Science and Religion: antinomy, dependence or coordination?

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n April 1, 1993—April Fools' Day, no less!—the distinguished scientific journal, Nature, censured Cambridge University for accepting a million pounds from the novelist Susan Howatch. The writer had given the money to establish the "Starbridge Lectureship" in theology and natural science. The journal coldly commented that such a conjunction—that of natural science and theology—was absurd and only indicated the shameful length to which British universities would go to attract money from the private sector. The Journal greeted with irony and distance the University's contention that there must be an interaction between theology and science in an effort to obtain "greater understanding of our current existence." Ms. Howatch is simply wrong. It is not the case that scientific conclusions and religious persuasions are, as Ms. Howatch contended, "no longer seen as opposed but complementary, two aspects of one truth." Nonsense, judged the journal. At very best, the inevitable conflict between them forces upon their adherents the supposition of two truths. The only academic justification of such a chair at Cambridge would have been research in the psychology of religious belief. Presumably, the journal was suggesting inquiry into the influences that bring human beings to believe such peculiar things. "What other academic purpose can there be?" concluded the editorial, sounding for all the world like Tertullian as an anti-body: what concourse can there be between the Stoa and the Porch of Solomon, or-perhaps more appositelybetween the Cavendish Laboratories and the King's College Chapel? Professor Wolterstorff has already contrasted the ideal types represented by those who taught and argued in the distinguished "painted porch" of Athens or in colonnaded portico situated along the east side of the Temple enclosure in Jerusalem. Allow me—inspired by this querulous British editorial—to take one instance from such learned and contrasting companies and speak about the relationship between science and religion. I hope to propose three conflicting settlements and argue finally for the third.

antinomies

Americans should not find the strictures of *Nature* so strange. They bespeak a view that was prominent in the United States earlier in this century and continues to inform much of the popular mind regarding the relationship between science and any assertion of the Mystery that God is. One can recall what perhaps the greatest of 20th-century American philosophers, John Dewey, maintained in his Terry Lectures of 1934: "The growth of knowledge and of its methods and tests has been such as to make acceptance of these [religious] beliefs increasingly onerous and even impossible for large numbers of cultivated men and women" (Dewey 30). Any postulation of the existence of "supernatural" realities such as God or even the use of the term "god" with any meaning other than "ideal values" is doomed or dying before the increased hegemony of the scientific method:

[These] new methods of inquiry and reflection have become for the educated man today the final arbiter of all questions of fact, existence, and intellectual assent. Nothing less than a revolution in the "seat of authority" has taken place. . .There is but one sure road of access to truth—the road of patient, cooperative inquiry operating by means of observation, experiment, record and controlled reflection. (31-32)

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essay on
science and religion

describes.

One can find similar statements in Sigmund Freud, Ernest Nagel, or A. J. Ayer—that the growth in the productivity and the self-validation of some form of the scientific method has made it inevitable that the culture will outgrow those religious beliefs that project what is traditionally known as God. If the term "god" is kept—as is the case often in the first and always in the second settlement—its significance is so thoroughly altered that Harry Austryn Wolfson with quiet irony found its proponents "busily engaged in the gentle art of devising deities" (Wolfson 271). Within an intellectual culture given something of its character by scientific sobriety, objectivity, and evidence, religious claims seemed of little cognitive seriousness.

One has only to recall discussions among theoretical physicists early in this century. From the celebrated Solvay Conference of 1927, Werner Heisenberg records a conversation with Wolfgang Pauli and Paul Dirac:

One of us said: "Einstein keeps talking about God: what are we to make of that? It is very difficult to imagine that a scientist like Einstein should have such strong ties with a religious tradition."

