CONCLUDING REFLECTION

by Arthur Peacocke

LINDON EAVES

It is not often that I have had the privilege of seeing my reflections on the relation of science and theology weighed sympathetically by one who has, as it were, come from a nearby stable and with such similar experience: a scientific career centered on DNA; a growing engagement with (dare I say it?) God, so that reflective theology becomes imperative to one's wholeness as a human being, to the point of ordination to the priesthood; and so, a life of laboratory, of sacrament, and of the Word, even practiced in the same universities. Moreover, I have, no more than he—though his title suggests otherwise—any presumed preference for orthodoxy as such, though I recognize that the pressure of the arguments is more likely to lead in that direction than away, for "orthodoxy" represents the range of opinions (*doxa*) through which the pendulum of theological discourse has most frequently swung *in the past.* Of course, it is this last emphasis that constitutes the challenge to theology from the sciences as they generate new knowledge and perceptions.

However, enthusiasm for the transformation, for example, of biology by the arrival of molecular biology on the scene must not stun our critical faculties, so I turn first to Eaves's second section, "Biology and Human Nature." Again and again I notice in the writings of biologists and geneticists a tendency to personalize DNA and to make it the subject of verbs—as if "DNA" had intentions, thoughts, and purposes, which are, in fact, attributable only to persons.[1] Indeed Eaves's response is not entirely free from this when he speaks of "humans" as "DNA's way of making more DNA" (*can* DNA have a plan?); and of DNA as the "*guidance* system" (my emphasis) of the human "rocket" (my infelicitous word, so he says!)—though the chief culprit is Richard Dawkins when he attributes "selfishness" to genes (=DNA).[2]

After all, DNA is a chemical structure developed in chemical and biological evolutionary history to have an encoding function, but like all other such structures at these levels, it constitutes a kind of

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abstraction downwards from the realities of living organisms, including *Homo sapiens.*[3] Do not mistake me—I *do* think the fine model I possess of DNA represents as closely as is possible the internal spatial relations of the structure it possesses at the atomic level but, in one sense, "DNA" is a construction derived from the process of human abstraction (and extraction) from the totality of a whole organism. Furthermore, *we* know that DNA has that structure and DNA knows nothing. How can DNA itself explain that? Clearly there are operative at the level of human beings functionalities and capacities that go far beyond the ability of DNA to code for protein sequences. The information encoded in DNA from its evolutionary past only enables the human brain to have the (no doubt, limited) *capacity* to think and to use language, to be a person, to engage in personal interactions, in fact to be distinctively human. The DNA story and the genetics themselves do not give any account of the operation of this capability and cannot prescribe the content of the thinking of which it is capable.

The possibility of the system of human-brains-in-human-bodies undergoing a succession of states that is in principle unpredictable has been enhanced by the recent new understanding of the unpredictability of nonlinear dynamic systems of which the neural nets of the human brain are likely to prove to be an instance (for some discussion of this see Peacocke 1990a, 3, and 1991a). Perhaps all this is what Eaves is referring to when he writes of "ecstatic DNA." But why make the noun here *DNA*—why not just *atoms,* or even *quarks* or, more fundamentally, *matter-energy?* For surely the significant point that is really being made by his invention of this phrase is that some of the stuff of the world has become free, self-conscious persons in us. However, DNA is only just one of the means, albeit a crucial one, through which that has occurred.

Hence I resist the apotheosis of DNA—and do not genuflect before my model of it! This does *not* mean that biological insights into human nature and behavior need not be taken seriously by theologians. For example, I cannot but regard much of "original sin" as primarily cultural and as the result of freely willed action of individuals and of society, but I am open to being convinced by the evidence, if forthcoming, that what might previously have been regarded as cultural is, in part at least, genetic in origin (our tendency to favor our genetic kin is clearly such). I agree with Eaves in his article with Lora Gross (1990) that "there is no mind or spirit without matter" and that therefore *biological* death must be reappraised by Christians (indeed by members of all religions postulating any form of life after death). Biological death can no

longer be regarded as the "wages of sin" (Romans 6: 23)—indeed biological death of the individual is the basis of the biological *creativity* that has enabled us to evolve! That classic text in Romans can only now be interpreted to mean something like the death, or the total destruction, of our relation to God consequent upon sin (see the discussion in Peacocke 1991b, 45). Incidentally, apropos orthodoxy, the Christian tradition has never been tied to a doctrine of the natural immortality of the human soul but has affirmed rather the hope of resurrection, not at all the same concept (Peacocke 1985, 154–58).

