

# A NEW METHODOLOGY FOR CHRISTIAN SYSTEMATIC THEOLOGY

by Joseph A. Bracken

*Abstract.* Science and religion are the two strongest influences on the conduct of human life, yet their respective truth claims frequently clash. To facilitate better communication between scientists and theologians on these rival truth claims, the author recommends that Christian theologians use the language and current methodology of science as far as possible so as to present the content of Church teaching in an idiom that would be intelligible not only to scientists but to the educated public as well. In this way, the rival truth claims might complement rather than compete with one another. That is, clothed in the language of science, the truth claims of religion would gain in rational coherence and intelligibility. Natural scientists in turn would have conversation partners better able to deal with philosophical and ethical issues arising out of new scientific discoveries.

*Keywords:* Thomas Aquinas; Terrence Deacon; Granville Henry; Alister McGrath; neo-Thomism; systems theory; truth claims of religion and science; Alfred North Whitehead

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The relation between the faith claims of the various world religions and the truth claims of the physical and social sciences is unquestionably one of the most controversial issues affecting human beings at the present time. For example, the heated arguments over the morality of genetic engineering in human reproduction make eminently clear how scientific research and deep religious intuitions can at times clash head-on. Alfred North Whitehead pinpointed the problem almost 100 years ago in *Science and the Modern World*: “We have here the two strongest general forces (apart from the mere impulse of the various senses) which influence men, and they seem to be set one against the other—the force of our religious intuitions, and the force of our impulse to accurate observation and logical deduction” (Whitehead 1967, 181–82). Yet, while they seem to be in perpetual conflict with one another, both Christian theology and science are themselves “in a state

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of continual development" (182).<sup>1</sup> With respect to the history of natural science, this seems obvious: "No man of science could subscribe without qualification to Galileo's beliefs, or to Newton's beliefs, or to all his own scientific beliefs of ten years ago" (183). But theology also exhibits gradual development in the proper interpretation of its basic beliefs. Whitehead instances the historical development in the understanding of the doctrines of the Trinity and the Incarnation in the early centuries of the Church. But one can also point to significant changes in the understanding of those same doctrines in the twentieth and twenty-first centuries, at least some of which occurred as a result of a more evolutionary approach to reality in the sciences and broader acceptance of its implications in public opinion. Whitehead concludes: "In both regions of thought, additions, distinctions, and modifications have been introduced. So that now, even when the same assertion is made today as was made a thousand, or fifteen hundred years ago, it is made subject to modifications to limitations or expansions of meaning, which were not contemplated at the earlier epoch" (183).

Why then do clashes between scientists and religious authorities still occur on a regular basis in contemporary life? "It may be that we are more interested in one set of doctrines than in the other. But, if we have any sense of perspective and of the history of thought, we should wait and refrain from mutual anathemas. . . . The clash is a sign that there are wider truths and finer perspectives within which a reconciliation of a deeper religion and a more subtle science will be found" (Whitehead 1967, 184–85). But, claimed Whitehead, everything depends on how one deals with opinions contrary to one's own. "Every age produces people with clear logical intellects, and with the most praiseworthy grasp of the importance of some sphere of human experience, who have elaborated, or inherited, a scheme of thought that exactly fits those experiences which claim their interest" (187). The strong temptation for such individuals is then to ignore or explain away all empirical data that does not fit into their own scheme. But as a result their own worldview is less convincing, at least for more critically minded readers.

Whitehead also believed that lack of rational credibility is especially the case with respect to many traditional religious beliefs. "Religion is tending to degenerate into a decent formula wherewith to embellish a comfortable life" (188). But he also claimed that the remedy for the ills of contemporary Christian systematic theology is at hand: namely, to adopt something like the empirically oriented methodology of contemporary natural science in doing systematic theology:

Religion will not regain its old power until it can face change in the same spirit as does science. Its principles may be eternal, but the expression of those principles requires continual development. This evolution is in the main a disengagement of its own proper ideas from the adventitious notions which have crept into it by reason of the expression of its own ideas in terms of the imaginative picture of the world entertained in previous ages. Such

a release of religion from the bonds of imperfect science is all to the good.  
(189)