"Not so much Einstein as Max Planck," someone objected. "From some of Planck's utterances it would seem that he sees no contradiction between religion and science, indeed that he believes the two are perfectly compatible." (82)

Planck was said to hold this position because of his belief that science deals with objective truth, while religion is concerned with subjective values. Neither Pauli nor Heisenberg will accept this subject/object dichotomy. In a later essay, Heisenberg accepted the question directly from Pauli: "Do you believe in a personal God? I know, of course, how difficult it is to attach a clear meaning to this question, but you can probably appreciate its general purport." Heisenberg answers the question by first redefining the meaning of "God" as "the central order of things or events." He then rephrases the question accordingly: "Can you, or anyone else, reach the central order of things or events, whose existence seems beyond doubt, as directly as you can reach the soul of another human being? I am using the term 'soul' quite deliberately so as not to be misunderstood. If you put your question like that, I would say yes . . . The words "personal God"—like "soul"—refer to the central order, to the "inner core of a being whose outer manifestations may be highly diverse and pass our understanding" (215-16). One can resolve the antimony between religious belief and scientific knowledge by radically redefining and domesticating the reality of God—another instance of the "gentle art of divising deities."

Nature does not rise to the level of sophistication of these conversations, but its conclusion is not that much different. Nor does it differ much from the report emerging recently from the National Academy of Science, as reported by Ernan McMullin. This distinguished body has publicly maintained that religion and science are, in principle, mutually exclusive realms of human thought, and hence of no possible relevance to one another.

science as foundational

Since this myth about the antinomic relationship between science and religion has become so common, there is little need to stay with that assertion here. Rather let us pass on to another, perhaps more recent, development. In the *New York Times Book Review* for February 12, 1989, the distinguished novelist-journalist, Dan Wakefield published a piece engagingly entitled, "And Now, a Word from our Creator." Wakefield traced the remarkable abundance of recent "works in which God—who for so long seemed absent, if not 'dead,' as a subject of concern in serious fiction, as in the culture at large—has returned as a force or a 'character' in the action." In these literary works, "God is not only present . . . but even sometimes has a 'speaking part." Wakefield argues that this presence which God has been accorded in contemporary literature is not only surprising, but significant. It indicates a radical change in the literary and educated culture.

To these literary hierophanies, Wakefield joins those in contemporary physics. "Only a generation ago, we enlightened intellectuals believed science has not only disproved, but replaced God; now science is one of the major factors making the idea of God a serious subject again . . . It is the

scientists who seem to be taking the lead away from the theologians" (1,28-29).

Chet Raymo, a physics professor and popular science writer, advanced a similar thesis in a recent essay: "Scientists are wresting from philosophers and theologians the biggest question of all: why is there something rather than nothing?" Raymo cites as representative the physical chemist, P.W. Atkins' The Creation, Paul Davies' The Cosmic Blueprint: New Discoveries in Nature's Creative Ability to Order the Universe, Robert K. Adair's The Great Design: Particles, Fields and Creation, and Harald Fritzsch's The Creation of Matter: The Universe from Beginning to End. He could have added many others. The novelist, John Updike made this radical redefinition of the relationship between science and religion the context for one of his more recent novels, Roger's Version. Stephen Hawking suggests a coordination between science and philosophy in the attempt to "discover a complete theory," one that will enable human beings to discuss why it is that they and their universe exist. "If we find the answer to that, it would be the ultimate triumph of human reason—for then we would know the mind of God" (175). Whether this deity would deserve the designation "God" in any sense recognized by Christian tradition and theology constitutes a further question. Another example of "the gentle art"?

Perhaps no book embodies this remarkable reversal more influentially or advances its claim more emphatically than *God and the New Physics* by the distinguished English theoretical physicist, Paul Davies. Davies' work is not necessarily the best in the field, but it has assumed an importance that is both symptomatic and influential. It has become paradigmatic. As such, it deserves the attention of theologians.

Davies seizes his turf and stakes his claim with candor: "It may seem bizarre, but in my opinion, science offers a surer path to God than religion." And then, perhaps more modestly: "Right or wrong, the fact that science has actually advanced to the point where what were formerly religious questions can be seriously tackled, itself indicates the far-reaching consequences of the new physics" (ix). Paul Davies accepts something from this current of thought and then counters it. What he accepts is the warning: "No religion that bases its beliefs on demonstrably incorrect assumptions can expect to survive very long" (3). Then how can one be sure of the correctness of one's beliefs? By the use of contemporary science as the foundational or fundamental approach to the reality of God. This is something of the point of the whole book. Where Davies will differ from Dewey or from Freud and even more from Ayer is in this: science does not invalidate all assertions about God. In fact, even more than religion, science can ground the search for a supreme being that can be called "God."