Such issues raise, of course, the more general question of the relationship between science and theology (Eaves's first section). My main intention in putting theology in the position of, as it were, a constitutional "queen of the sciences" was primarily to protect the concepts, language, and methodology of theology from being unwarrantably and reductively subsumed into anthropology, sociology, biology, the cognitive sciences, or even into genetics. But this defense is not meant to imply any kind of "preemptive strike" on the part of theology, as Eaves fears, for I also think that theology must seriously take account of the world described by the sciences, and that includes new knowledge about any genetic basis for human behavior not previously discovered. Indeed my recent (1990) book, *Theology for a Scientific Age,* has this specific purpose. There is a continuous, mutual modification going on all the time in the meaning to be attributed to the three terms in "nature-humanity-and-God," and there can be no presumption that we know all about God *before* we consider God in relation to the others. Indeed we only know God *in* these relations. So I think there is common ground here between Eaves and myself.

Actually, in that recent book (Peacocke 1990b, 22–23) I also recognized that this way of mine of regarding the relation of theology to other forms of knowledge entails the danger of overstressing the *transcendent* modality of God's relation to all-that-is, so I there also emphasize the perennial need to take account of God's *immanence*—God's presence *to* all-that-is and the existence of all-that-is *in* God. The subject matter of theology is, after all, according to Aquinas, the relation of *all* things to God.[4] In the light of such considerations, I have gone on to suggest that "it may well be that theology should be regarded as an exploration of the ultimate meaning of all levels" (Peacocke 1990b, 23). This brings me nearer to Aquinas—and to Eaves—but we all still have to face the paradox of relating the transcendent and immanent modalities of God's relation to all-that-is. It is this dichotomy that generates the two necessary ways

of relating theology to the sciences.

So, whatever impression I may have given in my earlier writings (and remember the extract printed in this issue is a summary of parts of my Bampton Lectures of *1978*), I think there is less difference between Eaves's and my views in this regard than might appear from this extract. I am more skeptical and less hopeful than he that biology might, as he says, "actually illuminate and resolve crucial theological speculations by providing 'model systems' of a relatively simple kind that focus and address theological issues." For, it has not actually been the case that, even within the sciences themselves, the models in a science concerned with one level of complexity (say, chemistry) have illuminated and resolved crucial speculations in a science concerned with a more complex level (say, physiology or ecology).

Eaves's last comment is on my concept of God. I agree entirely with what he says about the apophatic tradition and not to break "silence prematurely." The phrase "God's action in the real world" appears in the title of my article reproduced in this issue of *Zygon*. It was the usual way of denoting in the 1970s and 1980s the whole problem area of what I, and others, now prefer to denote as that of "God's interaction with the world" (the title of a chapter in my 1990b book). I have always preferred to think of God as creating in and through the processes of nature that the sciences reveal—so that it is true *both,* as Lindon says, that "reality shapes itself" *and* that reality (all-that-is) is held in being and continuously and dynamically given the kind of being it has by God as Creator. God "all the time" gives to all reality that kind of self-creative existence, and thereby *God* creates in and through natural reality.

Much of which, it seems to me, is what Eaves is saying in the first three paragraphs of this third section of his. But I lose him in the subsequent paragraphs. I cannot see how whatever has been, or "is," can in itself be normative and prescriptive of what is "not yet" for freely willing creatures, namely, ourselves. I note that in order to obtain an *ought* out of the *is,* he surreptitiously personalizes nature as an agent by giving the word a capital *N* and then making *Nature* the subject of verbs.

