moment," and (8) "scientifically informed theology."

To anticipate briefly the path our discussion will follow, note that the starting point is "religion" as an aspect of human evolution. In order to perform its function of providing "essential information," or "sacred truth" (which we later shall find is the basis for values), religion must be based on a "scientifically informed theology," which knows and understands man's "true nature" and his proper relation to "ultimate reality" (which we later shall find is nature). Further discussion of these concepts will deepen our understanding of Burhoe's position.

First, let us inquire about Burhoe's conception of religion. He finds that religion is a necessary, information-providing, functional aspect of humanity's biological character. As a biological phenomenon, it has two related roots—one genotypic and the other culturetypic. The strictly biological or genotypic basis of religion is supported by the conclusions of brain research which allow "us to account for religious experience" on scientific grounds; "Students of the brain have indicated how the 'subjectivity' of religious experience and the internalization of human values are essential for ultimate moral or social as well as personal values."<sup>3</sup> This research shows that the feeling-level, lower-brain functions—the basis for emotions—serve to orient and motivate life-sustaining behavior. Because life-sustaining behavior is at the apex of the hierarchy of human values and is therefore an ultimate human concern, such feeling-motivated behavior is deemed religious. This is to say that because emotions exist to provide us with a mechanism of survival they are inherently religious. Furthermore,

cognitive-level, higher-brain functions “that enable logical or cause-and-effect statements” and which therefore enable humans to understand the environment to which they must adapt are also innately religious because they, too, are a functional survival mechanism.<sup>4</sup> Taken together, the cognitive-level and feeling-level brain functions provide a biological basis for asserting that religion is (1) necessary, being a biologically given survival mechanism of the species, (2) information providing, enabling feeling-motivated behavior and logical statements of fact which entail adaptive behavior, and (3) functional, in that it is a biological mechanism for survival. These are the reasons why religion for Burhoe has a genotypic basis.

The other, related root of religion is culture in which “religion is the prime transmitter of values in cultural evolution.” In culture religion is distinguished by “rituals and beliefs.” Ritual and belief are intertwined inextricably in that belief is a transformation of ritual, a rationalizing of ritual into linguistic structures that render ritual more effective. Together they seek to order the world and to relieve anxiety.<sup>5</sup> In fact, the function of religion in culture and the purpose of culture itself are both biological, for both are mechanisms for survival. For example, the transformation of ritual into belief functions to enhance “complex understandings, decisions, and motivations that adapt our behavior adequately to the ultimate reality system around us.”<sup>6</sup> Ritual and worship have no end in themselves; they exist to “mediate suitable feelings and responses to provide adaptive or viable behavior.”<sup>7</sup> It appears therefore that ritual and belief are cultural analogues of the biological lower- and higher-level brain functions. Ritual is related to the emotive lower level as belief is related to the cognitive higher level.

In my view, Burhoe’s conception of religion as biological reduces religion to an instrument or function of a higher-level process, namely, the process of evolution whose normative telos is viability or life. While religion may be innate and necessary to the human species, it is only so because it has functional value. That is, it serves a higher purpose. Religion—its rituals and beliefs—exists because it is useful as an adaptive mechanism. Its value therefore is contingent and not in fact necessary because it serves a higher end, that of continued viability of the species.

Another important aspect of Burhoe’s conception of religion is the idea of cultural evolution. Biological evolution has created “a hierarchy of levels of interrelated systems of increasing organization and complexity,” which operate through a “universal selection procedure.”<sup>8</sup> This means that, “in the evolution of biological life systems, each new higher pattern in the hierarchy of life . . . is selected

by . . . 'natural selection.'"<sup>9</sup> What is somewhat unique to Burhoe's position is that natural selection operates in cultures: "The same principles are involved in determining the goodness, viability, or stability of civilizations."<sup>10</sup> Culture is the highest level of evolution yet to appear, the "top level of accumulated information built on top of the layer of the genotype."<sup>11</sup> Because culture is a biological organism, it has what Burhoe terms a culturetype, "the structure or information that is accumulated in and transmitted by a culture."<sup>12</sup> Together culturetypes and genotypes are "shaped ultimately by the same sovereign reality . . . selection by the environment."<sup>13</sup>