One should contextualize this project with something to which Davies does not advert: it is not quite the novelty that *God and the New Physics* contends. It has been done before. In fact, one can find it thematically throughout the history of physical and cosmological speculations from Plato's *Timaeus*, in Aristotle's *Physics* (with its carry-over into the *Metaphysics*), through the heady days of Boyle and Newton and the physicotheologies they inspired, to the cosmological writings of Alfred North Whitehead. In an extraordinary paragraph in the 28th query at the end of the *Opticks*, for example, Newton proposed a project for mechanics or natural philosophy not unlike that of Davies: "The main Business of natural Philosophy is to argue from Phaenomena without feigning Hypotheses, and to deduce Causes from Effects, till we come to the very first Cause, which certainly is not Mechanical" (369). In the 31st query, he indicates how this natural philosophy would provide the foundations for a moral philosophy that he elsewhere equates with religion. For Davies, then, to propose a god that comes out of physics is part of an honorable and lengthy tradition of wisdom. His project is not new. What is new, as his title indicates, is his physics—although even here one might want to make a few distinctions.

Having isolated the claims and the heritage of Davies' project, it is equally important to note its problems: "For the greater part of human history, men and women have turned to religion not only for moral guidance, but also for answers to the fundamental questions of existence: How was the universe created and how will it end? What is the origin of life and mankind? Only in the last few centuries has science begun to make its own contributions to such issues" (5).

Prescinding from the accuracy of the last remark, one must assess carefully the kind of questions Davies judges to be religiously fundamental. They do not deal with the interpersonal self-disclosure of God that is called "revelation," nor the knowledge or love of God in a community for which such faith and love is definitional; they do not touch upon our relations one to another within that call to love and service to the human race; they say nothing about the finding or the experiencing of God in one's life or in the lives of the gathering of people into community; they do not deal with personal experience or personal relations, with holiness and a commitment to the marginated, etc.—in all of which Christianity and its questions principally consist. Further, to use a different set of coordinates, these questions say nothing about what Baron von Hügel has isolated as two of the three elements of religion: first, the institutional and traditional; second, the affective, experiential, and mystical. Hügel included a third, the speculative and rational dimension of religion, but Davies insistently turns this into the "how" questions of the universe: How was the universe created? How will it end? How did life originate? How did humankind originate?

Catholic theologians would uniformly maintain that such questions belong to the inquiries of the various sciences. Augustine or any number of patristic commentators on Genesis have convincingly indicated that Scripture deals in metaphors, figures of speech, and narratives not to answer the question "how" but to deal with the questions of "what" and "why." But Davies has taken these "how" questions and made them the fundamental problems of religion. It is no great wonder that contemporary science is then expected to answer them and in this way to take the lead in the religious search for God.

Sometimes, however, the "how" question slips over to God, and then the situation gets even more sticky. Davies argues, for example, that God cannot be both timeless and personal because "it is hard to see how a timeless God can act in time" (134). Indeed it is. To know how a thing works, one has to know what it is. To expect to know how God acts in human time and creates in his eternity supposes some grasp of the divine essence. To know the "how" of God's action, one would have to know what God is. Classically Catholic theology, however, has insisted that God is incomprehensible, i.e., inexhaustibly intelligible, beyond definition—and so always disclosed to human beings as infinite mystery. Thomistic theology has insisted that we can only know that God is and what God is not, and that some things can be truly said of God—"Quia de Deo scire non possumus considerare de Deo quomodo sit, sed potius quomodo non sit" (Aquinas13). True assertions can be made about God, but precisely how they are true, how these analogical predicates are realized or reconciled in the divine nature, we do not know. Catholic theology is far more reticent (agnostic or skeptical, if you will) than is Davies.

