Natural Theology and Orthodoxy [1]

Richard Swinburne

[Swinburne, Richard, 2012, "Natural Theology and Orthodoxy" in (ed.) R.Vitz, *Turning East: Contemporary Christian Philosophy and the Ancient Christian Faith,* St Vladimir's Press, 2012; and (in Polish) under the title "My Spiritual Autobiography: The Vocation of a Natural Theologian", *Poznanskie Studia Teologiczne*. An earlier version was published as "The Vocation of a Natural Theologian" in *Philosophers Who Believe,* ed. K.J. Clark, IVP, 1993.]

Abstract: The author describes his intellectual development and academic pursuits starting from his undergraduate studies at Oxford University in mid-1950s up to the present day, in the perspective of his attempts to resolve the conflict between a materialistically oriented scientific worldview and the worldview of traditional Christianity. In time, he came to recognize the conflict as a problem of distinguishing between levels of explanation or points of terminating an explanation. To deal with this problem adequately, he adopted as his own the program of natural theology laid down by St. Thomas Aquinas in his *Summa Theologiae,* where Aquinas provided good arguments in favor of the Christian doctrine taking as his starting point the most general phenomena of experience and using the best secular knowledge of his day. Thus Swinburne's program of natural theology consisted in using the criteria used in modern natural science and historical inquiry for the probable truth of a suggested explanation, analyzed with the careful rigor of modern philosophy, to show the meaningfulness and probable truth of Christian theology. Scientific explanation explains phenomena in terms of prior states of affairs and natural laws; whereas personal explanation explains phenomena in terms of the powers and purposes of agents. Christian metaphysics explains the operation of scientific explanation in explaining why there are states of affairs at all and why the most fundamental natural laws have the character they do, in terms of the power and purposes of God, and in particular his purpose that humans should have a free choice of the kind of persons they are to be. Swinburne extends this model of explanation to show that our historical evidence about the life of Christ makes it very probable that Christ was (and so is) God Incarnate who rose from the dead.

Key words: natural theology – scientific explanation – personal explanation – Christian theology – probability of truth

[1] This paper is an updated version of a paper "The Vocation of a Natural Theologian," published in (ed.) Kelly Clark, *Philosophers Who Believe*, IVP Academic, 1993.

I. Introduction

As far back as my memory stretches, I recall having thought in Christian terms; and from early years I recall having prayed. Since neither of my parents was Christian, any human contribution to this process must be attributed to my early schooling. By the time I had passed through a British "public school," completed my military service, and come up as an undergraduate to Oxford University in 1954, being a Christian was, I claimed to myself, the most important thing in my life. I also loved argument and found myself with a natural theoretical interest in big questions. The latter led to my reading philosophy, politics, and economics (with the weight in philosophy) for my B.A. degree. My home, my school, my military service (spent learning to speak Russian, supposedly the language of the enemy in a future war) and above all my university were all highly intellectual places, where I was exposed to all the achievements and current attitudes of the modern academic world. These attitudes were, it seemed to me, basically anti-Christian. The ethics of sophisticated intellectuals were very different from the ethics of traditional Christians.

II. The Conflict between Materialism and Christianity

A materialistic worldview, very different from the traditional Christian worldview, was supposed to be what science favored; and the "scandal of particularity," God becoming incarnate in Christ in human history, was indeed regarded as a "scandal," that is, absurd by contemporary intellectuals. There was a great belief in progress, and progress seemed to mean leaving Christianity behind. But my instincts favored traditional Christianity; and the fact of this conflict between traditional Christianity and the modern intellectual worldview did not in itself disturb me too much. There's plenty in the New Testament to suggest that it might well be expected that Christianity should be a minority allegiance. Besides, as I said, I enjoyed argument—and the more people and the more clever people there were to argue against, as far as I was concerned, the better. (If you think that this attitude of mine was les than perfectly Christian, you could well be right!)

But what *did* disturb me very much is that the church didn't seem to take this conflict seriously. Preachers preached pious sermons that simply failed to connect with modern science, ethics and philosophy; they expounded biblical texts and preached attitudes.

