REVIEW ARTICLE: ALISTER E. MCGRATH'S A SCIENTIFIC THEOLOGY

McGrath, Alister E. A Scientific Theology: Nature, Reality, Theory, 3 vols. Grand Rapids: Eerdmans, 2001-2003. 325, 343, 340 pp. Hardcover, \$50.00 per volume.

_____, The Science of God: An Introduction to Scientific Theology. Grand Rapids: Eerdmans, 2004, 271 pp. Paper, \$25.00.

Introduction

While working at the University of Utrecht on a European Molecular Biology Organization fellowship in 1976, Alister E. McGrath conceived of the idea to "explore the relation between Christian theology and the natural sciences, using philosophy and history as dialogue partners" (1:xi). This project would "be grounded in and faithful to the Christian tradition, yet open to the insights of the sciences" (ibid.). McGrath notes that this initiative took "twenty years to follow through" (ibid.). The wait has been worth the effort: McGrath's contribution to Christian theological method is easily among the best works on the development of a theological system in contemporary evangelical circles.

McGrath's path to scientific-theological methodology is interdisciplinary. Holding degrees in chemistry (bachelor's, Oxford), molecular biology (doctorate, Oxford, post-doctorate fellowship, Utrecht; post-doctorate advanced degree, Oxford), and theology (bachelor's, Oxford; doctorate, Cambridge), McGrath brings depth to the often-misunderstood dialogue between the natural sciences and Christian theology. Coming from a background of atheism, his encounter with Christianity is not simply intellectual. He reports that he is always learning, ever willing to build on his current knowledge.

A Scientific Theology ultimately falls within the genre of thought literature most commonly found within nineteenth- and twentieth-century German scholarly literature. Although on the surface, McGrath's approach is historical theology, history becomes a mediating tool in which McGrath feels his way through layers of thought. Often, as in the case of his pattern of movement from Thomas Aquinas to Karl Barth to T. F. Torrance in volume 1, Nature, McGrath seeks a trajectory of doctrinal development and justification for theological theory. As in the style of the German philosopher Martin Heidegger, reading the entire piece is necessary in order to see that McGrath is often simultaneously endorsing and rejecting those whom he evaluates, rather than simply relating a series of historical narratives. Unlike Heidegger, however, McGrath not only carries out a thought experiment, but does so through the medium of historical narrative. The end product is not, however, simply a flight through various theories and systems of thought, but rather

is a thoughtful response to protracted periods of reflection that are grounded on a deep Christian faith. McGrath may have, admittedly, been drawn to study at Oxford because "it offered the possibility of a hugely stimulating intellectual environment in which to consolidate my atheistic views" (1:xiii), but his return to Oxford as a professor of Christian theology has been anything but atheistic: his discovery of the God who creates, coupled with his advanced understanding of the particular sciences, provides a fresh look at the dialogue between science and religion.

Overview of A Scientific Theology and The Science of God

The three-volume A Scientific Theology begins with a basic discussion of prolegomena, followed by extensive discussions of the development of definitions of "nature" (vol. 1), "reality" (vol. 2), and "theory" (vol. 3). The Science of God: An Introduction to Scientific Theology serves two basic purposes: to introduce the reader to the three-volume series as a type of prolegomena, and to provide a less scholarly and more concise summary of the larger work. McGrath's stated purpose for the overall project, which he refers to as A Scientific Theology, is "to examine, critically yet appreciatively, the way in which the working assumptions and methods of Christian theology and the natural sciences interact with and illuminate each other, and allow each other's distinctive characteristics to be appreciated, as an interesting means to the greater end of achieving at least a partial synthesis of their insights" (1:3).

Volume 1: Nature

In order to clarify his position regarding hermeneutics, McGrath provides a substantial essay discussing the roles of science, theology, and philosophy in the dialogue between science and religion before launching into "a detailed engagement with the concept of 'nature," the definition of which, he believes, "represents a socially mediated construct" (1:3-4). McGrath contends that because the concept "nature" has been socially mediated, there is room for the individual to choose responsibly among possible definitions. McGrath is not intimidated by plurality, but rather firmly believes that truth may be found by earnest seekers of it. The basis for truth, in McGrath's opinion, is one based solidly upon Scripture, which is informed by Christian tradition. He notes: "The roots of a scientific theology are thoroughly evangelical, resting on a deep and passionate conviction that 'theology must be nourished and governed at all points by Holy Scripture, and that it seeks to offer a faithful and coherent account of what it finds there" (Intro.: 14; cf. 1:60ff.). For McGrath, the process of interpretation of Scripture is guided by "the 'great tradition' of Christian theology and in response to the challenges to the Christian faith which are raised by other disciplines—such as the natural sciences" (ibid.). However, before moving into a discussion of his view of nature, he clarifies:

The position adopted in this study is not that the concept 'nature' is totally socially or culturally constructed, but that the notion is partly shaped by socially mediated factors. This process of mediation means that our perception of what 'nature' means—or what it means to be 'natural'—is covertly shaped by a series of influences, which deny us direct access to an allegedly neutral or self-sufficient notion of 'nature' itself. How can nature shape our values and ideas, when that same nature has already been shaped by them? How can we construct a philosophy based on nature, when nature has been constructed by our philosophical ideas?" (1:133).

To avoid a socially mediated relativism, in which the concept 'nature' has no real foundation upon which to build a healthy dialogue between science and theology, McGrath notes that "The Christian theologian will wish to explore another category as a means of reclaiming the concept of 'nature' as an intellectually viable category, while at the same time interpreting it in a Christian manner. The category? Creation" (ibid.).

Volume 2: Reality

In volume 2, Reality, McGrath moves to a discussion of a creation-based reality, providing critiques of anti- and non-realism. Due to his position of critical realism, he defines the role of theology to be "an a posteriori discipline" (1:4). "The key," McGrath contends, "to understanding how the Christian tradition relates to other traditions lies in natural theology" (2:xvi). His appeal to natural theology "allows the Christian tradition to offer an account of why truth, goodness and beauty are pursued in other traditions, and accounts, to a limited yet significant extent, for the specific forms that these take within those traditions" (ibid., xvii).

Building upon his postclassical understanding of a single unified reality, in which reality is stratified across disciplinarian lines (2:195ff.), McGrath proposes that the observable and unobservable universe is best understood when each discipline, working within its own limits, presents its own particular collection of data. This data is then interpreted under the magisterial direction of divine revelation as "God's creation." McGrath is heavily influenced by social scientist Roy Bhaskar's critical realism. Bhaskar contends, and McGrath agrees, that "one assumes at the outset the intelligibility of science (or rather of a few generally recognized scientific activities) and asks explicitly what the world must be like for those activities to be possible" (*The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*, 3d ed. [New York: Routledge, 1998], 8). Thus, while there may be many possible interpretations for data about the observable world, Christian theology necessarily limits probable explanations to those that correspond with divine revelation.

Volume 3: Theory

The discussion of reality leads naturally to McGrath's final thesis in volume 3, Theory, on "the origin, development and reception of such doctrines and

theories, and notes the important parallels between the scientific and theological communities in these important matters" (1:4). McGrath contends that theoretical reflection is necessary and inevitable: "To be human is to long to know more of God and the things of God in this world—in brief, to aspire to theological reflection" (3:65). Thus it is entirely appropriate to create Christian doctrine, even if classical dogmatic Christianity has received a rather tainted reputation. Therefore, in response to critics of formalized Christian doctrine, he proposes that

To demand an 'undogmatic' Christianity often involves confusion over the tone and substance of Christian doctrine. 'Dogmatic' can rightly be understood as meaning 'enclosed within a framework of theoretical or doctrinal beliefs', and in this sense, I must insist, reflects some integral themes of the Christian faith. Yet the term can also bear the meaning of 'uncritical', 'unreflective' or 'authoritarian'—referring, in other words, to the tone or voice in which Christian theological affirmations are made, rather than to their substance. I have no interest in supporting shrill, strident, imperious and overbearing assertions of Christian doctrine, which demand silent unthinking compliance on the part of their audiences, and lead to conflict and tension. Yet I remain convinced that such statements are necessary and legitimate, while insisting that they can and should be stated in a more reflective tone. After all, the purpose of Christian doctrine is partly to inspire awe and worship, not to silence and threaten its audiences (3:60-61).