Christian systematic theology, in other words, is currently in a state of decline because it is too closely associated with an outdated worldview.<sup>2</sup>

#### A LOOK BACK AT A COMPLICATED HISTORY

Granville Henry, retired Professor of Mathematics and Philosophy at Claremont McKenna College in Southern California, came to much the same conclusion as Whitehead in a book on the history of relations between religion and science in 1998. In the early chapters, he proposes three theses that in his mind set forth the historically complex relation between religion and science:

- (1) Christians normally accept good science.
- (2) Conflict between science and religion occurs when religion, after accepting a given understanding of science into its theology, is challenged in its traditional truth-claims by a new and different science.
- (3) The new science is necessarily cloaked in philosophical concepts that can positively influence religion if properly understood and accepted (Henry 1998, 21, 28, 31).

With respect to the first thesis, Henry points to the way in which early Greek mathematicians like Anaximander (c. 610–c. 546 BCE) and apparently some of the Biblical writers thought that the Earth was flat (1998, 18–19). Yet, a later Greek mathematician Eratosthenes (276–194 BCE) used careful empirical observation to argue that the Earth is not flat but curved, a sphere (Henry 1998, 20–21). Since the theory of Eratosthenes was subsequently confirmed by the voyages of discovery of Christopher Columbus and others in the early modern era of Western history, subsequent Biblical scholars almost universally claimed that Biblical references to “the four corners of the Earth” are simply figures of speech, not meant to be taken literally. Thus, argues Henry, Christians implicitly accept good science and find a way to work it into their own Biblically based understanding of the God–world relationship.

By way of confirmation for his second thesis, Henry reviews the historical controversy between proponents of heliocentrism and advocates of geocentrism in the ancient world. Aristarchus (c. 310–c. 230 BCE) believed that the Earth revolved around the Sun and Archimedes (c. 287–c. 212 BCE) contended that the Earth is the center of the universe (Henry 1998, 24–25). Since the mathematical arguments of Archimedes were considered superior to those of Aristarchus, an Earth-centered universe became standard scientific belief in the ancient world. Early Christians, accordingly, accommodated their understanding of the God–world

relationship to this scientific belief. For example, “they used it to proclaim the location of heaven (with God beyond the outer sphere of the stars) and hell (in the center of the Earth). They also discovered that the Bible, which appears to claim that the Earth does not move, confirmed the geocentric position” (27). In the early modern period, of course, first Copernicus on the basis of a new mathematical theory and then Galileo on the basis of new empirical evidence argued that Aristarchus’ heliocentric theory was instead correct. This initially caused an uproar in theological circles (both Lutheran and Roman Catholic) because it seemed to challenge Biblically based divine revelation. Yet, over time, heliocentrism was accepted by virtually all Christian denominations. The initial reluctance of Christian theologians to accept heliocentrism only happened because “in that day neither theologians nor scientists had the measurements from good instruments necessary to confirm or disconfirm the Copernican Sun-centered theory with authority” (Henry 1998, 27–28). Hence, concludes Henry, conflict between religion and science only arises when a new and different science arises that even on scientific grounds is still not empirically confirmed and fully established. Accordingly, just as Whitehead suggested in the citation from *Science and the Modern World*, scientists and theologians should refrain from mutual anathemas. The clash between them is a sign that there are wider truths and finer perspectives within which a reconciliation of a deeper religion and a more subtle science will be found.

#### A NEW APPROACH TO RELATIONS BETWEEN RELIGION AND SCIENCE

Yet, such a reconciliation of religion and science will not take place apart from better recognition of the way that the two disciplines can in fact complement one another in the search for truth and objectivity. Scientists, for example, tend to be more experimental in their fashioning of new hypotheses than theologians. They uncover new empirical data, try out various hypotheses in explanation of the data, eventually settle on one and make it available to their peers for comment and critique. Yet, they do not normally ask themselves about the deeper philosophical presuppositions of their theory, the underlying worldview therein implied, unless as in quantum mechanics the contrast with common sense experience is impossible to ignore. Theologians, on the contrary, being engaged from the start in an understanding of the God–world relationship that is partly grounded in philosophical reflection and partly based on select texts from Sacred Scripture, are inevitably more involved in thinking about the philosophical implications of their theological positions. So, in principle, they could be of considerable assistance to natural scientists in thinking through the deeper philosophical assumptions of new scientific theories.