And the answer to such questions—Why should one believe the Bible? Does it not presuppose an out-of-date science? Are not moral truths mere matters of opinion? Why should one suppose that there is a God at all?—was that religion was a matter of "faith." But the preachers had nothing to say about why one should take a leap of faith, and why one should take it in this direction rather that that (that is, in facor of this religion rather than that rival worldview). The church's lazy indifference to modern knowledge appalled me; and I saw that, even if as many as 20 percent of the population of the United Kingdom still went to church in 1954, things wouldn't go on like that unless Christianity could fit in better with the intellectual worldview.

In due course I came to realize that behind this "lazy indifference," as I saw it, lay a theological attitude. There were theological "justifications" of why reason had no part to play in establishing foundations of the Christian theological system. The most influential modern systematic theologians were German, of whom the best known was Karl Barth. They derived their philosophy from the Continental tradition in philosophy of the past two hundred years. This includes such very diverse figures as Hegel, Nietzsche, Heidegger and Sartre. But it seemed to me—and has seemed to most Anglo-American philosophers—that what characterizes them all is a certain sloppiness of argument, a tendency to draw big, vague, general pictures of the universe, without spelling them out very precisely or justifying them very thoroughly, a kind of philosophy geared toward literature rather than toward science. And the philosopher who above all influenced the theologians was Søren Kierkegaard, who thought that the choice between worldviews was a highly nonrational matter.

Now I did not wish to deny that the practice of religion is chosen; it does indeed involve giving your life generously for a supremely worthy purpose. But it needs to be shown that the purpose is indeed worthy—that the Christian way of living on earth is a good way; and that involves showing that the Christian theological system, which explains *why* it is a good way, has some reasonable chance of being true. There is no point in confessing your sins to God or worshiping him if he almost certainly doesn't exist. And if the modern work throws up some reasonable arguments that suggest that he almost certainly doesn't exist, they need to be treated seriously and shown to be unsound. To ignore them is insulting to God, who has given us our reason and allowed us to use it to such good effect in theoretical and practical science. But, alas, the systematic theology fashionable in the 1950s had no resources for dealing with such matters.

III. The Legacy of Logical Positivism

While appalled by the church's attitude towards modern knowledge, I had been acquiring some of the latter in the form of philosophy as taught at Oxford in the late 1950s. The broad stream of careful and rational argument about big metaphysical issues that has characterized European philosophy since the Greeks had reached an odd stage. In the Anglo-American world at large the skepticism of Hume has given rise to logical positivism: the view that the only real things are sense impressions and (possibly) material objects of a size visible to the naked eye, and that our knowledge is limited to past, present and future alterations of sense impressions and material objects. And not merely our knowledge is limited; talk about anything else is meaningless. This view was codified in the verification principle, which says that the only propositions that are meaningful are ones that can (in some sense!) be verified by observation. And hence, said the verificationists, all claims about the nature of space and time, about which moral views are true, and of course about God, are not false but meaningless.

In Oxford this logical positivist background had led many philosophers to hold that the only job left for philosophy was to teach people what words mean in ordinary use, and so to help them avoid using words to state meaningless philosophical theses. If you understood what "cause" meant, that is, how it was applied in ordinary situations, you couldn't be tempted to say such a meaningless things as "God caused the world"! The high priest of Oxford "ordinary language" philosophy was J. L. Austin. I attended many of his lectures and classes and count myself fortunate to have done so. I learned something about the subtleties or ordinary language, and the need to start from words used in their ordinary senses, even if thereafter one introduces new technical terms by means of the former. Metaphysical language must take off from and be explained in terms of ordinary language. "Ordinary language" philosophy however had no sympathy for anything that went beyond ordinary language. But it taught on clarity of statement and thoroughness of argument. I valued Oxford philosophy greatly for its cultivation of those virtues. But there seemed to me no good reason for believing the dogmas that lay behind the practice. In particular there seemed no good reason for believing the verification principle, but even if one did assume it, so long as you do not interpret "verified" as "conclusively verified" but as "confirmed or supported by evidence or argument," then why shouldn't great metaphysical theories, including Christian theism, be verifiable and so meaningful?

So I disliked Oxford philosophy for its dogmas, but I liked it for

its tools of clarity and rigor; and it seemed to me that someone could use its tools to make Christian theology again intellectually respectable. And I came to believe it to be my Christian vocation to make a contribution to this process. I was going to become an Anglican priest, but I became a professional philosopher instead. I went on to do graduate work in philosophy—I took the two-year Oxford B.Phil. in philosophy (the normal course at Oxford at that time for intending professional philosophers) and then a one-year diploma in theology.