Religion functions in culture as a mechanism of the culturetype by transmitting adaptive information and motivating behavior based on that information which is adaptive. The "wisdom" of "traditional mores" until recently have been "unconscious mechanisms" in providing stable, viable, adaptive societies. In today's scientific world, however, the unconscious mechanism by which religion functions has become conscious. We know how it operates, and it is as follows. In a given society individuals are capable of "making value judgments and expressing preferences."<sup>14</sup> That is, people are free to choose how to spend money, where to go to church if at all, whether to vote, etc. Burhoe calls such individual decisions a "lower court of judgment." There is, however, a "higher court of judgment." If individual preferences in a population lead to behavior which is not adaptive to the environment (e.g., agricultural patterns which deplete the soil and lead to starvation or health practices which catalyze disease and lead to death), a "lethal cultural pattern" is developed which will suffer and possibly perish, thus ending not only a culturetype but also a genotype. And, indeed, as history shows, cultures have evolved, and some patterns of behavior and custom have prospered, while others have become extinct. Burhoe therefore concludes, "Thus, any pattern of personal preferences automatically undergoes the inevitable selection or rejection by the 'higher court'."<sup>15</sup> There seems to be in this view an inescapable paradox with regard to the function of religion. The function of religion is to transmit information and values which enhance adaptive behavior, and religion is thereby concerned with ultimates and "sacred truth." But religion functions only at the lower level of judgment, influencing and motivating individuals and individual cultures. At this level it cannot provide any information that is claimed as ultimate, for what is ultimate is the higher court of judgment, a court in which religion is not a judge. To put the paradox in the form of a question, How can religion be concerned with ultimate values or essential information requisite to adaptive behavior if it has no access to the ultimate court of judgment? It is one thing to claim

that recent religions in existing cultures have been adaptive—that is obvious in that they exist and therefore have been selected—but it is quite another thing to claim that we can know beforehand what beliefs, values, and individual and cultural behavior patterns will be selected in the future. As long as the cultures in which religion is embedded are subject to an ultimate, omnipotent “higher court of judgment,” we can see no basis for Burhoe’s claim that we can know what cultures will be selected.

We come now to the notion of scientific theology, which is also an adaptive mechanism in cultural evolution. Unlike most contemporary Christian theology since Schleiermacher, in which theology is a second-order discipline (i.e., reflection upon the thematization of religious experience), Burhoe’s scientific theology is essential to the vitality and effectiveness of religion. In fact, I will argue that in culture religion and theology are almost synonymous; this is to say that in culture it is belief and not ritual that counts toward adaptive behavior. Recall from the text cited at the beginning of this paper that scientific theology arises at a fortuitous moment in history, what Burhoe termed “the present moment.” That moment presents us with a crisis of global proportions for which scientific theology is the solution. In Burhoe’s view, the world crisis exists because the cultural environment has changed, while cultural wisdom, values, and mores remain adapted to an older cultural situation.<sup>16</sup> As a result “traditional value-generating programs or institutions have been consumed by a relatively much more rapid growth of their scientific and technological programs or institutions. These civilizations are showing signs of internal disorders that if continued would mean their death.” Scientific theology is the solution to this crisis, but, I shall argue, to call this solution scientific theology is odd, for the problem as defined is not theology; it is values. Burhoe tells us how we can arrive at new, adaptive values. The axiomatic claim is that there is “an objective criterion of value for civilizations.”<sup>17</sup> That criterion is variously called viability, life, sustaining and advancing life, and the maintenance or enhancement of life.<sup>18</sup> As Burhoe concisely states it, “Life . . . becomes what is sometimes called the ultimate or intrinsic value, or the peak in the hierarchy of a multitude of various subordinate values necessary to accomplish this end.”<sup>19</sup> The value hierarchy is “given to us by the nature of the ultimate reality which created life and selects or judges what is good and what is not good for living systems.” Because values are “given,” they are “objectively real, or scientifically verifiable.”<sup>20</sup> This is to say that “the new information on the values necessary . . . will be through the contemporary sciences.” Here we find the point of contact, the interface, between science and religion.

This new, scientific information about ultimate reality and the values that sustain and enhance life is provided by science. From "the ancient religions the still valid wisdom" will be winnowed like the wheat from the chaff and combined with the scientific facts.<sup>21</sup> Religious wisdom of the ages, cleansed and purified by science, together with scientific facts provides the basis for new, "objectively real, or scientifically verifiable" values. These new values will lead to life-enhancing, adaptive behavior within the new environment.