But Christian theologians, out of respect for tradition and the teaching authority of the Church, often remain committed to a philosophical worldview that scientists are inclined to reject as out of date because it is inconsistent with their more empirically grounded scientific hypotheses. Scientists, for example, in their explanations of the emergence of life from nonlife and of self-consciousness from the neural activity of the brain tend to proceed from the bottom up rather than from the top down in their explanations of how higher forms of life are emergent out of lower order forms of life. That is, in their view, the energy or causal efficacy of an organism arises from the ongoing interaction of its material components (e.g., atoms as the components of molecules; molecules as constituents of cells), not from an immaterial form or governing principle that is introduced into the mix of material components by some outside source (God in the case of living things; human beings in the case of inanimate things). Hence, contemporary philosophers of science like Terrence Deacon tend to reject an Aristotelian substance-accident ontology *tout court* because it impedes further scientific research: “Being alive does not merely consist in being composed in a particular way. It consists in *changing* in a particular way” (Deacon 2012, 175).

Admittedly, many contemporary theologians likewise concede that the classical metaphysics of being that was set forth by Aristotle and then further developed by Aquinas and others in the scholastic tradition does not fit well with the evolutionary approach to reality advocated by the vast majority of contemporary natural scientists. But they do not want to surrender allegiance to the worldview in which much of their theology is still grounded. Hence, these Christian systematic theologians appeal to a more scripturally based understanding of the God–world relationship even though that appeal to the language of Scripture is sometimes at odds with the philosophical principles of Aristotelian-Thomistic metaphysics. An example of what I mean here is the Christian belief, arguable from Scripture, that God suffers with human beings and all God’s creatures in their trials and tribulations. This belief, however, is logically inconsistent with Aquinas’s claim that God is immutable and thus incapable of being personally affected by the sufferings of creatures (Aquinas 1951: I, Q. 9, art. 1). In Aquinas’s view, God shows mercy to creatures in pain; but God’s mercy is purely dispassionate, grounded in God’s own goodness, not in deep personal feeling for the creature (I, Q. 21, art. 3).

Jürgen Moltmann in his book *The Crucified God* pointed to the importance of the suffering and death of Jesus on the cross for a deeper understanding of the God–world relationship (Moltmann 1974, 1–6). But Moltmann himself found inspiration for his thinking here not in the theology of Aquinas but in the writings of the twentieth-century Jewish philosopher Abraham Heschel on the *pathos* of God, “a divine suffering of evil . . . He [God] suffers in his passion for his people” (272). Moltmann,

accordingly, is calling for an understanding of the God–world relationship that is not grounded in the classical distinction between the primary causality of God and the secondary causality of creatures in the writings of Thomas Aquinas and other like-minded theologians according to which the free decisions of human beings are strictly subordinate to the achievement of a predetermined divine plan (Aquinas 1951: I, Q. 22, art. 3). That is, human beings exercise causality in their own right but only as executors of the divine plan for the whole of creation (Q. 22, art. 3, *ad 2*). Instead, Moltmann is calling for a reciprocal or intersubjective understanding of the God–world relationship: “Love is the source and the basis of the possibility of the wrath of God. The opposite of love is not wrath, but indifference. Indifference toward justice and injustice would be a retreat on the part of God from the covenant. But his wrath is an expression of his abiding interest in man” (Moltmann 1974, 272).