Ultimately, for McGrath, Christian doctrine is as awe-inspiring as a beautiful Gothic cathedral: "Just as Gothic churches embodied a sense of the spaciousness of heaven, the worship which was enacted within their walls further strengthened the corporate sense of beholding the vision of God.... The evocation of a sense of mystery both affirms the vitality of the vision of God, while at the same time suggesting that there are limits to the extent that any theoretical accounts of such a mystery can hope to represent it" (3:6). However, in spite of the seemingly impossible task of providing some theoretical description of God, McGrath contends that just such a task must be undertaken:

Yet some such theoretical account of this vision of God must be offered. The development of theory is as inevitable as it is legitimate, and must be seen as an exercise of theological responsibility, a call to be answerable for and to the Christian gospel. A church which fails to reflect critically upon its identity and proclamation is ultimately a dead or dying church, which has lost confidence in the regenerative power of its ideas. Yet it must be conceded immediately that, while the living God possesses an ability to excite worship and delight, theories about God often seem to be rather lustreless, plodding and ponderous (3:6-7, emphasis original).

Building upon the approaches to *theoria* by writers such as Heidegger and Jürgen Habermas, McGrath brings to a conclusion his argument for the possibility of a scientific theology, which is delicately balanced upon divine revelation and observed reality. For instance, Heidegger's suggestion that the

Greek word θεωρέω could have been derived originally from the word θέος and ὁράω, "implies that 'theory' was essentially a beholding of the divine—an idea perhaps more naturally expressed in the Latin term complatio" (cited in 3:7; cf. Martin Heidegger, Erläuterungen zu Hölderlin und das Wesen der Dichtung [Frankfurt am Main: Klostermann, 1944], esp. the essay "Hölderlin und das Wesen der Dichtung," 31-45). McGrath notes that Habermas, on the other hand, "sought to reconceive the notion [of theoria] in a purely social context, relocating an ostensibly theological activity within the public discourse of knowledge concerning the universe. The theoris was the representative sent by Greek cities to public celebrations whose function was theoria—that is, to behold what was taking place" (3:7-8). McGrath's goal throughout Reality is to reconcile these two perspectives, by showing the coming together of the human and divine in the process of revelation, as expressed in doctrine. Doctrine is thus built upon divine revelation, but because humanity cannot see the complete scope of reality, doctrine is also at least partially socially constructed.

Having laid a basic foundation for McGrath's work, we will evaluate his proposal.

An Evaluation of McGrath's Proposal in A Scientific Theology

McGrath, as noted above, was deeply influenced in his theological perspectives by a number of individuals, to whom he often returns: Thomas Aquinas, Karl Barth, and T. F. Torrance. While McGrath is certainly influenced by many others, including theologians, such as Jean Calvin, philosophers such as Roy Bhaskar and Martin Heidegger, and scientists, such as Niels Bohr, Louis De Broglie, and Werner Heisenberg, the remainder of this review will especially focus on the primary theological influences of Aquinas, Barth, and Torrance on McGrath, due primarily to space constraints (for further interaction with scientific and philosophical influences on McGrath, see my forthcoming dissertation).

The Aquinian Influence

The goal that McGrath wishes to realize in volume 1, Nature, is to demonstrate the necessity of a natural theology that is built upon Scripture, guided by tradition and observation, and described theoretically. As he lays the foundation of his approach to natural theology, McGrath grapples with Thomas Aquinas's philosophical-theological approaches. Aquinas is neither exclusively philosopher or theologian, but philosopher-theologian (cf. F. C. Copleston, Aquinas: An Introduction to the Life and Work of the Great Medieval Thinker [New York: Penguin, 1991]). In a similar manner, McGrath is both scientist and theologian.

Understanding the dual role carried out by Aquinas and McGrath as, respectively, philosopher-theologian and scientist-theologian is necessary for understanding their approaches to theology. An often-misunderstood point in