As regards his concluding comments on talking *to* God rather than *about* God, I am not at all surprised that we use metaphors involving personal pronouns. In my perspective, the personal is the most comprehensive, all-embracing level of reality that we encounter in those physical human-brains-in-human-bodies that are, at the same time, persons. So I argue (Peacocke 1990b, *passim*), God must be conceived of as "at least personal"—that is, to use personal language of God

is less misleading than saying nothing. For me God is the ultimate and total "environment" to which we need to adapt for human personhood to flourish as its Creator intended we should.

JAMES NELSON

James Nelson's retrospect on my writings comes from one who is widely read and informed in modern theology over a much greater range than that of the ostensible interface between the sciences and theology. The contribution is greatly welcome on that account alone—apart from the existence of a continuing dialogue between us over the years.

In the introductory section of his reflections, he raises the question of what epistemology I have developed that "allows identification of value connections between [the] disciplines" and later, "how the methods and concepts of various realities refer to what is known." Space forbids a detailed response but, as to epistemology, I consider that the acknowledgment in my thought of epistemological levels, as he succintly outlines (see also Robert Russell's article), in a kind of hierarchy of knowing is itself definitive of the value connections between disciplines. For it recognizes, as he says, that knowledge of "higher" levels in the hierarchy of complexity can be (not *must* be) *sui generis* and nonreducible to that of "lower" levels, the knowledge of which is foundational to the higher. Moreover (Peacocke 1990, 54), there is a downward epistemological movement too—knowledge of higher levels can inform us of the significance in a wider setting of the inevitably more narrowly based knowledge of one particular level (e.g., archetypally, the informational sequence of a DNA molecule is both the "bottom-up" origin of more complex structures and processes and also the "top-down" result of the particular evolutionary history of the organism as a whole (Campbell 1974)).

With respect to ontology, I have expounded (in the first part of my *Intimations of Reality* [Peacocke 1984, chap. 1, and also in my recent book [Peacocke 1990b, 11ff.]) how I think a putative ontological reference in both science and theology can be derived from what is claimed to be known (a putative epistemology) in a chain of "social reference" involving increasing verisimilitude. In doing so, my approach is greatly indebted to that of Janet Soskice (1985), who treats this problem convincingly, in my judgment, with adequate philosophical and literary sophistication—the latter being implicated in any consideration of the *metaphorical* character of both scientific and theological language.

In his introductory remarks, Nelson says that I have not developed

enough the notion of religious experience in relation to claims about God. This is true of my writings hitherto but I hope this deficiency will be corrected in a chapter I already have in draft.[5] Therein I shall analyze how and in what ways God communicates to humanity in and through patterns of events that are entirely "natural" (i.e., no interventions by a *deus ex machina*) but are, nevertheless, what they are because of God's general and *special* providential interaction with the world in a "top-down" manner (Peacocke 1990b, chap. 9). In these patterns of natural events God can communicate to us in a way similar to the way we communicate with each other—that is, through patterns in the natural world detected through our senses and recorded in our brains.

Nelson does, in fact, later refer to my use of the concept of top-down or downward causation as a model for God's total and general interaction with the world that also allows *particular* events or patterns of events to come about through God's intentions—without the scientifically observed regularities at any particular level being abrogated. I agree with him that cognitive psychology provides important clues here (see Peacocke 1990b, 53–55, where I refer back to Campbell [1974] and also to Sperry [1983][6]). I also agree that there may be mileage in the use of top-down causation as a model in a more overtly "spiritual" context (his point 2). I think this may well emerge in my thinking as I take seriously *both* God's acting in a "top-down" way in particular events in the natural, personal, and social worlds *and* that God is thereby actually and continuously communicating to us in the patterns of those events.