Yet it seemed to me that the centerpiece of the modern worldview was not Oxford or any other brand of professional philosophy, but modern theoretical science—the physics of relativity theory and quantum theory, the biology of evolution, the genetics of DNA—which many people thought counted against the traditional Christian worldview. And here I felt very ignorant, as I had studied little science at school. I needed to study these great developments thoroughly. I was fortunate to be awarded three years of research fellowship (at Oxford and then at Leeds, in the years 1960-63) after my philosophical and theoretical studies; and I devoted them to learning much modern science and much history of science—how we had got to where we are. And I studied "philosophy of science," then a very ill-cultivated branch of philosophy in England, which is a study of the meaning and justification of scientific theories—and especially of the criteria that scientists use to judge one theory as well as well evidenced and another as ruled out by data, and of whether those criteria are ultimate or whether they can themselves be justified by some general principles of rationality or logic.

IV. What Makes Scientific Theories Probably True

My study of science showed me one thing very quickly and very obviously. The great theories and predictions of modern science concerned matters far beyond observation: atoms and electrons and now quarks, far too small to be observed in any literal sense; and galaxies and quasars and the "big bang," far too distant in space or time to be observed in any literal sense. If we insist that to be meaningful a theory has to be "verifiable" in the sense of conclusively verifiable by observation, modern science would be rendered meaningless. Yet since it quite obviously isn't meaningless—as everyone in any way touched by the modern worldview would have to admit—theories could be meaningful without, in that sense, being verifiable. I saw, and in due course Oxford philosophy itself came to see, that the verificationist dogma was fatally flawed. What makes scientific theor-

ies *meaningful* is not their verifiability but the fact that they describe entities ("atoms") and their properties ("velocity," "spin") with words used somewhat similarly to words used for describing ordinary mundane things. Atoms are somewhat like billiard balls, only very much smaller; they are also somewhat like waves, only not waves in media like water—words have to be used somewhat analogically in order to describe what atoms are like. Any attempt to describe them won't be totally adequate but can give us quite a good idea of what atoms are like. And scientific theories (or hypotheses) were *probably true* insofar as (1) they lead us to expect the phenomena we observed around us, (2) the phenomena would otherwise be unexpected, and (3) they are simple theories.

The criterion of simplicity is crucial. If the only evidence in favor of a scientific theory was its success in leading us to expect what we observe, then we would never have any justification for any prediction about the future. Let me illustrate this by a simple example. Suppose that you are a scientist studying the relation of two variables (x and y); you have made six observations so far and you find, say, that x and y are related as follows:

x: 1, 2, 3, 4, 5, 6

y: 1, 2, 3, 4, 5, 6

You seek a general formula connecting x and y that will allow you to predict a future value of y for a new value of x. An infinite number of formulas are possible, all equally successful in leading you to expect what you have observed so far but diverging in their future predictions. For example, all formulas of the form $y = x + z\,(x - 1)\,(x - 2)\,(x - 3)\,(x - 4)\,(x - 5)\,(x - 6)$, where z is some constant, are like this. But of course you think that one of them ($y = x$) is better justified than the others; and this is because it is simpler. The simpler theory is that most likely to be true.

Scientists use this same pattern of argument to argue to the existence of unobservable entities as causes of the phenomena that they observe. For example, at the beginning of the nineteenth century scientists observed many varied phenomena of chemical interaction, such as that substances combine in fixed ratios by weight to form new substances (for example, hydrogen and oxygen always form water in a ratio by weight of 1:8). They then claimed that these phenomena would be expected if there existed a hundred or so different kinds of atoms, particles far too small to be seen, which combined and recombined in certain simple ways. In their turn physicists postulated electrons, protons, neutrons and other particles in order to account for the behavior of atoms; and now they postulate quarks in order to explain the behavior of protons, neutrons and most other

particles. What we postulate must enable us to predict (at least with some probability) what we observe when other theories do not; but the criterion of simplicity remains crucial for choice among the infinite number of theories that do so predict.