If our summary of how adaptive values arise is correct, it clarifies how Burhoe relates science and religion.<sup>22</sup> In a formula, science is to religion as facts are to values. Science provides information about facts (the "sacred truth"); religion provides values based upon those facts. The factor which relates the "valuing mechanisms" and the "fact-gathering and analyzing mechanisms" is the "brain." Thus it is the brain which brings science and religion in consort: "We might say that . . . the 'will' (the motivational program of the central nervous system) is a program of processing information as much as the 'intellect,' and that both 'values' and 'reason' are factual processes or mechanisms investigatable by the sciences."<sup>23</sup>

Burhoe's central claim which appears most suspect is that values are "objectively real, or scientifically verifiable." This claim is based upon a premise whose logical structure cannot be established. The premise is that one can get an "ought" out of an "is" or a value out of a fact. To illustrate, let us suppose with Burhoe that "good" or "right" means "have life" or "being viable." We may agree that X has life but still ask, "Is that good?" or "Is that right?" But when we make the statement, "X has life, but is it good or right?" we are saying by equivalence, "X has life, but has it life?" which makes no sense at all. One could say similarly, "X has life, but it is not good or right," without being contradictory—a statement which could not hold if the definition, "Having life is good or right," is correct. Therefore the definition that values are objectively real or scientifically verifiable cannot be correct.<sup>24</sup>

Beyond this question of logic, further related questions arise. On what basis does one choose viability or life as the ultimate criterion for values? The answer is not difficult to find: a certain view of evolution. But is a theory of evolution, even if it is the consensus viewpoint, subject to scientific verification? If it is not, how can it be claimed that values have an objective criterion in the notion of viability? From another perspective, if we grant that science in fact can make an analysis of surviving cultures and can specify the values in those cultures which have survived, what is to say that in a new, future environmental context those values will be adaptive? Even if we were

able to discover what have been adaptive values, we have no way of knowing what will be adaptive in the future until the future becomes the past. Then, finally, there is the enormous problem of the plurality of cultures and values. By what means can one adjudicate between values which conflict in present cultures in choosing those one will hold in order to be adaptive in the future?

Enough of values; let us proceed to the final concept in Burhoe's proposal—scientific theology. We find that theology is the cognitive correlate of religion. In culture the two are practically synonymous, for at this level religion is characterized primarily by belief, and belief is thematized by theology. It is in fact hard to differentiate between religious beliefs and scientific theology. In Burhoe's words, "a scientific theology can provide as much spiritual and moral power as any previous religious beliefs."<sup>25</sup> In the past, before the rise of science, there was no tool by which to differentiate between true religious beliefs and false ones. But in the scientific present we know the ultimate truth in fact, and therefore we can judge whether a belief is true. It is on this basis that Burhoe claims that scientific theology is a "convincing theology" or a "more solidly based theology."<sup>26</sup> In a word, there have always been religious beliefs; now, since the rise of scientific knowledge, there can be scientific religious beliefs or scientific theology.

Scientific theology functions as religious beliefs have always functioned, as an intermediate but essential stage between knowing and doing. It generates "attitudes and motivations" that issue in behavior.<sup>27</sup> In terms of the aforementioned crisis of "the present moment," in which what is believed is out of kilter with what is required for viability in a new environmental setting, scientific theology is posed as the solution to that problem. It provides what Burhoe calls the "sacred truth" or essential information about what we should believe and do in order to adapt.

Let us consider two questions about the nature of scientific theology. First, why is this theology called scientific? Burhoe's answer is that it is informed by facts. But can the facts of Burhoe's position be verified? My answer is that they cannot, because overarching all factual claims is "the higher court of judgment," nature, which is defined as "a common, universal, everlasting, all-determining 'ultimate reality system.'"<sup>28</sup> The ultimate status of nature given by Burhoe is beyond verification. To say that nature is what is to make a nonscientific, unverifiable statement, and it is my thesis that Burhoe's entire enterprise rests upon such a premise. I suggest that Burhoe's scientific theology is what Stephen Toulmin calls scientific mythology.<sup>29</sup> In Burhoe nature becomes Nature and through natural selection oper-

ates as *the* fundamental, all-encompassing principle of reality. A truth becomes the Truth. I cite but two reasons for my thesis that scientific theology is based upon myth and not science. In the first place, scientific concepts are used to give answers to religious questions; for example, natural selection answers the religious question of who God is. This is simply a nonscientific use of a scientific term. In the second place, the claims of scientific theology can be neither verified nor falsified.<sup>30</sup> For example, what would count against the claim that nature encompasses all reality? For these reasons, I do not believe that scientific theology can properly be called scientific because it is based on a metaphysical assumption.