Some contemporary neo-Thomistic thinkers likewise use the language of intersubjectivity (reciprocal causal relations between God and creatures) in their efforts to incorporate evolutionary theory into the framework of classical metaphysics. Denis Edwards, for example, in his book *How God Acts* claims that “it is God’s self-bestowal that enables and empowers creaturely self-transcendence” (Edwards 2010, 43). But in human intersubjective relations, to enable or empower another human being to make a significant choice is not to dictate what that choice will be. Otherwise, one is equivalently overpowering rather than empowering the free choice of the other party. Admittedly, as noted above, within the parameters of Aristotelian metaphysics causal activity is unilateral rather than bilateral or reciprocal. Edwards, however, appeals here to the Christian doctrine of the Incarnation according to which Jesus Christ simultaneously exists “in two natures, unconfused, unchangeable, undivided and inseparable” (Rahner 1969, 158 [n. 302]). The Divine Word freely gives of “Himself” to Jesus and by extension to the whole of creation, and Jesus together with the rest of creation freely accepts this divine self-bestowal (Edwards 2010, 44–45). Yet, upon closer examination, Edwards’s argument here for a reciprocal relation between God and the world of creation is based on his personal belief rather than on philosophical argument. For, according to Aquinas, the Divine Word unites itself to the human nature of Jesus, but the human nature of Jesus does not actively unite itself to the Divine Word (Aquinas 1951: III, Q. 2, art. 2, *ad 1*). The Divine Word uses the humanity of Jesus as a divinely chosen instrument to accomplish the divine plan for the salvation of the world. Presumably what God has in mind with this divine plan is altogether good and praiseworthy, but Jesus in his humanity and all other creatures are executors, not codeterminants, of that plan.

Another option open to Christian theologians who are looking for a *rapprochement* between a classical Thomistic and an evolutionary worldview is to shift one’s starting point in philosophical reflection from ontology to

philosophical anthropology, that is, from a focus on the objective meaning of Being to a focus on the subjective awareness of human beings. Perhaps the most prominent proponent of this form of neo-Thomism in the second half of the twentieth century was Karl Rahner. A move in that direction had already been made, of course, by Pierre Rousselot (1935) and Joseph Maréchal (1964), both of whom presupposed that God is experienced and implicitly known in every act of human cognition. But Rahner in my judgment was more heavily influenced by the phenomenological approach to reality of Martin Heidegger in *Being and Time*. Heidegger claimed that Being is continually coming into existence everywhere in this world but especially in *Dasein*, that is, Human Being or Being-in-the-World (Heidegger 1962, 107). Rahner instead claimed that God is invisibly present as mystery to human beings in and through their experience of the surrounding world as itself an ever-receding horizon in their quest for self-transcendence (Rahner 1978, 51–55).

That is, “man is and remains a transcendent being, that is, he is that existent to whom the silent and uncontrollable infinity of reality is always present. This makes man totally open to this mystery and precisely in this way he becomes conscious of himself as person and as subject” (Rahner 1978, 35). In this experience of God as infinity, God is no longer an object of thought, for example, the transcendent ground of being. Rather, in the experience of infinity, one experiences God as Person, a transcendent subject of experience akin to oneself as a finite subject of experience (87–89). Rahner seems to have in mind here an intersubjective relation between the human person and God as Transcendent Person that is akin to Martin Buber’s understanding of an I-Thou moment of experience between two human beings in which the experience is transformative for both parties: “I require a You to become; becoming I, I say You” (Buber 1970, 21). But within the logical parameters of Thomistic metaphysics is this really possible? How can God be transformed in and through relationship with a human being if God is the Pure Act of Being and thus incapable of transformation, that is, a transition from potentiality to actuality in terms of God’s own self-actualization? Even with respect to Aquinas’s understanding of the three divine persons as “subsistent relations,” there is logically no possibility of change or development of the persons vis-à-vis one another since a *subsistent* relation is identified with the fullness of the divine being and thus is incapable of change or development (Aquinas 1951: I, Q. 29, art. 4).

Hence, Rahner’s shift from an ontology grounded in unchanging principles of being to a contemporary philosophical anthropology grounded in an evolutionary understanding of human subjectivity as an ongoing quest for self-transcendence cannot in my judgment be carried out with full logical consistency within the parameters of classical Aristotelian-Thomistic metaphysics. Many students of Rahner’s thought and others in the neo-Thomistic tradition, however, would disagree. Anthony Godziewa,

for example, in a recent book *A Theology of the Presence and Absence of God*, argues that “human experience by its very nature is open to infinite transcendence and participates in a dynamic movement toward God that can be more fully articulated through a faith-commitment to God’s further self-revelation” (Godzieba 2018, 104). In this way, natural theology and revealed theology, that is, theology grounded in Sacred Scripture, complement one another. Natural theology provides the rational foundation for the faith-based assertions set forth in Christian systematic theology.