We know, for example, that God creates, because there are creatures. We really do not know how God "pulls it off." Catholicism has found no great scandal in this admitted ignorance. In quantum mechanics something analogous lies behind the pervasive uncertainty principle in dealing with the subatomic, and Sir Brian Pippard has written that when we try to get behind the big bang and ask why the pistol was fired and what it is that is not the universe but that from which the universe sprang, "we are completely tongue-tied; only verbs without tenses and nouns without extension are permitted, and discourse is limited to mere ejaculation: Mind! Love!" (795). If this is true of the subatomic, how much more should one expect it to be true of human discourse about God?

Such are Davies' project, heritage, and fundamental questions. What are its results? One negative result has been noted already. A more positive example can be taken from chapter five of his book, *God and the New Physics*. Davies contends that "according to the theologians, life is the supreme miracle, and human life represents the crowning achievement of God's cosmic masterpiece" (58). (I must confess, I know of no contemporary Catholic or Protestant theologian—or medieval, for that matter—who holds that life is "the supreme miracle." If that title were given by a theologian to anything, I suspect it would be given, analogically, to the Incarnation. But let us prescind from this for a moment.) Davies proceeds to give a wonderfully lucid summary of contemporary explanations of life, moving from reductionism through vitalism to holism and the emergent

qualities at the collective level of structure. He then suggests that the origin of life is illumined by Prigogine's research on the occurrence of "dissipative structures" and that life could be attributed to Miller-Urey's "primeval or prebiotic soup" and the external influence that would have upset the thermodynamic equilibrium and so occasioned a self-organization of the components that resulted in DNA. Fine. But this is followed by the question, "Does the study of life—its origins and function—yield any evidence for the existence of God?" At best, he answers that it "provides strong evidence for some sort of purpose in the universe." Any statement beyond this would be the return to a "God of the gaps" (70-71).

Davies turns to physics, then, for a clear and illuminating discussion of the fundamental structure of matter (chapters 11-14). He concludes that "perhaps future developments in science will lead to more direct evidence for other universes, but until then the seemingly miraculous concurrence of numerical values that nature has assigned to her fundamental constants must remain the most compelling evidence for an element of cosmic design" (189). But physics cannot carry this any further. Why not? Davies will later contend, "I don't believe that physics can tackle questions about, for example, purpose or morality" (227).

Davies' finding strong evidence of purpose in the biological phenomena and in the cosmological constituents of the universe somewhat parallels the thinking of great theologians. Bonaventure's *Journey of the Mind to God*, for example, opens with this recognition that creatures indicate God's power, wisdom, and goodness, and thus the various sciences can be integrated with theology and serve the mystical ascent. But Bonaventure would never argue from this anything like Davies' claim that "science offers a surer path to God than religion" For Bonaventure, religion has its own evidence in Christ and in religious experience.

a judgment about foundations

What is Davies actually left with? Fascinating hints and suggestions of purpose, but nothing more. Contemporary science finds in the universe "strong evidence for some sort of purpose." Where could one go with this? It seems to me that it might function in two ways: (1) It could offer a harmonious correlation—in service to personal integration—between what one finds in the world through science and what one's religious view encompasses. (2) It could raise the religious question for those whose lives are dedicated to scientific inquiry—a question raised but not answered by physics: Is there, then, really purpose in the universe?

Both of these functions might allow one to argue further that science (like almost every discipline human beings engage in) yields questions with which it can go no further—hints and suggestions of something more to reality which is beyond the methodology of physics and biology, or of literary criticism or history for that matter. In this way it opens the door eventually to some metascience which deals with the hints and issues that it has raised, but with a different methodology. Aristotelian metaphysics—or "theology," as he termed it—was conceived as such a metadiscipline. Perhaps a theology in which philosophy was an integrated, albeit autonomous discipline should attempt something of the same. All of these possibilities will be considered in the final third of this paper. My point in mentioning them here is to point out what is not done in this new scientific functionalism.