The second question I raise is based upon my interpretation of Burhoe's overall scheme. It seems to me that theology is not crucial to the aim of enhancing viability. Religion is concerned centrally with rituals and beliefs that will instill proper adaptive values and hence adaptive behavior. What is the need for God talk? Religious language, given Burhoe's position, would be more appropriately moral and ethical language. Humans need to know what to believe and what to do in order to remain a viable species. Proper beliefs are specified by science; in Burhoe's words, "modern science is the new revelation;"<sup>31</sup> proper action or behavior is motivated by religious ritual. My question, given this analysis, is whether theology or theological language serves any useful function in maintaining the viability of the human species. Cannot all religious language be reduced to moral discourse, and cannot theological concepts be eliminated completely?

#### NYGREN'S SCIENTIFIC THEOLOGY

In Nygren's *Meaning and Method: Prolegomenon to a Scientific Philosophy of Religion and a Scientific Theology* we find a book whose title reminds us of Burhoe but whose content stands in stark contrast.<sup>32</sup> In Burhoe we found that science and religion are related as facts are to values. In Nygren science, religion, and theology are related in a quite different manner.

The essential starting point for unraveling the relationship among these three is Nygren's assumption that "contexts of meaning are given phenomena."<sup>33</sup> That is, the history of ideas shows that within human experience there are certain irreducible contexts of meaning or language games. While in principle there may be more than four (Nygren nominates economics and technology as potential candidates), the most prominent are science, morality, art, and religion.<sup>34</sup> Each context of meaning, language game, or category is autonomous: "In its presuppositions each . . . possesses the laws that must be observed within its own particular province." Each must therefore be



judged on its own terms, on the basis of its own rules and procedures: "Science must be scientifically judged. Otherwise its propositions lose their scientific meaning. The ethical must be ethically judged. Otherwise its propositions lose their ethical meaning. The aesthetic must be aesthetically judged. Otherwise its propositions lose their aesthetic meaning. The religious must be religiously judged. Otherwise its propositions lose their religious meaning."<sup>35</sup>

The autonomy of the contexts of meaning is central to Nygren's scientific theology: "The idea of autonomy denies the right of any one context to set itself up as a judge over the others." Any notion of the priority of one context over any other is thus excluded.<sup>36</sup> For example, Nygren calls scientism "an outlook that makes science the measure of all things, refusing to grant the validity of anything but what is 'scientifically proved' and insisting that in the last resort nothing is meaningful unless it can be expressed in a scientific formula." This means that science can provide no answers to religious, moral, or aesthetic questions; it can answer only scientific questions.<sup>37</sup> The same holds for the other contexts of meaning. With regard to the religious context, then, we can draw the following conclusions: (1) Religion is a given, independent, autonomous context of meaning; (2) religion is intrinsically valid on its own grounds; and (3) religion can be critically judged only on religious grounds.<sup>38</sup> Immediately, we note the contrast between Nygren and Burhoe. Whereas Nygren asserts that religion is independent of science, morality, and art, Burhoe finds that religion is a functional aspect of a higher principle. Whereas Nygren claims religion is intrinsically valid, Burhoe grants religion validity only as it functions to motivate adaptive behavior. Whereas Nygren wants to assess religion on strictly religious grounds, Burhoe judges religious ritual and belief on the basis of science.