This inevitably raises, of course, the perennial problem of holding in one framework of thought the necessary sense both of God's transcendence over and of God's immanence in the world that he is creating. I have in my writings hitherto used the term *pan-en-theism* to denote my attempt to resolve this tension. The definition of this term which Nelson quotes from me is, in fact, that given in the *Oxford Dictionary of the Christian Church* (1983). However, I have gradually realized that this term can be too easily misunderstood—even by those who do not confuse it with *pantheism.* For it can be thought to imply: (*a*) that the world is in some sense a *part* of God, of the same kind of being as God; and/or (*b*) a complete acceptance of Whiteheadian metaphysics and the whole apparatus of process theology. Neither of these options represents my own position, so I now avoid the term (for a fuller discussion, see Peacocke 1990b, 208–9, note 75). However it is labeled, I agree with Nelson that a consequence of this view is that "the divine life is vulnerable to the events of the universe," as he puts it; so I also think, along with many other modern

theologians, that the ancient and venerable doctrine of divine impassibility was a mistake (see Peacocke 1990b, 126–27).

I am particularly grateful to Nelson for drawing attention to the attempted exposition in my 1978 Bampton Lectures of the theme "Evolved Man [humanity] and God Incarnate" (Peacocke 1979, chap. 6). I only hinted then (Peacocke 1979, 243) that recognition of God's activity and action in Jesus the Christ has ontological implications.[7] This certainly needs developing further in relation to classical Christological doctrine. It is worth pointing out in this regard that I did also stress in that earlier treatment that there is a *divine* initiative in the *human* response of Jesus to God his Father—and recognition of this should be linked with the way I have come to conceive that God communicates to humanity in and through the world. So that the "incarnation" involves both a God-inspired movement of a human being (Jesus) towards God and a movement of God in and to that human being; so that both natures are fused in a new, emergent kind of existent ("God incarnate") that has both continuity and discontinuity with what precedes it in the world with respect to its manifestation of the divine.

I thank Nelson for his insightful and supportive remarks, especially in his encouragement to explore more deeply in thought and practice a sacramental perspective on the world.

ROBERT RUSSELL

Finally I come to Robert Russell's measured and sympathetic response to the sometimes complex (and not always consistent?) web of my ideas. He nicely completes the trio of commentators—the first (L.E.) an ordained biologist, the second (J.S.N.) a theologian, and now Russell, the third, an ordained physicist. I have appreciated Russell's shrewd and judicious comments on my work over the years and can now do but scant justice to what he has to say.

In his initial summary of my views, he suggests denoting my philosophical position as that of "emergent materialism." I would not demur from this, provided the word *materialism* is shorn of its widely assumed presuppositions—and I am not at all sure it can be so rescued! Nevertheless, at the twentieth Nobel Conference in 1984, whose theme was "How We Know," I presented a paper (Peacocke 1985) entitled "A Christian 'Materialism'?"—note the quotation marks around the provocative word! I there argued *inter alia* for the psychosomatic unity of the human person as a *Christian* belief, against reductionism (surprise, surprise!), and I approvingly quoted William Temple's dictum that Christianity is the most materialist of all the

great religions.[8] Temple's approach was based not only on his affirmation of the Incarnation but also on his perception of the sciences in the 1930s; my apprehension is similarly based, indebted as it is to Temple, but with an even more acute recognition of how the sciences in the latter part of the twentieth century have demonstrated the potentialities of matter in ways previously undreamed of.[9]

In the philosophical section of Russell's "critical appraisal," he focuses on my interpretation of critical realism and rightly points out the puzzles evoked by the evidence for a nonlocal view of nature that takes quantum holism seriously. Our world is indeed more "fuzzy" than even most (non-quantum-physicist) scientists are inclined to think! But *epistemologically,* at least, above the levels of subatomic physics, we can identify entities, structures, and processes sufficiently localized to have a continuing identity over long enough periods of time for us to take account of them in our exposition of "what is in" and of "what is going on in" the world. So we can with good reason assign to them a provisional ontological status on which to base our ongoing attempts to relate to the world we perceive ourselves as actually living in. For me that is the essence of "realism"—what is real for us is what we know of the world that we have to take account of in our formulating for our limited minds a sufficiently coherent picture to enable us to discern its meaning and purpose and to steer our lives from birth to death. This position is therefore unashamedly and pragmatically anthropocentric, in the sense that it is we as human beings who are trying to make sense of the world we find ourselves living in. It is not absolutist, for it does not suggest that it is a perspective that covers all possible complexes of events, but that it is enough for us to be getting on with as we peer into the darkness and await the resolution of the philosophical puzzles of quantum theory.