This effort to found religion and religious beliefs upon scientific discoveries and processes strikes me as just as benighted as the contrasting dismissal of the religious upon the same evidence. The enthusiasm greeting this remarkable development appears unwarranted. It brackets as of no cognitive cogency such data specific to religion as the experience of the sacred within life and of the absolute claim made by truth upon conscience, the longing for God in love and the lives of holiness that bear witness to the validity of this longing, the encounter with the Gospels and with limit experiences that raise the questions of human meaning, and above all, the personal word addressed to human beings and the transformation of subjectivity by the Spirit of God. Rather it makes biology or physics or any science as such the foundation of religious assertions, the basis of its hesitant inference that there is a "friend behind the phenomena." God has become at best a functioning and

useful hypothesis, as one can find in Descartes, Kant, and even George Steiner. But, as the seventeenth and eighteenth centuries have shown us, it is only a question of time until what is at best provisional hypothesis fades quietly away. As science insists upon its own integrity of methods, these religious assertions become quite literally baseless. God evanesces as the gap God was to fill closes of its own accord. Newton eventually gave way to Diderot.

Even in Davies, what looks like a very strong foundational claim at the beginning of his book actually melts into a much milder assertion towards its end. Why does science offer a surer path than religion in the search for God? Not because it even attempts answers to the questions which lie at the foundation of religion, like the existence of God: "It would be foolish to suppose that the fundamental questions concerning the existence of God, the purpose of the universe or the role of mankind in the natural and supernatural scheme have been answered by these advances [in science]," he finally concludes. It is rather because "science does have something to say about religious matters" (218). And what are those religious matters? The nature of time, the origin of matter and life, causality and determinism.

These refined physical concepts constitute "religious matters," writes Davies, because they form the "very conceptual framework in which the religious question are posed" (218). As a culture changes in its understanding of time and causality and life, it inescapably alters the framework in which the properly religious questions are cast. This seems a much weaker claim than Davies' original one. Parallel to the anthropic principle, one might want to distinguish between a Strong Davies Claim and a Weak Davies Claim. The SDC lodges in such a statement as "Science offers a surer path to God than religion." The WDC would be the more mild: "Science does have something to say about religious matters."

Davies seems here to be making a valid and an important point: human understanding of religious realities—as of all reality—is conditioned by the conceptual structures influentially present in the common culture. These structures are often taken so much for granted that they are not even noticed. There is a constant dialogue in process between (a) human subjectivity, individual or communal, with its prior conceptual content and structures, and (b) that which confronts this subject as the object of inquiry and interpretation. Contemporary hermeneutics has disclosed some of the factors dynamically active in this interchange, and, as I have described elsewhere, the scholastics were aware that "whatever is received, is received according to the mode of the one receiving it" (Buckley, 1979,693).

Human beings of a particular culture think in a certain way, within a characteristic frame of reference or intelligibility that makes some things plausible and others absurd. John Dewey repeatedly made the point that culture is the matrix of credibility. Olympian gods, a flat earth, or the values to be achieved through blood-sacrifice do not obtain much credibility today. Our culture has passed beyond these—so far beyond, that assertions to the contrary would only provoke laughter. So also, touching closer to home, the heliocentric universe and the evolutionary development of all physical reality are part of our intellectual culture; they have altered our understanding of Scripture and of theology—not totally, but perhaps in some places significantly. What Davies urges is that contemporary relativity theory and quantum mechanics will play, or do already play, a similar role. This insight bears crucially upon theology. Christian theology is an attempt to understand what is given to us in the revelation of Christ. Many of the thought-forms, such as those touching upon causality and time, we use to interpret this reality are heavily influenced by our own culture. To understand this fundamental hermeneutical activity becomes critically important if one is to understand how one is understanding the gospel.

relevance: three levels of coordination

If religion, then, is neither to be opposed to science nor to be founded on science, if neither the settlement of Dewey nor that of Davies is adequate, is there anything left for the religious intellect confronting science and religion except the acceptance of the indifference of one to the other and the rejection of any positive connection between Christian revelation and human knowledge?