It would be an error, however, to conclude that by the autonomy of the contexts of meaning Nygren means they are totally unrelated and exclusively independent. Each context of meaning exists within the realm of experience, and together they comprise human experience. They are related thereby as complements of one another: "One context does not exclude another, but points to it—and points to it precisely as a different context of meaning. One makes up for the other, so to speak, by saying things which the other because of its particular way of looking at things is unable to say, but which also must be expressed." In my view, Nygren's idea of complementarity is suggestive but imprecise. To justify this notion he simply cites Bohr's classic expression of the complementary nature of the corpuscular and wave theories of light and goes on to make the analogy that we should "regard the different areas of experience and the diverse contexts of

meaning in a similar way.”<sup>39</sup> The idea is suggestive, but it needs to be more fully explained. What, for example, does it mean that one context “points” to another or “makes up for the other”?

What is crystal clear in Nygren, on the other hand, is that discourse from one context of meaning cannot be mingled with, translated into, or reduced to language from another context of meaning. Any attempt to do this, for Nygren, is metaphysics, an enterprise that “holds the form of science but denies the power thereof.”<sup>40</sup> In great part *Meaning and Method* is an exercise to purge metaphysics from philosophy and theology. The problem with metaphysics is that it “makes claim to scientific validity” but is unable “to live up to that claim”:<sup>41</sup> “What decisively distinguishes metaphysical doctrines from scientific hypotheses is the fact that they are essentially incapable of being tested, criticized, refuted.”<sup>42</sup> This error is illustrated when one lifts out what is valid in the religious context into the scientific context and thereby claims that the religious proposition is true. For example, I believe that Nygren would dismiss Burhoe’s scientific theology as metaphysics, for to equate the religious term “God” with the scientific term “nature” or “natural selection” as Burhoe does is disallowed by Nygren because it mixes language from two autonomous contexts of meaning.

One might think, given the autonomous nature of the contexts of meaning, that a scientific theology is impossible for Nygren. But not so. An escape from this apparent impasse is provided when Nygren defines “science as where, and only where, there is a ‘possibility of objective argumentation’ concerning a stated idea or opinion.”<sup>43</sup> Science thereby is defined by neither its content nor its results but by its way of arguing.<sup>44</sup>

What does Nygren mean by the “possibility of objective argumentation”? While science has a multitude of procedures and methods, it has only two structurally different kinds of argumentation: the axiomatic and the empirical.<sup>45</sup> Axiomatic argumentation is modeled after Euclid’s geometry. It begins with certain axioms, presuppositions, or hypotheses, whose grounds are unspecifiable, and proceeds by rules of logic. Its form is “if . . . then”: “if we assume the axiom to be valid, then a multitude of consequences follow from it.”<sup>46</sup> The “if” clause is always hypothetical; therefore the results never establish anything as real or true.<sup>47</sup> To claim either is to make a metaphysical statement. Empirical argumentation proceeds differently, though it includes axiomatic arguments. One proposes a hypothesis, tests it empirically by attempting to falsify it, and concludes that the hypothesis is valid if it has not been falsified. The sequence of the argument is hypothesis-deduction-verification via attempts at

falsification. The form is "since . . . therefore": "When a law or hypothesis is said to have been confirmed by experience or experiment, all that this really means is that in spite of all attempts to refute it no decisive negative instances have been found."<sup>48</sup> Again, as in axiomatic argumentation, the real or true is not established by empirical argumentation.<sup>49</sup> In two succinct paragraphs, Nygren sums up the point:

An axiom is a presupposition (an initial assumption) which is conceived as self-evident, and from which certain consequences can be deduced and conclusions drawn by logical necessity. Hence the acceptance of an axiom involves the acceptance of what follows from it. *If* the axiom is accepted, *then* the conclusions in which its consequences are drawn out must also be accepted.

A hypothesis is a tentative presupposition, intended as an explanation of certain empirically observed phenomena. That it is correct can never be directly verified. It is never more than a hypothesis, an assumption, though perhaps a very probable one. It can, however, be indirectly tested by confronting the propositions deduced from it with empirical observations made independently of it.<sup>50</sup>

It is the application of these two ways of arguing that determines whether a proposition is scientific.<sup>51</sup>