The simplicity of a theory is not just a matter of mathematically simple formulas connecting given variables (as in my example), but of few laws, each connecting few entities, few kinds of entity, few properties, few kinds of property, connected by a mathematically simple formula. We could always postulate many new entities with complicated properties to explain anything that we found. But our theory will be supported be the evidence only if it postulates few entities, which lead us to expect the diverse phenomena that form the evidence. It is sometimes said that we can test between theories equally successful in predicting observations so far by a new test—in my example observe the value of y for $x = 7$—and that will rule out most of those theories. But it will still leave us with an infinite number of theories (incompatible with each other in their future predictions). It is sometimes said that the "background knowledge," our general knowledge of how the world words in neighboring fields of inquiry, will help us to choose between competing theories without recourse to simplicity; we choose the theory that "fits best" with that background knowledge. But "fits best" turns out to mean "fits most simply." And anyway when we are considering big theories, such as the general theory of relativity, they purport to explain so much (such as about all of mechanics, optics and electromagnetism) that there is not much left by way of theories of neighboring fields with which they can fit. Simplicity remains the ultimate criterion of choice between such rival theories. According to an old Latin saying, *simplex sigillum veri*—"The simple is the sign of the true." To be rendered probable by evidence, a theory must be simple.

V. Natural Theology

But once I had seen what makes scientific theories meaningful and justified, I saw that any metaphysical theory, such as the Christian theological system, is just a superscientific theory. Scientific theories each seek to explain a certain limited class of data: Kepler's laws sought to explain the motions of the planets; natural selection seeks to explain the fossil record and various present features of animals and plants. But some scientific theories are on a higher level than others and seek to explain the operation of lower-level theories and the existence in the first place of the objects with which they

deal. Newton's laws explained why Kepler's laws operated; chemistry has sought to explain to explain why primitive animals and plants existed in the first place. A metaphysical theory is a highest-level-of-all theory. It seeks to explain why there is a universe at all, why it has the most general laws of nature that it does (especially such laws as lead to the evolution of animals and humans), as well as any particular phenomenon that lower-level laws are unable to explain. Such a theory is meaningful if it can be stated in ordinary words, stretched a bit in meaning perhaps. And it is probably true if it is a simple theory and leads you to expect the observable phenomena when you would not otherwise expect them. Once I had seen this, my program was there—to use the criteria of modern natural science, analyzed with the careful rigor of modern philosophy, to show the meaningfulness and probable truth of Christian theology. And, at the same time as I was moving in this direction, most Anglo-American philosophers were also coming to reject the logical positivist and 'ordinary language' approaches, and coming to see philosophy as the metaphysical enterprise of constructing a worldview by means of rigorous arguments sensitive to science. But they, unlike myself, saw that enterprise as leading to a materialist worldview.

At this time I discovered that someone else had attempted to use the best science and philosophy of his day to argue strongly for the existence of God (that is, to provide what is called a 'natural theology'). I read part one of the *Summa Theologiae* of Thomas Aquinas. He too started from where the secular world was in his day—the thirteenth century—and used the best secular philosophy available, that of Aristotle, instead of the initially more Christian-looking philosophy of Plato; and he sought to show that reflection on the observable world, as described by Aristotelian science, led inescapably to its creator God. The *Summa* doesn't start from faith or religious experience or the Bible; it starts from the observable world. After an introductory question, its first main question is *Utrum Deus Sit*, whether there is a God; and it provides five "ways" or arguments from the most evident general phenomena of experience: that things change, that things cause other things, and so on—to show that there is. I do not think those five ways work too well in detail; and it is interesting that often where the argument goes wrong it is not because Aquinas had relied unjustifiably on Christian theology but because he had relied too much on Aristotelian science. While I realized that the details were not always satisfactory, it seemed to me that the approach of the *Summa* was 100 percent right. I came to see that the irrationalist spirit of modern theology was a modern phenomenon, a head-in-the-sand defense mechanism. In general, I believe, it is the spirit of St. Thomas rather than the spirit of Kierkegaard that has been the more prevalent over two millennia of

Christian theology. But each generation must provide good arguments in favour of the Christian system by using the best secular knowledge of its own day; and that is why true disciples of St. Thomas cannot rely on the *Summa*—they have to carry out Thomas's program, using the knowledge of their own day.