current evangelical circles is the miscategorization of natural theology as an element of theology proper. The role of a natural theology is, however, to act as a bridge between philosophy/science and theology. Rather than simply being the result of special revelation, natural theology takes its primary mode of interpretation from theology proper and applies it to the observable universe. thereby, as in the case of McGrath, interpreting nature as "God's creation." Generally, as Copleston notes: "The theologian, who bases his reflection on revelation, naturally starts with God and only afterwards proceeds to a consideration of God's creation. But the philosopher [i.e., natural theologian] proceeds the other way round. He starts with the immediate data of experience. and it is only by reflection on these data that he comes to some knowledge of what, considered in its essence, transcends natural experience. Hence the part of metaphysics which treats of God comes last in order from the philosophical point of view" (Copleston, 56). Thus a natural theologian moves through the realm of the observable, expressed philosophically and/or scientifically, to the realm of the unobservable, expressed theologically. Natural theology, coming at the end of philosophical discourse, provides the impetus for a movement beyond philosophy and science to the realm of theology. McGrath follows a similar trajectory, moving both within the realm of scientific discovery as he views the world as a critical realist who expects to find an objective reality existing beyond himself, and as a Christian theologian, who allows Scripture and Christian tradition to provide the ultimate foundation for the interpretation of nature. Thus Copleston's distinction between revealed theology and nonrevelatory philosophy is crucial: "Christianity is essentially a revealed way of salvation and not an academic philosophical system. It also brings out the fact that there is no revealed philosophy. One philosophy may be more compatible than another with Christianity. . . But in the long run a philosophical system stands or falls on its own intrinsic merits or demerits." To realize this fundamental difference between theology and philosophy will prevent one from treating "any philosophy as being part of the Christian faith," even Thomism and, I might add, McGrathism (Copleston, 58-59). McGrath essentially would agree with Copleston's view, noting that due to its partially socially mediated nature, natural theology and science must therefore be ancillary to Scripture (1:7ff.). Thus natural theology, while not special salvific revelation, functions as a general revelatory tool, pointing the observer beyond the observable universe to its ultimate cause in divine creativity. But, importantly, divine creativity is only understood through that which is directly revealed, i.e., through Scripture.

McGrath, while inspired by Aquinas, differs from him in important ways. For example, Aquinas posits an approach to natural theology that is built upon the notion of principia per se nota ("self-evident principles"). Copleston notes that Aquinas "did not admit any innate ideas or principles. He did, however, admit self-evident propositions which in some sense give information about reality" (Aquinas, 30). McGrath also explicitly rejects the notion of innate principles due

to his belief that they are built solely upon a priori (i.e., preconceived) notions about the world rather than an observed understanding of the world. Such a viewpoint, McGrath contends, forces theological positions upon the world, making the world conform to preconceived notions. To avoid such an approach, McGrath posits a critical-realist perspective that is firmly based upon a posteriori (i.e., observed) conceptions of the world. He notes that "One of the most important working assumptions of the natural sciences is that there exists a reality, independent of the human mind, of which some account may given" (1:71), but this is a reality that is viewed specifically from the perspective of Christian Scripture and tradition (1:135ff.). In order to guard the process of interpretation from imposing a priori presuppositions on a Christian interpretation of nature, McGrath contends that it is necessary to know the limits of each discipline, as well its language, area of described reality, and its intersect with other disciplines. Understanding the role of each discipline in providing a particular view of reality from its own perspective helps to prevent misunderstandings, protecting the integrity of the interpretive process, especially in regard to the ancillary role of science to Scripture and Christian theology. Likewise, the integrity of the scientific procedure is protected from being used for the sole purpose of maintaining a theological position (see esp. 3:77ff.). Social scientist Roy Bhaskar, with whom McGrath finds much agreement in regard to defining reality, warns:

What would [a conflict between the disciplines] show? Merely that one had come up against the limits of a particular scientific form, just as the limits of the possibility of measurement may be given by quantum theory. But that measurement has limits does not mean that nothing can be said a priori about what the world must be like for measurement to be possible within those limits. What it does mean is that there is no way in which philosophy can legislate in advance for the transportation of particular scientific procedures, so that the minor premises of philosophy's arguments may have to be developed afresh in the case of each specific science. Indeed, were philosophy able to anticipate the form of or stipulate criteria ex ante for successful scientific practices, the historic aspirations of [for example,] absolute idealism and post-Cartesian, precritical, rationalism (including empiricism) would stand vindicated. For science would now appear as the simple realization of philosophy or as the automatic product of a practice (or method) authenticated by it (The Possibility of Naturalism, 7, emphasis supplied).

The point that Bhaskar makes, and that McGrath supports, is that each discipline has its place and necessarily unique methodology. For McGrath, however, the interpretation of reality is ultimately subservient to revealed Scripture. What McGrath ultimately hopes to accomplish is to provide a balanced view of natural theology, in which each discipline, working under the purview of Scripture and guided by Christian tradition, contributes its own special knowledge about the observable and unobservable universe. Thus, ultimately, there should not be contention between what Scripture reveals about how the universe is and what science shows it to be.

An important contribution that McGrath makes throughout his volumes is to illustrate the importance of not allowing an intermediate discipline, such as philosophy, to provide a second-hand interpretation of scientific data. Further, he is concerned about the readiness of some to throw out Christian tradition on the assumption that what is the most current theological pronouncement is, therefore, the best theological pronouncement (1:36).