In that Nobel Conference paper I asked "What is 'for real'?" (Peacocke 1985, 153–54), and I still prefer to make an intellectually pragmatic response along the lines I have indicated; but I recognize the profound problems generated at the deepest level of inquiry into the nature of matter-energy-space-time. I suppose we will never know what *that* is "in itself," as little as we shall ever know what a person is in a person's own self—and even less what God is in God's own self. Meanwhile "probability is the guide to life," as Joseph Butler said. This does not mean, of course, that we should not attempt to incorporate, best as we may, the insights of quantum theory into the perspectives generated by all the other sciences. Indeed, on my own presuppositions, I would *expect,* as Russell says, that the world will be "far more complex and holistic" when we have

done so. But *that* exploration is still in only a very preliminary stage, considering the current disagreement about the philosophical interpretation of quantum theory (and of cosmology). We must bide our time and get on with what we can, in the knowledge that our well-established evolutionary understanding of the cosmos and of life must eventually be incorporated coherently and consistently into a larger perspective that we hope will be "more complex and holistic."

The issues, which Russell describes, that are evoked by cosmology are indeed profound. But cosmology is *par excellence* that part of the physical sciences that is most underdetermined by the facts. Only when its speculations acquire sufficient verisimilitude need they dislodge us from what we, *qua* human beings, more assuredly perceive from the other sciences—for it is our human perceptions on our human role and meaning that we seek to render coherent and intelligible.

With reference to his theological critique, I agree that there is no simple answer to the question of how we apply a critical realist view in theology. I have tried to develop this further (in 1990b, 14–19) by stressing that critical realism in theology is an aim or a program rather than an actual, already delivered achievement, that there *are* criteria of reasonableness that can be applied, and that there is now even some hope for intersubjective accord. All of which could afford our theological affirmations an increasing chance of depicting the realities of the God-humanity-nature relation with increasing verisimilitude. The alternative is to be trapped in the linguistic, cultural relativism that characterizes George Lindbeck's approach in his *The Nature of Doctrine.*

I have already commented on the panentheistic element in my theology in my reply to James Nelson, but it is just worth adding, in response to Russell's question 2 under this heading, that I certainly distinguish my views from process theology insofar as I consider that the concept of *creatio ex nihilo* is essential to any coherent theism. The only fundamental dualism I find acceptable is that between God and all-else-that-is. With respect to Russell's question 3, it is tempting, of course, to relate the three concepts that denote modes of God's relating to the world—namely, transcendence, incarnation, and immanence—to the three traditional *personae* of the Trinity—Father, Son, and Holy Spirit. But if the *personae* are recognized, with Barth, as "modes of being" (*Seinweise*) of the one God, then *God* in God's own unity must still be the subject of verbs (*to transcend over, to be incarnate in, to be immanent in*) that represent God's relation to the world, and also of those verbs (*to create, to redeem, to sanctify*) that represent the relation of God to humanity in the Christian revelation. So God, in

God's own triune unity, is active in all these modalities, even if we associate each modality of activity more particularly with one mode (Father, Son, and Holy Spirit) of God's being than another.[10]

The questions Russell raises in question 4, concerning God's relation to time, are highly pertinent. I have tried to address some of these in my recent book (1990b, 128–34), but I recognize the conflict that exists between any view of the world that takes its evolutionary development in time as expressing in some way God's creative purposes, and the "static, time-independent four-dimensional geometry" perspective of cosmologists. Would it not help to regard this latter as simply a useful, interpretative *model* rather than to give it ontological status? Or is cosmology to be the last stronghold of *naive* realism? (Mathematicians certainly have a weakness for Platonism!)