For theology to be scientific, it follows from this discussion that theology must have the "possibility of objective argumentation." To establish the grounds for scientific theology Nygren begins by examining the structure of the religious context of meaning. It is asserted that every context of meaning has a logically necessary fundamental presupposition without which it could not exist. In science it is the true, in morality the good, in art the beautiful, and in religion it is eternity. Such logically necessary presuppositions of the contexts of meaning are not, however, like the initial assumption of an axiom or the tentative presupposition of a hypothesis which is posited on unspecifiable grounds and can never be proved. Logically necessary presuppositions are indisputable, for they are given in experience and constitute the basis of experience. Without them experience itself would not exist and would not be possible. An axiom is selected, a hypothesis is tentatively proposed, but a logically necessary presupposition is irrefutable. Given experience, these presuppositions follow as logically necessary. Given science, the true must exist; given art, the beautiful; given morality, the good.<sup>52</sup> Finally, there is the logically necessary presupposition of religion—eternity. How Nygren arrives at the idea of eternity is an interesting question, but it is not treated in *Meaning and Method*. Here Nygren departs from Kant, whom he follows closely in all that has gone before. Whereas Kant subsumes religion under the moral, Nygren makes it a separate category.<sup>53</sup>

A peculiar and crucial characteristic of ultimate presuppositions is that they have no content: "The category itself prescribes nothing as to what the answer may be. Knowledge of the answer can be obtained only by going to the actual religions."<sup>54</sup> If in traditional thought eternity was thought of in terms of infinite time, here it is conceived of as a completely vacuous receptacle. The question is posed by the category of religion; the answer is provided by particular religions. That religion is a category with no inherent content is, as Paul Holmer suggests, a strange idea.<sup>55</sup> Stranger still, perhaps, is that the book in which Nygren develops this idea remains untranslated, and in *Meaning and Method* the position established in 1921 is simply asserted and left therefore fuzzy.<sup>56</sup>

Despite our desire for a more elaborate explanation of the transcendental deduction of the category of religion, let us nevertheless turn from religion as a general context of meaning or category to particular, specific religions in order to discover the nature of scientific theology. We come face to face again with the notion of presuppositions. Religion has two kinds of ultimate presuppositions on different levels: "one on that of the context of meaning and the other on that of the motif context. . . . The former have the force of logical necessity, the latter of something historically self-evident."<sup>57</sup> For example, the ultimate presupposition of all religion is eternity; for Christianity, a particular religion, the historically self-evident presupposition is *agape*. Lower-level, historical presuppositions are called motifs, and they differ from religion to religion.<sup>58</sup>

From this the task of systematic or scientific theology follows in two related steps, one historical and the other systematic. The historical step is motif research, of which the book *Agape and Eros* is the classic example. Nygren says, "We must try to see what is the basic idea or the driving power of the religion concerned, or what it is that gives it its character as a whole and communicates to all its parts their special content and color."<sup>59</sup> Again he says, "Our task is to discover their roots [referring to fundamental motifs] and determine their characteristics. For this purpose, of course, we can draw material from the particular historical forms in which they have appeared."<sup>60</sup> Once the fundamental motif is established, the second step is taken, that of systematization:

The task of systematic theology [is] to seek to understand and elucidate the Christian faith in its uniqueness, its distinctively Christian character. Its business is to clarify the nature of that faith, its precise meaning and content, showing what is specifically Christian about it that makes it different from everything else. It has to exhibit—and this is what makes it "systematic"—the various affirmations of the Christian faith in their own context and in relation

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to their own center. In other words, it is not called upon to produce any external systematization, but rather to allow the Christian faith to be seen in its own inner organic coherence.<sup>61</sup>

This theology in both its historical motif research and systematization is scientific in two regards: (1) It begins with what is given, a historical religion and its texts, and (2) it proceeds by objective argumentation.

### CONCLUSION

This is but a bare outline of Nygren's position, but from my discussion its most important features for characterizing scientific theology become evident. In this final selection, I will note three and contrast them with Burhoe's position.

1. Nygren's scientific theology is a descriptive, historical, and analytical discipline which reduces theology to historical theology. Its sources are historical texts; for example, in the case of Christianity the text is the Bible. Its method is the analysis of historical texts by objective argumentation. And by such an analysis, it seeks to describe the beliefs and doctrines of a particular religion. By contrast, Burhoe's scientific theology is normative and metaphysical. It is normative in the sense that it prescribes beliefs which are true with respect to all particular religions. It is metaphysical and not primarily historical in that it posits a universal principle—a point which Nygren rejects in every way, at any time, and for any scientific purpose—and from this principle all claims derive and are judged. Burhoe's sources are not historical texts; they are the results of a naturalistic assumption and biological theory elevated to an absolute status.