Before I could put my program into practice I needed to develop thoroughly this understanding of science to which I was coming, and I needed to establish my credentials in this area in order that those who respect such work might listen to what I had to say when I began to write about religion. So when I obtained my first teaching post at the University of Hull in 1963, I devoted most of the next ten years to writing on the philosophy of science. Respect for the pronouncements of science is such a major component of the modern intellectual outlook that investigating the nature, limits and justification of such pronouncements is a vitally worthwhile task on its own, quite apart from any consequences it might have for religion; it is also a fascinating task. I wrote two substantial books in this area: *Space and Time* (1968) and *An Introduction to Confirmation Theory* (1973). The former worked up from an analysis of our talk about distance and temporal interval to such big questions as whether there is only one space and time, whey space has three dimensions and time only one, and why causes precede their effects. It had a lot to say about the interpretation of relativity theory; and was in that way a case study of the meaning of justification of a famous scientific theory. The book on confirmation theory was crucial for my later thinking. Confirmation theory is the axiomatization in terms of the mathematical calculus of probability of what makes what probable, or confirms it (that is, increases it probability). I sought to show that the criteria by which scientists judge the worth of theories, which I described above, can be captured by that calculus, and especially by a famous theorem of that calculus, Bayes's theorem.

Apart from a short book, *The Concept of Miracle*, and a few articles, I had published nothing on the philosophy of religion before 1972. I was then ready to change gear. In that year I became professor of philosophy at the University of Keele and began to write a trilogy on the philosophy of theism, the claim that there is a God. The fist book of that trilogy, *The Coherence of Theism*, was concerned to spell out the claim that there is a God in a coherent way. It analysed how we should understand the claim that God is 'omnipotent', 'omniscient', 'perfectly free', 'perfectly good', and being a 'source of moral obligation' and 'a necessary being'; the second book, *The Existence of God*, was concerned with whether there is a God, and it argued that it is significantly more probable than not that there is; and the third book, *Faith and Reason*, was concerned with the relevance of

arguments about the existence of God to the practice of religion. It distinguished between faith (trust in God) and belief (that there is a God); and claimed that, in order for faith to be rational, while one does need a belief that there is a significant probability that there is a God, one does not need a belief stronger than that. People may come to a rational belief that there is a God either on the basis of their personal religious experience or because of what they have been taught. But not all people have very deep religious experiences, and many people have been exposed to teachers who have taught them that there is no God as well as to teachers who have taught them that there is a God. For this reason (instead of or in addition to religious experience and the testimony of teachers) many people have always needed arguments for the existence of God beginning from obvious mundane phenomena and using criteria for when an explanation is probably true accessible to theists and atheists alike; and in our modern world perhaps most people need such arguments. I am myself one of those people; while I may not have become a religious believer as a result of arguments, my remaining a religious believer is—I believe—the result of my conviction that there are sound (probabilistic) arguments for the existence of God and for the truth of the doctrines of the Christian religion.

VI. Scientific Versus Personal Explanation

The basic idea of *The Existence of God* is that the various traditional arguments for theism—from the existence of the world (the cosmological argument), from its conformity to scientific laws (a version of the teleological argument), and so on—are best construed not as deductive arguments but as inductive arguments to the existence of God. A valid deductive argument is one in which the premises (the starting points) infallibly guarantee the truth of the conclusion; a correct inductive argument is one in which the premises confirm the conclusion (that is, make it more probable than it would otherwise be). Science argues from various limited observable phenomena to their unobservable physical causes, and in so doing argues inductively. My claim was that theism is the best justified of metaphysical theories. The existence of God is a very simple hypothesis that leads us to expect various very general and mode specific phenomena that otherwise we would not expect; and for that reason it is rendered probable by the phenomena. Or rather, as with any big scientific theory, each group of phenomena adds to the probability of the theory—together they make it significantly more probable than not.

When explaining phenomena we have available two different kinds of explanation. One is *scientific explanation*, whereby we explain a phenomenon *E* in terms of some prior state of affairs *F* (the cause) in accordance with some regularity or natural law *L* that describes the behavior of objects involved in *F* and *E*. We explain why a stone took two seconds to fall from a tower 64 feet from the ground (*F*) and by the regularity derivable from Galileo's law of fall that all bodies fall toward the surface of the earth with an acceleration of 32 ft/sec^2 (*L*); *E* follows from *F* and *L*. And, as noted earlier, science can also explain the operation of a regularity or law in some narrow area in terms of the operation of a wider law. Thus it can explain why Galileo's law of fall holds for small objects near the surface of the earth. Galileo's law follows from Newton's laws, given that the earth is a body of a certain mass far from other massive bodies and the objects on its surface are close to it and small in mass in comparison.