With respect to Russell's question 5, I do not think that the world *is* God's body for the reasons he indicates. But I do think that the psychosomatic unity of the personal, transcendent "I" that is immanent in human bodies is a partial, and incomplete, but useful model for the relation of the transcendence of God over the world to God's immanence in it and that, furthermore, the transcendence-in-immanence which is ourselves might also itself be a model for Incarnation. However, like all such models, this will be partial and inadequate ontologically and must not necessarily or prematurely be naively identified with reality *simpliciter.*

As regards question 6, I do not see how taking "quantum nonlocality seriously" could possibly affect the observation, say, that the location of mutations in the DNA of an organism is random with respect to the ecological environment of the organism, which then naturally and statistically selects for survival of the best procreators. Are we in a position to talk about the wave function for an ecological system when we can scarcely deal with a triatomic molecule?

In his next section, Russell links closely the problems of suffering and of evil in general. I have made the link rather between the problem of suffering through *natural evil* with the constraints imposed on any universe that is to be creative of new forms and in which self-conscious personhood could emerge. However, I acknowledge that this does not solve the deep problem of human evil and how to cope with the tragedy of suffering in ourselves and in others. I can but re-echo the unanswered questions he raises while hoping that their resolution might in the end be linked with the history of the incarnate God suffering in a human life.

Finally, Russell's remarks on the Incarnation, salvation, and the Resurrection. To describe my Christology as "exemplarist" seems to me to evacuate it of its true significance and "bite." First, if God has,

as it were, taken over the humanity of one human being (Jesus) to recreate it as God intended, then God can also take over ours and recreate us too—so there is a new hope for human flourishing consummated by incorporation into the life of God ("eternal life"). Second, the means whereby this was effected was the actual suffering of God in, with, and through the suffering of the human Jesus which so reveals the nature of God as self-offering Love that it evokes that response in us which is salvific by virtue of its making us open to God's grace (that is, to his presence in us as Holy Spirit). And this in spite of our self-centered egoism, that endemic substituting of ourselves for God at the center of "our" universe. I would urge (see some elaboration of this in Peacocke 1991b, 49–51): (*a*) that most of the classical interpretations of the Atonement simply do not work for a twentieth-century humanity unfamiliar, if not repelled by, the religious, social, and personal procedures associated with ritual "sacrifice," "redemption," "satisfaction," etc.; (*b*) that the Abelardian interpretation, in which the passion of Jesus the Christ is salvific by virtue of the love evoked in us by our experience and awareness of the love of God manifest in those events and the revelation of God's nature as Love, is *not* a purely "subjective" one, as cogently argued recently by Paul Fiddes (1989).

Finally, the Resurrection? I cannot see how science as such can have any bearing on the historicity or otherwise of the Resurrection of Jesus, except insofar as the whole scientific perspective predisposes us to want, with Hume, stronger historical evidence for those events that appear to be out of joint with our regular experience than with those that are in accord with it. I think we *do* have such good, historical evidence that, in ways that will forever remain opaque to us, the whole person of Jesus was taken through death to a new mode of life with God in which he was able to demonstrate his continuing existence to his followers (the earliest evidence is, of course, that of Saint Paul in I Corinthians 15). The evidence that his tomb was empty is later and, so it seems to me at the moment, secondary, for it proved, and proves, nothing. So whether or not the Resurrection signals a potential transformation of the "physical" into the "spiritual" remains for me an open question. I would be intrigued if it were so, but the essential truth of the Resurrection as an act of God taking the humanity of Jesus into the life of God is sufficiently overwhelming for me for the present!