2. Nygren's scientific theology makes no claims about truth and remains scientific in so doing; Burhoe's scientific theology makes truth claims and is so judged to be scientific. For Nygren, theological claims take the form, "It is valid for Christianity that . . ." or "It is valid for Buddhism that. . ." Such claims are valid only within the religious context of meaning as statements about a particular religion. The task of Nygren's theology is to lay "bare the ultimate presuppositions that . . . answers the fundamental questions of meaning and validity in so far as they can be answered at all. . . . Its task is not verification or justification."<sup>62</sup> Further, what is valid is what is meaningful. He says, "Whether we speak of 'validity' or of 'meaning' we are speaking essentially of one and the same thing. 'Validity' accentuates the depth in the . . . use of 'meaning,' while 'meaning' supplies the . . . clarification of 'validity' and prevents it from slipping away into the obscurities of metaphysics."<sup>63</sup> On the other hand, Burhoe's scientific theology seeks "a religious perspective to be both

meaningful and true.”<sup>64</sup> Meaning lies in religion’s “function or capacity to provide men with an orientation to their destiny in the world” that makes “good sense” to them.<sup>65</sup> “True knowledge” about “ultimate reality” is the domain of science.<sup>66</sup> The task of scientific theology is to make truth claims that are meaningful by being functional. It translates the “true knowledge” of science into religious symbols (e.g., Nature is God) and structures these symbols into a metaphysics, variously called “the scientific picture of reality” or “the new scientific picture.”

3. Nygren’s scientific theology makes relative claims, whereas the claims Burhoe makes are absolute and universal, due to the fact that Nygren treats particular religions while Burhoe treats religion in general. Nygren’s view denies the possibility in principle of adjudicating the general or ultimate validity of any religious claim. All that can be said is “This is valid for Christianity”; never can a religious claim be of the form, “This is valid” or “This is true.” Van A. Harvey raises the troublesome question about this relativizing of claims when he says Nygren “builds a fence around the Christian faith and permits no question of truth to arise. The theologian can describe but he cannot assess.”<sup>67</sup> Are theologians willing to pay the price of delimiting themselves to the question, “Is it true?” Burhoe’s claims for theology are of the highest order; they are universal in the sense that they apply to all religions; they are absolute in the sense that they are true. Thus Burhoe speaks of “essential information” and “sacred truth” as the material of theology.<sup>68</sup> If Nygren’s limitation is the isolation of religions and their claims from one another, Burhoe’s is the legitimatization of his claims for theology which he deems scientific but which I have assessed are metaphysical.

#### NOTES

1. Thor Hall, “Does Systematic Theology Have a Future?” *Christian Century* (March 17, 1976), p. 254.

2. Ralph Wendell Burhoe, “The Human Prospect and the ‘Lord of History,’” *Zygon* 10 (1975): 365.

3. *Ibid.*, p. 306.

4. *Ibid.*, p. 305.

5. *Ibid.*, p. 312.

6. *Ibid.*, p. 306.

7. *Ibid.*, p. 312.

8. Ralph Wendell Burhoe, “The Civilization of the Future: Ideals and Possibility,” *Philosophy Forum* 13 (1973): 156–57.

9. *Ibid.*, p. 157.

10. *Ibid.*, pp. 157, 150. For Burhoe, the terms “civilization,” “culture,” and “society” are interchangeable.

11. *Ibid.*, p. 159.