First, the problem of placing undo emphasis upon secondary interpretations of scientific data is demonstrated in a classic example of Werner Heisenberg's uncertainty principle. A hallmark of postmodern thought is the issue of antirealism or relativism. McGrath notes that antirealism "has had a major impact on most aspects of western culture during the late twentieth century. Yet its failings and weaknesses have become increasingly apparent, not least because of its failures in relation to the natural sciences" (2:191). He notes that

The problem, as we have seen, is that the critiques directed by postmodernity against the alleged claims to objectivity of the natural sciences proved embarrassingly self-referential. Most damning of all, postmodernity has signally failed to explain why it is the case that the natural sciences continue to produce useful knowledge. Why do the laws of physics prove resilient to issues of gender, race or social class—to name only the three most obvious factors in a constructivist account? (ibid.).

But where did such antirealism originate from? One leading contribution has been, according to McGrath, the adoption of erroneous understandings of scientific data by philosophers, who have then created concepts of reality, which, in turn, are passed on to society at large and to theology in particular. The result, in regard to Heisenberg's uncertainty principle has been that some "fashionable French intellectuals . . . have altered a fundamental postulate concerning the limitations placed upon our knowledge of the quantum world to a global statement of relativism in all matters of truth, objectivity and judgment" (2:283-284). But is this really the point that Heisenberg was attempting to make in his principle?

The answer is no. In his landmark paper, "Über den anschaulichen Inhalt der quantentheoretischen Kinematik und Mechanik" (Zeitschrift für Physik 43 [1927]: 172-198), Heisenberg laid out the following fundamental principle: "if the position of an electron is determined by irradiation with high energy gamma rays, the electron undergoes a change in its momentum as a consequence of this process of irradiation. As a result, an uncertainty exists concerning both its position and momentum" (2:285). Heisenberg went on to note that "If one wants to be clear about what is meant by the 'position of an object', for example of an electron . . . then one has to specify definite experiments by which the 'position of an electron' can be measured; otherwise this term has no meaning at all" (cited in 2:285; Heisenberg, 172-198). Thus the issue that Heisenberg is addressing is not a global relativism, but rather "the limitations placed upon observation, and hence upon knowledge, by the entities it is proposed to observe. Heisenberg's uncertainty principle represents the

theoretical outcome of the application of the principle that we must encounter reality on its own terms, and accept the limitations which this entails" (ibid.).

The need for allowing the individual disciplines to speak their own language and methodology is crucial. But beyond that, having a clear understanding of what science means before applying it to a worldview is crucial. An entire Western worldview has been posited upon the mistaken notion that the new physics is relativistic. This point leads naturally to McGrath's second concern.

The second concern that McGrath addresses in regard to the development of a natural theology is the readiness of some to throw out theological tradition. McGrath notes that "Many of those theologians who have contributed to the dialogue between the natural sciences and Christian theology have done so on the basis of the assumption that classic Christian theology is faced with serious limitations, which require to be transcended before any meaningful or significant dialogue may take place" (1:37). A restlessness to transcend the past is often at issue. McGrath points to Ian Barbour, who "declines to talk about the 'two natures' or the 'substance' of Christ, preferring to talk about Christ's 'relationship with God'" (1:37), as an example of this trend. The danger of basing one's views upon transient and fashionable themes, political correctness, or cultural issues is that "such transient trends leads to the results of such a dialogue being discredited on account of the outdated theological assumptions which shaped and guided it in the first place—including both the criticisms made of orthodox Christian theology, and the alternative theological stances adopted in its place" (1:38).

Thus a correct understanding of the disciplines and the strata of reality that they portray is crucial for all those engaged in developing a Christian theology. A world that is viewed from a Christian critical-realist perspective will have a specific nature. McGrath cites Eric L. Mascall (1956 Bampton Lectures at Oxford University), who proposes that a world that has been created by God

"will be both contingent and orderly, since it is the work of a God who is both free and rational. It will embody regularities and patterns, since its Creator is rational, but the particular regularities and patterns which it embodies cannot be predicted a priori, since he is free; they can only be discovered by examination. The world of Christian theism will thus be one whose investigation requires the empirical method, that is to say, the method of modern natural science, with its twin techniques of observation and experiment" (McGrath, 1:222; cf. Mascall, Christian Theology and Natural Science: Some Questions on their Relations [London: Longmans, Green & Co, 1956], 94).