Perhaps a complicated kind of conversation in which each maintains its own autonomy—its methods and data, its own language and field of experience—and yet stands as complementary to the discoveries and insights of the other. What on earth could that mean? I think it could mean at least three things.

1. Cultural Cooperation. The most immediate and obvious meaning lies with the patterns of cultural cooperation and coherence that the distinguished philosopher of science, Ernan McMullin has remarked:

The human quest for understanding requires us to draw on a diversity of different sources. Science is not merely a means to technical control or accurate prediction; religion is not just a matter of moral action or private converse between the individual and God. Each contributes to our understanding of the complex world in which we are set. The quest for understanding is thus necessarily a collaborative one in which the autonomy of the constituents must be respected." (104)

Science and religion can and do come together to explore subjects of common human interest: pressing issues such as nuclear weaponry discussed for years among the physicists, political scientists and theologians at Berkeley, or the genetic engineering explored at Georgetown and Boston College; or—if one lifts one's vision to a broader subject-matter—more generally, what it means today to be a human being and have a human life as these questions emerge in the general collaboration that builds together the university or the common life of the body politic; or—even more generally—the coming together to obtain what Philippians so generously designated as "whatever is true, whatever is just, whatever is lovely, whatever is gracious" (Phil 4:8). This, for instance is the theme of the 1988 papal letter on the relationship between science and theological reflection.

2. Problematic Situation. Allow me to advance this a step farther, with one preliminary methodological note: The disciplined reflection upon the experience and content of Christian faith or upon the object and content of the Christian religious experience is the function of theology. Christian theology, which is at issue here, insists upon the internal presence of the philosophical disciplines as an essential moment in its own procedure. One cannot "do theology" without "doing philosophy" as a discipline with its own integrity of method and evidence, but coordinated as such a discipline within theology. As Karl Rahner has repeatedly insisted: "We are theoretically, practically and didactically justified in philosophizing here within theology itself" (10). One cannot do Christian theology without philosophy.

Now science, like any human enterprise, can affect such a theology positively in the growth both of its conceptual richness and of the knowledge available for its assimilation. Concepts such as field or energy, vector or organism or evolution and (even) the second law of thermodynamics can and do pass as analogous and heuristic structures into theology. They broaden the possibilities for standard theological reflection by making for a fuller set of terms for common human discourse, without reducing the language and methods of one to the other.

Science also provides an expanding field of facts against which the interpretation of sacred scripture and the assertions of theology must be evaluated. Do theologians have *nothing* to learn about the human as the *imago Dei*, the image of God, from contemporary cosmogenesis, from the evolution of the species, or from theories concerning the fate of the universe for our still very primitive eschatology? There is nothing strange or original about this. If theology is alive, every human project and every academic discipline feed into its content.

On the other hand, does theology offer any comparable service for science, in concepts and facts? Standard histories of science report that certain concepts and some questions first emerged and were pursued in religion or theology before they made their way into science. But that seems to me of secondary importance. A much more significant contribution might be made if theology were to take up some of the hints and suggestions latent or obvious in scientific discoveries and subsume them precisely as *questions*—not as the grounds for religious assertion, but as constituting something of the problematic situation for contemporary theological reflection. Let me give a couple of examples.

If the fundamental constants found in nature in all of their extreme precision and mutual balance catch one up short, and one finds oneself exclaiming like Davies about "the seemingly miraculous concurrence of numerical values that nature has assigned to her fundamental constants" (189), if one finds oneself driven in this way to wonder if purpose or design are actually present in our universe, then a methodological problem emerges—one with several possible, but alternative resolutions: (1) one can insist that the natural sciences are to be pushed to consider questions of this kind of ultimacy, as Isaac Newton or Paul Davies would have it; or (2) one can say question of ultimate purpose and meaning is one that you may not legitimately examine further at all, as with John Dewey or Claude Levi Strauss; or (3) one says this is a very important question, but you cannot examine it further in physics or in biology, but you ought to try some other place, some other disciplined reflection: is there nothing in the whole of religious experience and in the human reflection upon ultimacies that speaks to this?