The other way that we use all the time and see as a proper way of explaining phenomena is what I call *personal explanation*. We often explain some phenomenon *E* as brought about by a person *P* in order to achieve some purpose or goal *G*. The present motion of my hand is explained as brought about by me for the purpose of picking up a glass. The motion of my legs earlier toward a room is explained by my purpose of going there to give a lecture. In these cases I bring about a state of my body that then itself causes some state of affairs outside my body. But it is I (*P*) who bring about the bodily state (*E*) conducive to producing that further state (*G*) rather than some other.

The kind of explanation involved here is a different way of explaining things from the scientific. Scientific explanation involves laws of nature and previous states of affairs. Personal explanation involves persons and purposes. In each case the grounds for believing the explanation to be correct are, as stated earlier, the fact that to explain the cited phenomenon and many other similar phenomena we need few entities (for example, on person rather than many), few kinds of entities with few, easily describable properties, behaving in mathematically simple kinds of ways(such as a person having certain capacities and purposes that do not change erratically) that give rise to many phenomena. In seeking the best explanation of phenomena we may seek explanations of either kind, and if we cannot find a scientific one that satisfies the criteria, we should look for a personal one.

We should seek explanations of all things; but we have seen that we have reason for supposing that we have found one only if the purported explanation is simple and leads us to expect what we find when that is otherwise note to be expected. The history of science shows that we judge that the complex, miscellaneous, coincidental

and diverse needs explaining, and that it is to be explained in terms of something simpler. The motions of the planets (subject to Kepler's laws), the mechanical interactions of bodies on earth, the behavior of pendula, the motions of tides, the behavior of comets and so forth formed a pretty miscellaneous set of phenomena. Newton's law of motion constituted a simple theory that led us to expect these phenomena, and so was judged a true explanation of them. The existence of thousands of different chemical substances combining in different ratios to make other substances was complex. The hypothesis that there were only a hundred or so chemical elements of which the thousands of substances were made was a simple hypothesis that led us to expect the complex phenomena. When we reach the simplest possible starting point for explanation that leads us to expect the phenomena that we find, there alone we should stop and believe that we have found the ultimate brute fact on which all other things depend.

VII. The Cosmological Argument

The cosmological argument argues from the existence of a complex physical universe (or something as general as that) to God who keeps it in being. The premise is the existence of our universe for so long as it has existed (whether a finite time or, if it has no beginning, an infinite time). The universe is a complex thing with lots and lots of separate chunks. Each of these chunks has a different finite and not very natural volume, shape, mass and so forth—consider the vast diversity of galaxies, stars and planets, and pebbles on the seashore. Matter is inert and has no powers that it can choose to exert; it does what it has to do. There is a limited amount of it in any region, and it has a limited amount of energy and velocity. There is a complexity, particularity and finitude about the universe that looks for explanation in terms of something simpler.

The existence of the universe is something evidently inexplicable by science. For, as we saw, a scientific explanation as such explains the occurrence of one state of affairs in terms of a previous state of affairs and some law of nature that makes states like the former bring about states like the latter. It may explain the planets being in their present positions y a previous state of the system (the sun and planets being where they were last year) and the operation of Kepler's laws, which postulate that states like the latter are followed a year later by states like the former. And so it may explain the existence of the universe this year in terms of the existence of the

universe last year and the laws of cosmology. But either there was a first state of the universe or there has always been a universe. In the former case, science cannot explain why there was the first state; and in the latter case it still cannot explain why any matter exists (or, more correctly, matter-energy) for the laws of nature to get a grip on, as it were. By its very nature science cannot explain *why* there are any states of affairs at all.

But a God can provide an explanation. The hypothesis of theism is that the universe exists because there is a God who keeps it in being and that laws of nature operate because there is a God who brings it about that they do. He beings it about that the laws of nature operate by sustaining in every object in the universe its liability to behave in accord with those laws (including the law of the conservation of matter, that at each moments what was there before continues to exist). The universe exists because at each moment of finite or infinite time, he keeps in being the objects with this liability. The hypothesis of theism is like a hypothesis that a person brings about certain things for some purpose. God acts directly on the universe, as we act directly on our brains, guiding them to move our limbs.