Second, McGrath also finds continuity and discontinuity with Aquinas's reliance upon sacred tradition. Whereas Aquinas might have been inclined to see a more direct revelatory line extending from Scripture through classical literature (i.e., Justin Martyr's unintentional Christians) and the Church Fathers, leading to ultimate truth, McGrath is more inclined to also take note of social factors that cause digressions toward and away from truth and which causes

seekers to carefully evaluate the merits of any particular approach. Such a position makes McGrath a child of his own times. Influenced by postmodern approaches in this regard, McGrath is willing to acknowledge a number of different methods of inquiry, but grounds his own understanding upon Christian tradition, thereby willingly limiting possible alternatives. Therefore, in the case of defining "nature," McGrath limits his definition of "nature" to God's "creation."

A final point in which McGrath finds inspiration to journey with and beyond Aquinas is in the area of observation. Aquinas theorizes from within his own context, the Aristotelian/Neo-Platonic/Christian tradition. While Aristotle spoke throughout his works (e.g., Physics, Parts of Animals) of the necessity of personal observation in order to understand the real, Christian tradition had, by Aquinas's day, tended to accept a primarily deductive approach in regard to natural theology. A classic example of allowing theology to dominate observation of the natural world in an unhealthy way is the insistence of maintaining the Ptolemaic interpretation of celestial movements in spite of evidence to the contrary—evidence which extended from classical Greek thought to Copernicus, Galileo and Kepler. While medieval Christian scholars acknowledged interpretations of nature based upon observation, they often accepted interpretations of natural phenomena that were supportive of a prior theological assumptions regardless of what actual observation presented. McGrath, on the other hand, posits the importance of observation in the engagement between science and Christian theology, proposing that theological theories (i.e., doctrines) should not be dependent upon scientific theories, nor should theological theories presuppose the actual realities of nature. Rather, science and theology, each functioning within their own space of reality, work in complementary relationship together. "The real difficulty," McGrath contends, in "engaging in a critical yet appreciative dialogue with the natural sciences" by theologians, "is clarifying how this dialogue can take place without destroying the distinctive character of theology" (Intro, 17). Understanding the distinctive role of each scientific discipline is, therefore, central to McGrath's purpose for A Scientific Theology (ibid., 18).

The Barthian Influence

McGrath notes in his Preface to Nature, that "While I have misgivings about many aspects of [Karl] Barth's theology . . . it is impossible to understate the positive impact which Barth had upon my estimate of, and enthusiasm for, theology as a serious intellectual discipline" (1:xv-xvi). "Above all, I found myself impressed by the intellectual coherence of Barth's vision of 'theological science', and thrilled by the vision Barth offered of a sustained theological engagement with the past" (ibid., xv).

McGrath first encounters Barth in the doctrine of creation. He notes that "Barth's initial position may be regarded as a polemic against any possibility of discovering, discerning or encountering God through any natural resource,

whether this is to be understood in terms of the categories of creation, nature or culture. One of the central themes of Barth's theological enterprise is the elimination of any dependence of theology upon any form of natural mediation—such as human cultures, or natural theology" (1:177). For Barth, there is nothing "intrinsic" to nature that would allow it to serve as a source of divine revelation. Thus the subject of divine revelation lies outside Barth's doctrine of creation (1:178). However, interestingly, "For Barth, creation is the external basis of the covenant, just as the covenant is the internal basis of creation. It is the divine decision to enter into this covenantal relationship that underlies the creation of the world in general, and humanity in particular [cf. Church Dogmatics III/1, 94-95]" (1:180).

McGrath gleans three central insights from Barth's discussion concerning the nature and status of creation, including the ability of creation to reveal God: (1) "The doctrine of creation ex nihilo is seen as undergirding the fact that the entire created order owes its existence and purpose to God. . . . Creation is a direct consequence of the divine decision to create, the divine fiat which is grounded in the freedom and sovereignty of God." (2) Barth rejects any notion of the autonomy of the creation over and against the creator. . . . For Barth, the divine freedom is such that God is free to impose such meaning as God determines upon the creation—and that meaning is to be articulated in terms of a covenant between God and humanity." (3) "It therefore follows that the created order cannot be allowed to possess an ontological or revelatory autonomy—for example, by becoming the basis of an alleged 'revelation' of the nature and purposes of God" (1:180).

While agreeing with Barth, that Barth's doctrine of creation provides a needed corrective "to the quasi-deistical tendencies of many liberal Protestant theologies of the nineteenth and early twentieth centuries" (1:181), McGrath nevertheless finds it necessary to go beyond Barth's position.