If, to use another example, both Einstein and Heisenberg assess scientific inquiry as suggesting that there is a fundamental, impersonal order within the world that they can call "god," can or should theologians take that assessment seriously—not as a fact, not as a buttress or foundation for religion, but as a question?" Should they inquire whether there are grounds in their own disciplines for such an assertion, whether such a reality would necessarily be personal in a refined but real use of this word, or even more whether its primary evidence must be personal? Does not "science develop best when its concepts and conclusions are integrated into the broader human culture and its concerns for ultimate meaning and value?"(John Paul II, M 13).

There is nothing novel about this claim that science constitutes part of the problematic situation for theological reflection. Aristotelian physics gave way to metaphysics, which Aristotle actually called "theology," and Alfred North Whitehead brought his mathematical and scientific writings to their organic completion with his inquiry into the relationship between God and the world. Many areas of disciplined human reflection—such as history and literature—yield questions beyond their own internal capacities to resolve, indicating the need for metadisciplines to consider such problems. This movement to another discipline such as theology is not to search for a god of the gaps, nor is it parallel to the Davies' project to use science to provide "a surer path to God." It rather suggests the need for a disciplined inquiry whose problematic area is fed by *all* human projects including science.

3. Mutual Completion. Allow me, finally, to advance this matter one step farther, from a consideration of content—whether concepts or questions—to a more universal consideration of the mind investigating the content. [What follows reflects what Professor Buckley has written in the two citations of 1993. —the Editor] To understand the genius and the unique academic coordination between the religious and the intellectual, one cannot make these great areas of human engagement simply extrinsic to one another, two distinct entities related to one another additionally or influentially. The religious (or its disciplined self-understanding we may call "theology") and the academic are inherently related—not simply extrinsically coordinate, but intrinsically related. How so?

The dynamism characteristic of all inquiry and knowledge—if not inhibited, if allowed its full range and scope—is towards ultimacy, towards that completion in which a fact or a discovery, an issue or its resolution finds place in a universe or the whole of reality that makes final sense. The mind may not reach this, but is it not towards this? This assertion obviously does not suggest that quantum mechanics or geography is religion. But it does mean that any movement towards meaning and truth is inchoatively religious in as much as this care for ultimacies engages the reality characteristically religious. Once one begins on the path of honest inquiry, whether in physics or social science or aesthetics, if one allows the questions to mount cumulatively, one will come to the such questions that engage what is absolute in inquiry. It is no accident, for example, that the physics of Aristotle or Newton or Whitehead led inexorably to the issue of God.

At the same time, the tendency of religious conviction and faith have historically been towards the academic. This obviously does not suggest that all serious religion is scholarship. It does

mean that the dynamism inherent in religious faith—if not inhibited—is towards its own understanding, towards its own self-possession in knowledge, towards its coherence and unity with everything else we know. In the classic phrase of Anselm, faith inevitably does seek understanding. It seems to me no accident that the universities of Europe and the colleges of the American colonies came out of the church.

I am arguing, then, that if permitted their full development, the religious intrinsically involves the academic, and the academic intrinsically involves the religious—granted that this development is de facto always imperfectly realized at best or even seriously frustrated. This inherent unity bespeaks something of the promise of the religious affiliated university that has realized the integration of theology within its *circulus artium*: to allow—if this transpires—the dynamism native to these engagements of the academic and the religious to reach its completion in each other. Rather than truncate the dynamism of knowing through dogmatically interdicting the religious dimension of life or isolating the religious from academic demands and inquiry, such a university has unique resources to allow each its full maturation.

There is, then at Cambridge University a place for the discussion between religion and the natural sciences: one in which they are enabled to collaborate as two components within human culture, as conceptually and prepositionally mutually influential, and perhaps most importantly as the completion of the native promise of either. If this inquiry were to proceed further and deal with the specifically Catholic horizon of faith, the profound sacramental nature of matter would have to be engaged, but that would be the subject of another paper.

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