But critically minded readers of Godzieba’s book may well call into question his presupposition that the desire for and actual experience of transcendence in human cognition is a sure sign of the presence of God. Natural and social scientists, given their commitment to methodological naturalism, that is, the explanation of physical reality in terms of natural causes and effects, could instead claim that the goal of the human quest for self-transcendence can likewise be found elsewhere, namely, with success in life in terms of money, power, prestige, and so on. Furthermore Jean Paul Sartre in his book *Being and Nothingness* claimed that the human desire for self-transcendence is an instance of *mauvaise foi* (bad faith), that is, a failed attempt to be other than what one actually is (Sartre 1992, 86–119). My comments here are not intended to disprove Godzieba’s thesis that the implicit presence of God is to be found in the human desire for self-transcendence but only to remind Godzieba and other neo-Thomists that human experience of God and of the overall God–world relationship is beyond empirical verification and thus open to rival interpretations. Scientific hypotheses, of course, are likewise implicit faith claims and thus only provisionally true, barring strong empirical evidence to the contrary. But scientists admit the provisional status of their hypotheses, whereas Christian theologians all too often maintain that their Christian beliefs are based on indubitable first principles and/or universal human experience.

#### THE NEED FOR A MORE COMPREHENSIVE WORLDVIEW

Must one admit then that the language and philosophical presuppositions of Christian systematic theology are unavoidably at odds with the language and empirically oriented presuppositions of contemporary natural science? Here in my view is where Granville Henry’s third thesis for the relation between religion and science should be borne in mind: any new science is necessarily cloaked in philosophical concepts that, if properly understood, can influence religion positively. Stuart Kauffman, Terrence Deacon, and other contemporary philosophers of science, for example, explain the gradual evolution of life from nonlife and the evolution of mind from neural activity in the brain through a progression of hierarchically ordered and dynamically interrelated systems (Kauffman 1995, 3–30; Deacon 2012, 143–81, esp. 175–81). That is, the dynamic of evolution is not based



on ongoing interaction between individual entities in terms of traditional cause–effect relations (as in classical metaphysics). Rather, it is based on reciprocal causal relations between organized systems of individual entities. To be specific, thermodynamic systems with low levels of organization and internal complexity tend to interact and indirectly bring into existence a morphodynamic system with a greater level of self-organization and internal complexity. Two or more morphodynamic systems in dynamic interaction sometimes result in a teleodynamic system with a level of complexity and internal complexity that over time allows for the emergence of sentient and rational levels of life (Deacon 2012, 206–325).

At the same time these natural scientists do not offer a philosophical explanation for how life can thus be emergent from nonliving components, and how self-awareness can be the outcome of neuronal activity in the brain. Kauffman, for example, simply comments, “life is a natural property of complex chemical systems, that when the number of different kinds of molecules in a chemical soup passes a certain threshold, a self-sustaining network of reactions—an autocatalytic metabolism—will suddenly appear” (Kauffman 1995, 47). Deacon recognizes that his systems-oriented approach to the emergence of life from nonliving components dramatically differs from the understanding of physical reality in terms of matter and form in Aristotelian metaphysics (Deacon 2012, 34–35, 44–45). He replaces the Aristotelian notion of a substantial form or immaterial principle of existence and activity within individual entities with the notion of constraint as operative in the ongoing relation between rival systems of individual entities (192). That is, higher order systems within physical reality are more complexly organized than their constituent subsystems and thus are inevitably more constrained in their customary mode of operation. Deacon illustrates what he means here by making reference to the notion of habit in the philosophy of Charles Sanders Peirce: “habits tend to beget habits” (Hartshorne and Weiss 1935, VI:4). But how can inanimate entities like atoms and molecules form habits? Habits would seem to involve some form of subjectivity whereby the entity instinctively responds to what works and does not work in dealing with its physical environment (Conway Morris 2015, 3–8). But Deacon excludes any form of internal self-organization from his philosophical explanation of morphodynamic systems even as he also claims that teleodynamic systems that exhibit ever-increasing levels of self-organization are nevertheless emergent from non-intentional and deterministic morphodynamic systems (237–38; 289).