As McGrath moves further into his engagement with science and Christian theology, he returns to the impact of human culture on theological development, pointing out that

The appeal to human culture as either a foundation or norm of Christian theology can be argued to lie in the patristic period—for example, in Eusebius of Caesarea's 'imperial theology', which treated the culture of the Roman empire as being in some manner reflective of the divine will or character. The systematic development of the potential of culture as a theological resource is, however, generally regarded as dating from the nineteenth century, particularly through the rise of 'Culture Protestantism'—as the critics of the movement dubbed it (1:255).

Barth, McGrath notes, found liberal Protestant thought abhorrent as he reflected on the possibility of basing Christian theology on a revelation coming from within culture. And it is little wonder that he did so as he viewed the effects of the German Christian Movement, inspired by Adolf Hitler's fascist Nazis. "Might not such an approach lead to someone such as Adolf Hitler becoming authoritative for Christian theology?" (1:255). Thus Barth pushed for

a theology that was Christocentric, having no other source of revelation or authority other than Jesus Christ. In the Barmen Declaration, Barth asserted that "Jesus Christ, as he is attested for us in Holy Scripture, is the one Word of God which we have to hear and which we have to trust and obey in life and in death. We reject the false teaching, that the church could and should acknowledge any other events and powers, figures and truths, as God's revelation, or as a source of its proclamation, apart from or in addition to this one Word of God" ("The Theological Clarification of the Present State of the German Evangelical Churches" [1934], article 1, in Bekenntnisschiften und Kirchenordnungen der nach Gottes Wort reformierten Kirche, ed. W. Niesel [Zurich: Evangelischer Verlag, 1938], 335; cited McGrath 1:255). McGrath notes that "For Barth, a church which failed to define itself in relation to Christ and to judge its cultural context would be judged by and defined with respect to the prevailing culture" (1:255).

While sympathetic to Barth's position on the connection between revelation and nature, especially in light of the period of history in which he wrote, McGrath finds three serious criticisms against Barth's position: "It is seen to rest on inadequate biblical foundations"; "Barth's view on natural theology represents a significant departure from the Reformed tradition which he clearly regards himself as representing"; and "Barth's negative attitude towards natural theology appears to be linked to an indifferent attitude towards the nature sciences, stifling what potentially could be a significant theological exploration and engagement" (1:268).

However, McGrath's harshest criticism of Barth comes in his final synthesis of the Barthian doctrine of creation:

Barth's greatest achievement may well turn out to be the shaping of perceptions of Christian history for those who are too lazy to study it for themselves. It does not seem to have occurred to some of these people that Barth has a theological agenda, and that this agenda shapes his presentation and interpretation of the past. Barth's reluctance to acknowledge that Calvin concedes a natural knowledge of God is not simply a case of a nodding Homer; it is a piece of purposeful theological polemic involving the reinterpretation of the formative phase of the Reformed tradition to suit Barth's agenda" (1:279).

Further, McGrath proposes, Barth's views on creation and natural theology, when studied against the Genevan school of Jean-Alphonse Turrettini (1671-1737), begin to make sense, for it is here that "Barth's polemic against natural theology, both as an autonomous discipline and as an independent means of gaining access to knowledge of God, resonates with the trends at Geneva reflecting the growing impact of the Enlightenment on Reformed theology in general" (ibid.).

Thus McGrath, while inspired by Barth's desire to create a Christocentric theology that is influenced as little as possible by transient and, especially, harmful social and cultural practices, must ultimately move beyond Barth.

The Influence of T. F. Torrance

Probably the single most influential theologian in the formation of McGrath's thought is his mentor, Thomas F. Torrance. Torrance believes that the dangers Barth tried to avoid in regard to a natural theology can be "averted if natural theology is itself seen as a subordinate aspect of revealed theology, legitimated by that revealed theology rather than by natural presuppositions or insights" (1:281). The source of legitimation of natural theology lies, Torrance contends, in divine revelation itself. "Theologia revelata both legitimates theologia naturalis and defines its scope" (1:281; cf. Torrance, "The Problem of Natural Theology in the Thought of Karl Barth," Religious Studies 6 [1970]: 128-129).

McGrath notes that

The doctrine of creation plays an especially important role in Torrance's reflections on the place of a reconstructed natural theology. The doctrine of creation ex nihilo is, for Torrance, the foundation of the idea that the world is contingent, and dependent upon God for its being and order. This allows for the notional separation of natural science and theology, while at the same time insisting that, rightly understood and conceived, the two enterprises can be seen as thoroughly compatible (1:284).