There is a general matter to which I would like to advert, though I don't think it is raised quite explicitly by any of those to whom I am here responding. I am sometimes held to task for not adhering to or formulating any specific metaphysical scheme or system—

whether that of Whitehead or anyone else's, even my own! On reflection, I think the reason for this is that I really am a *critical* realist. I do not think that we know, or perhaps will ever know, what matter is in itself, what persons are in themselves, what God is in God's own self. We continue to be able to refer to all these as real but are able to depict them only in metaphors or models (sophisticated, elaborated metaphors). We can be confident of the increasing verisimilitude of our depictions at some, but far from all, levels in the hierarchy of all-that-is (from subatomic particles through living organisms and persons up to the very Godhead), but rarely to such a degree that we can begin with any surety to construct an ontology of these various levels that can be integrated into a metaphysical system. As we probe the depths and intricacies of each successive level, new layers of reality emerge to challenge us epistemologically, yielding only partial reflections of the realities-in-themselves. To this extent I remain unashamedly the empirical scientist and a *critical* realist. I wish to stress that we really do see only "through a glass darkly" (Corinthians 13: 12, A.V.) and are likely to go on doing so until we are vouchsafed the beatific vision.

NOTES

1. As it happened, the contingencies of scientific history already gave a bias towards this tendency by the convention of capitalizing deoxyribonucleic acid as DNA, so that it has been less easy to spot when this unwarranted verbal legerdemain is being perpetrated than it is when *nature* becomes *Nature!*

2. I understand the statistical point he was making when he attributed selfishness to genes, but his use of this word, with its personalization of the gene, and so of DNA, thereby rendered his whole approach vulnerable to the philosophical hatchet work of Mary Midgeley (1979, 1980, 1985).

3. As always, we have to beware of what A. N. Whitehead called the "fallacy of misplaced concreteness" (Whitehead 1948, 54–56; see also Peacocke 1971, 14–16 for discussion).

4. He wrote "Omnia autem tractantur in sacra doctrina sub ratione Dei, vel quia ipse Deus vel quia habent ordinem ad Deum ut ad principium et finem" (1969, 1a, q. 1, art. 7). "Now all things are dealt with in holy teaching in terms of God, either because they are God himself or because they are relative to him as their origin and end."

5. To be the first chapter, entitled "God's Communication with Humanity," in a Part 3 of an expanded version of my recent volume (1990), which I hope to present also as a Gifford Lecture at St. Andrew's University in 1992/3.

6. Even more pertinent to this point is Sperry (1988).

7. *Cf.* my earlier remarks above on epistemology and ontology: we, however putatively, *know* that God is active in Jesus and then go on to affirm, perhaps even more putatively, that God is *in* this human person, that Jesus *is* both God and man.

8. Temple ([1934] 1964, 478): "It may safely be said that the hope of Christianity that it may make good its claim to be the true faith lies in the fact that it is the most avowedly materialist of all the great religions. . . . Its own most central saying is: 'The Word was made flesh,' where the last term was, no doubt, chosen because of its specially materialist associations. By the very nature of its central doctrine Christianity is committed to a belief in the ultimate significance of the historical process, and in the reality of matter and its place in the divine scheme."

9. In the concluding part of that article on "A Christian 'Materialism'?" (Peacocke 1985, 164) I wrote, "I hope the question mark in my title at least indicates that the word *materialism* has to be taken in a somewhat Pickwickian sense—and certainly not in that of nineteenth-century materialists. Far from any reduction to the material being intended, the juxtaposition of the adjective *Christian* and the noun *materialism* seeks to highlight the significance of the stuff of the world, its *matter* as we normally call it, but now including energy within this term. This significance lies in the potentialities of that world-stuff, potentialities . . . showing how that stuff can become intelligent and display cognitive abilities."

10. I find myself in this regard drawn to the more apophatic position of J. P. Mackey (1983, 187) who, after referring to "a more ancient piece of Christian (and Greek) wisdom which said that God's inner essence or being remained veiled from us while *in via,* in a way in which God's outreach did not," goes on to suggest that "from that more ancient point of view it seems best to say that trinities (or binities) primarily, to the extent that they are or were at all successful, point to God's being in outreach to us and as such suggest some self-differentiation in God which, however, we are quite unable to describe."

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