## ZYGON

12. *Ibid.* In conversation Burhoe has claimed that this notion is similar to Teilhard's noosphere.
13. *Ibid.* For a criticism of the oddity of the term "cultural evolution" and its seemingly inherent paradoxical character, see Langdon Gilkey's *Religion and the Scientific Future* (New York: Harper & Row, 1970), pp. 163-66, where the views of Julian Steward, G. G. Simpson, Theodosius Dobzhansky, and Victor Ferkiss are considered.
14. Burhoe, "Civilization of the Future," p. 162.
15. *Ibid.*, p. 163.
16. The crisis or situation to which scientific theology is addressed is among others that portrayed by Robert L. Heilbroner in *An Inquiry into the Human Prospect* (New York: W. W. Norton & Co., 1974). For a more detailed analysis of this, see Burhoe, "Human Prospect," pp. 321-33.
17. Burhoe, "Civilization of the Future," p. 172.
18. *Ibid.*; Ralph Wendell Burhoe, "Potentials for Religion from the Sciences," *Zygon* 5 (1970): 112; and "What Specifies the Values of the Man-made Man?" *ibid.* 6 (1971): 227.
19. Burhoe, "What Specifies the Values," p. 228.
20. *Ibid.*, p. 229.
21. Burhoe, "Civilization of the Future," p. 173.
22. Burhoe, "Potentials," pp. 119-27.
23. *Ibid.*, p. 120.
24. My argument follows that suggested by William K. Frankena in *Ethics*, 2d ed. (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973), p. 99.
25. Burhoe, "Human Prospect," p. 332.
26. *Ibid.*, p. 359.
27. *Ibid.*, p. 317.
28. *Ibid.*, p. 330.
29. Stephen Toulmin, "Contemporary Scientific Mythology," in *Metaphysical Beliefs*, ed. A. Macintyre (London: SCM Press, 1957), pp. 13-81.
30. These criticisms are based upon Toulmin by way of Gilkey (n. 13 above), p. 38.
31. Burhoe, "Human Prospect," p. 328.
32. Anders Nygren, *Meaning and Method: Prolegomenon to a Scientific Philosophy of Religion and a Scientific Theology*, trans. Philip S. Watson (Philadelphia: Fortress Press, 1972).
33. *Ibid.*, p. 275.
34. *Ibid.*, pp. 227, 275.
35. *Ibid.*, p. 276.
36. *Ibid.*, p. 278.
37. *Ibid.*, p. 279.
38. Anders Nygren, *Essence of Christianity*, trans. Philip S. Watson (Grand Rapids, Mich.: Wm. B. Eerdmans Publishing Co., 1973), pp. 34-36.
39. Nygren, *Meaning and Method*, p. 295.
40. *Ibid.*, p. 40; an allusion to 2 Tim. 3:5.
41. *Ibid.*, p. 2.
42. *Ibid.*, p. 50.
43. *Ibid.*, p. 67.
44. *Ibid.*, pp. 69-71.
45. *Ibid.*, p. 103.
46. *Ibid.*, p. 105.
47. *Ibid.*, pp. 105-7.
48. *Ibid.*, p. 114.
49. *Ibid.*, pp. 107-17.
50. *Ibid.*, p. 193.
51. *Ibid.*, p. 124.
52. *Ibid.*, pp. 205-7.
53. Nygren established the category of religion and its ultimate presupposition, eternity, in 1921 in an as yet untranslated work, *Religious A Priori*. For a brief discussion

of this, see Ragnar Bring, "Anders Nygren's Philosophy of Religion," in *The Philosophy and Theology of Anders Nygren*, ed. Charles W. Kegley (Carbondale: Southern Illinois University Press, 1970), pp. 36-37. A more extended discussion appears in Bernhard Erling, *Nature and History* (Lund: C. W. K. Gleerup, 1960), pp. 49-79.

54. Nygren, *Meaning and Method*, p. 343.

55. See Paul Holmer, "Nygren and Linguistic Analysis: Language and Meaning," in Kegley, p. 86.

56. I refer to the untranslated *Religious A Priori*.

57. Nygren, *Meaning and Method*, p. 352.

58. *Agape* as the fundamental presupposition of Christianity is established by Nygren in *Agape and Eros*, trans. Philip S. Watson (1953; reprint ed., New York: Harper & Row, 1969).

59. *Ibid.*, p. 35.

60. *Ibid.*, p. 34.

61. Nygren, *Meaning and Method*, p. 371.

62. *Ibid.*, p. 183. Strictly speaking, this quotation refers to the task of philosophy, but it applies equally to theology given the previous definition: "As it is the task of the philosophy of religion to clarify the presuppositional concepts of religion, so it is the task of theology to clarify the content of an individual religion" (p. 12).

63. *Ibid.*, p. 179.

64. Burhoe, "Human Prospect," p. 329.

65. *Ibid.*

66. *Ibid.*, p. 331.

67. Van A. Harvey, review of Nygren's *Meaning and Method*, *Religious Studies Review* (September 1975), p. 15.

68. Burhoe, "Human Prospect," p. 367.