Christian systematic theologians could effectively challenge that deterministic approach to the emergence of life from nonlife if they had at hand their own version of a systems-oriented understanding of physical reality in which the components of systems were not inanimate entities (atoms and molecules) but instead entities endowed with some measure of subjectivity and thus able to engage in active communication with one another.

Moreover, the Danish philosopher of science Jesper Hoffmeyer has already laid the groundwork for that claim by Christian systematic theologians. That is, in his book, *Biosemiotics: An Investigation into the Signs of Life and the Life of Signs*, Hoffmeyer argues that information is conventionally traded between physical entities by way of signs that have to be interpreted in order to be understood (Hoffmeyer 1991, 3–5) but he then further claims that trading of information exists not only among human beings and higher order animal species but also exists even at the level of molecules (31–37, 195–97). Hoffmeyer, however, does not extend to atoms the same ability to trade information with one another by way of signs. But then how is one to account for the spontaneity needed to interpret signs from the environment if atoms, the internal constituents of molecules, are lifeless and inert? Furthermore, as Jason Brown, retired professor of neurology at New York University, points out in a recent article on the act of cognition, “[e]very act, object, and utterance has a brief diachronic history in a continuous sheet of mentation from mind-internal to mind-external. Objects develop as endogenous images that are constrained or sculpted by sensibility to model the external world” (Brown 2018, 163). Yet, if what human beings see in an act of cognition is a model of some physical entity but not the entity itself as an extramental reality, can Deacon, Kauffman, and others in the life sciences be sure that the entity in question is inert and unchanging? Changes may be taking place within the entity but these changes may be too subtle or short-lived to affect the current mental model for that entity (Brown 2018, 170–71).

Yet, to follow up on these new proposals coming from the natural sciences, Christian systematic theologians would have to rethink the traditional God–world relationship in terms of reciprocal or intersubjective relations between God and creatures and reciprocal relations of creatures with one another. This move, of course, would then put these same theologians at odds with other Christian philosophers and theologians who continue to uphold strictly unilateral cause–effect relations between God and creatures and then between creatures in their relations with one another. Hence, they would have to formulate a new Christian worldview, clearly a formidable task involving what some could see as posing many risks to the integrity of Church belief and practice.

Yet, Pope Francis in *Laudato si'*, his encyclical letter on the environmental crisis and the Christian response to it, seems to have taken that risk. He makes frequent reference to the systems (economic, political, social, and cultural) that exercise great influence both positively and negatively on the thinking of human beings in today's world (Pope Francis 2015, 49–66). Admittedly, Francis was not writing here as a professional economist or environmentalist. The great bulk of his references in the encyclical, for example, are to previous Church pronouncements issued by his predecessors as Pope or by episcopal conferences in various parts of the world. But he did venture into a new line of thought in which the focus of attention

was no longer on the sins of individual human beings in dealing with one another but on the ill effects of economic, political, and social systems that have been exploited by a minority group to the great disadvantage of the majority in contemporary society. In that way, he recognized that one cannot solve the current environmental crisis by simply appealing to people to reform their personal lives. Political, economic, and cultural systems are changed only by collective action on the part of a great number of individuals with very clear goals and values as to what to do next.

So, while Pope Francis could have been widely criticized by the scientific community as a rank amateur in issues well beyond his competence as pastor and spiritual leader, in fact his encyclical was warmly received by most environmental scientists (e.g., *Nature* 522 [June 25, 2015], 391). As the well-known environmentalist, Bill McKibben, noted in a recent commentary on the encyclical, “[t]he empirical data about climate change make it clear that the moment is ripe for this encyclical. The long line of brown-robed gurus, of whom Francis is the latest, now marches next to scientists in lab coats; instead of scriptures, the physicists and chemists clutch the latest printout from their computer models, but the two ways of knowing seem to be converging on the same point” (McKibben 2015, 8). Thus McKibben concedes that further progress in science and technology cannot alone solve all environmental issues. “Pope Francis, in a moment of great crisis, speaks instead to who we could be. As the data suggest, this may be the only option we have left” (9).