Thus, for Torrance, creation only reveals God "from the standpoint of faith. Nevertheless, to one who has responded to revelation (and thus who recognizes nature as God's creation, rather than an autonomous and self-created entity), the creation now has potential to point to its creator" (1:284). The observer who is aided by divine revelation will, thus, necessarily come to different conclusions about the universe than the so-called "neutral" observer, who sees the world only through a purely naturalistic methodology.

McGrath's work is, thus, firmly founded upon Torrance's methodology. Although influenced by Bhaskar's social-scientific approach in regard to the question of reality (see above), McGrath gains a theological trajectory and purpose from Torrance's method that would not, naturally, be found in Bhaskar's secular explanation. Thus McGrath walks a careful line between the disciplines, thoughtfully choosing a scriptural foundation for his scientific theology.

Conclusion

McGrath's A Scientific Theology makes a number of important contributions to evangelical theology. A Scientific Theology is, as far as I am concerned, one of the most complete thought processes in contemporary evangelicalism on how a theological prolegomena comes into being. McGrath carries the reader along as he thinks through the implications of ascribing to any particular position. Thus McGrath is not simply a historian, relating a series of narratives, but a historical theologian, who uses history as the means of not only connecting his thought to Christian tradition, but for demonstrating the living and progressive nature of that tradition. Christian tradition is not simply a static entity that must be preserved in its exact original form from generation to generation—only

Scripture as the Word of God is worthy of such an honor—but is the continuing and progressive search for the deeper things of God. If McGrath made no other contribution to Christian theological scholarship than this, his efforts would not have been in vain.

McGrath's sense of value in all disciplines, as they are submitted to an ancillary position to Scripture, makes it the responsibility of Christians, whether they are, for example, theologians, scientists, or historians, to preserve the Christian faith. Understanding reality from a uniquely Christian perspective helps to limit the possible definitions that may be given to constructs that are at least, according to McGrath, partially socially mediated. Preserving the discoveries of scientific and theological thought via theoretical (i.e., doctrinal) statements, formulated in the light of Scripture and Christian tradition, helps to ground and preserve Christian thought, giving it a sense of completeness, but yet, at the same time, providing a launching point for even deeper exploration in future generations. Therefore, McGrath views all disciplines as essential, in their own unique ways, to the welfare of Christian thought.

Some minor criticisms are called for. First, volume 2, Reality, was poorly edited, especially for a quality publisher such as Eerdmans. The second chapter of the book needs a thorough going over to clear up numerous spelling errors, although spelling and grammatical errors are found throughout the book. Further, general content editing is needed that would streamline the basic content of the entire book and eliminate unnecessary repetition.

Second, while I understand McGrath's reasons for writing The Science of God, compressing the information into a smaller format for the convenience of the reader does take away from a major contribution of A Scientific Theology. To struggle and think along with McGrath as he works through his problem is as important as the content of his thought. There are precious few theologians who work within thought genre, thereby passing on content, but little "how-to."

McGrath has not finished thinking through all of the implications of A Scientific Theology or a definition of nature as "God's creation." But he promises to keep thinking. Though he is not a biblical scholar in the traditional sense of the word, he is nevertheless committed to the primacy of Scripture. I would like to see him step out of historical theology a bit more and engage even more directly with the text of Scripture, especially since he has a such high view of Scripture. For example, he chose not to enter into the debate on Gen 1–2. While I understand why he might have chosen to do so, perhaps because so much negative theology has emerged around the mechanism of origin that it seriously detracts from (creation) theology, there is nevertheless a wealth of informative details about the creation of the world in these chapters that could only strengthen his position. This is especially true for McGrath because he chooses to see the beauty of creation, the necessity of a natural law that finds its origin in God, and the worth that God places upon human beings as his special creation.

But these are minor criticisms. McGrath is, in a word, amazing: his ability

to discuss a wide range of scholars from a number of disciplines including theology, biblical theology, philosophy, the social sciences, physics, biology, chemistry, and mathematics; his use of English, German, French, Latin, Greek, and Hebrew literature, covering a wide span of history and genre types; his willingness to share his faith and his thought processes—these are worthy of emulation. McGrath tells you what he personally believes; one is not left to read between the lines or guess what his real perspective is. Nor must one sort through a virtual tirade of "righteously" indignant and/or misinformed authorship. While much of evangelicalism seems to be going through a negative-attitude slump, McGrath's ability to find something truly wonderful about Christianity is refreshing.