Thus, as McKibben sees it, the Church has something of value to contribute to the scientific debate about ways to deal with environmental issues. The Church can call attention to deeper religious and ethical issues concerning what human beings can and should be that are outside the range of scientific inquiry into what is and is not empirically possible. Furthermore, there are resources within the Christian tradition that can be called upon by systematic theologians to support their claims in these matters. Beginning with the encyclical letter *Rerum Novarum* of Pope Leo XIII in 1891, there have appeared an impressive list of Papal documents addressing the complex issue of the common good and the rights of minority groups within contemporary Western society—for example, Pius XI’s *Quadragesimo Anno* in 1931; John XXIII’s *Mater et Magister* in 1961; John Paul II’s *Centesimus Annus* in 1991; Pope Francis’s *Laudato si’* in 2015 (O’Brien and Shannon 2016). Likewise, Gustavo Gutiérrez’s *A Theology of Liberation* that was designed to assist peasants in Latin America to form “base Christian communities” for reform of the social order has had significant impact on the origin and growth of black theology, feminist theology, gay and lesbian theologies, and so on in the United States and Canada (Gutiérrez 1973). Furthermore, in Protestant circles Walter Rauschenbusch and others have called attention to the way that Jesus in the Synoptic Gospels was focused at least as much on reform of the social

order of his day as on the need for individuals to repent of their sins and accept God's forgiveness (Rauschenbusch 1917). So there is ample background information for Christian systematic theologians to use in putting together a more socially conscious systems-oriented approach to physical reality and the God relationship.

Following suit upon these earlier initiatives, Christian systematic theologians could in this way be fulfilling what Granville Henry had in mind with his third thesis for more productive religion-and-science dialogue, namely, that theologians think through the philosophical principles that are emergent out of the results of new scientific research and publication and then use them in creative ways to make clear the long-term religious and ethical implications of the new scientific approach to reality (Henry 1998, 31). For, as Alister McGrath comments, "[w]e have to use a variety of research methods to do justice to the important questions of life . . . . Insisting that we use only scientific methods, forms and categories confines us to a narrow world that excludes meaning and value, not because they are *absent* but because this research method *prevents them from being seen*" (McGrath 2017, 16). Contemporary human beings need a bigger picture of reality "that does more than simply create space for science and theology but allows the nature, limits, and benefits of their interaction to be grasped" (3). This article only provides a preliminary sketch of what can and should be done to give contemporary human beings a new sense of the meaning and value of their lives.

## NOTES

1. Whitehead clearly had in mind Western Christianity and modern natural science when he wrote *Science and the Modern World* (Whitehead 1967, 1). In this article, I delimit the term "Western Christianity" to mean "Christian systematic theology." Systematic theology, of course, is only one of several alternatives for the explanation of the Christian belief system: for example, scriptural theology, focused on the explanation of key texts within the Hebrew and Christian Scriptures (Old and New Testaments), historical theology dealing with the gradual development of the Christian belief system, moral theology addressing ethical issues pertinent to that same doctrinal tradition. Systematic theology focuses on the philosophical presuppositions of the Christian belief system; it thus finds itself either in harmony with or in conflict with the underlying philosophical presuppositions of contemporary natural science.

2. This understanding of the relation between religion and science, of course, was also in the mind of Immanuel Kant in writing *The Critique of Pure Reason* and of the German idealists, notably Schelling and Hegel, in their dialectical approach not only to human thought processes but also to the workings of physical reality as a whole. Subsequent to the publication of *Science and the Modern World*, other philosophers and theologians have also embraced the idea of using the methodology of natural science to support Christian systematic theology: for example, Wolfhart Pannenberg (1976), Nancey Murphy and George F. R. Ellis (1996), Robert John Russell (2008), and Denis Edwards (2010).

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