As we have seen, personal explanation and scientific explanation are the two ways we have of explaining the occurrence of phenomena. Since there cannot be a scientific explanation of the existence of the universe, either there is a personal explanation or there is no explanation at all. The hypothesis that there is a God is the hypothesis of the existence of the simplest kind of person that there could be. A person is a being with *power* to bring about effects, *knowledge* of how to do so and *freedom* to choose which effects to bring about. God is by definition an omnipotent (that is, infinitely powerful), omniscient (that is, all-knowing) and perfectly free person: he is a person of infinite power, knowledge and freedom; a person to whose power, knowledge and freedom there are no limits expect those of logic. The hypothesis that there exists a being with infinite degrees of the qualities essential to a being of that kind is the postulation of a very simple being. The hypothesis that there is one such God is a much sompler hypothesis than the hypothesis that there is a god who has such and such limited power, or the hypothesis that there are several gods with limited powers. It is simpler in just the same way that the hypothesis that some particle has zero mass or infinite velocity is simpler than the hypothesis that it has 0.32147 of some unit of mass or a velocity of 221,000 km/sec. A finite limitation cries out for an explanation of why there is just that particular limit, in a way the limitlessness does not. This is why scientists have always preferred a hypothesis postulating an infinite degree of some property over a hypo-

thesis postulating a large finite degree of that property when both hypotheses would lead us to expect the phenomena equally well. For example, Newton's theory of mechanics postulated that the force of gravity was propagated with infinite velocity, although some theory ascribing to this force a very large finite velocity would have been equally well able to explain the phenomena. Only when Einstein's General Theory of Relativity which postulated a large finite velocity proved able thereby to explain a much wider range of phenomena than Newton's theory was able to explain was the infinite velocity hypothesis abandoned. God provides the simplest stopping-point for explanation. It follows from God's omniscience that he knows all moral truths – what is good and what is bad. To recognise some action as good to do involves having some desire or inclination to do it. But we humans are subject, as well as to such good desires, to irrational desires influencing to do what is bad. God, being perfectly free, is free from such influences and so will inevitably do only what is good. He is perfectly good. His omnipotence means that he is not dependent on a body for the exercise of his powers.

That there should exist anything at all, let alone a universe as complex and as orderly as ours, is exceedingly strange. But if there is a perfectly good God, it is not vastly unlikely that he should create such a universe. A universe such as ours is a thing of beauty, a theater in which humans and other creatures can grow and work out their destiny, a point that I shall develop further below. So the argument from the universe to God is an argument from a complex phenomena to a simple entity, which leads us to expect (though does not guarantee) the existence of the former far more than it would be expected otherwise. Therefore, I suggest, it provides some evidence for its conclusion.

VIII. The Argument from Design

The teleological argument, or argument from design, has various forms. One form is the argument from temporal order. This has as its premises the operation of the most general laws of nature, that is, the orderliness of nature in conforming to very general laws. What exactly these laws are, science may not yet have discovered—perhaps they are the field equations of Einstein's general theory of relativity, or perhaps there are some yet more fundamental laws. Now, as we have seen, science can explain the operation of some narrow regularity or law in terms of a wider or more general law. But what science by its very nature cannot explain is why there are

the most general laws of nature that there are: for *ex hypothesi*, no wider law can explain their operation.

The conformity of objects throughout endless time and space to simple laws cries out for explanation. For let us consider to what this amounts. Laws are not things, independent of material objects. To say that all objects confirm to laws is simply to say that they all behave in exactly the same way. To say, for example, that the planets obey Kepler's laws is just to say that each planet at each moment of time has the property of moving in the ways that Kepler's laws state. There is, therefore, this vast coincidence in the behavioral properties of objects at all times and in all places. If all the coins of some region have the same markings, or all the papers is a room are written in the same handwriting, we seek an explanation in terms of a common source of these coincidences. We should seek a similar explanation for that vast coincidence which we describe as the conformity of objects to laws of nature—such as the fact that all electrons are produced, attract and repel other particles, and combine with them in exactly the same way at each point of endless time and space.

That there is a universe and that there are laws of nature are phenomena so general and pervasive that we tend to ignore them. But there might so easily not have been a universe at all, ever. Or the universe might so easily have been a chaotic mess. That there is an *orderly* universe is something very striking, yet beyond the capacity of science ever to explain. Science's inability to explain these things is not a temporary phenomenon, caused by the backwardness of twentieth century science. Rather, because of what a *scientific* explanation is, there things will ever be beyond its capacity to explain. For scientific explanations by their very nature terminate with some ultimate natural law and ultimate physical arrangement of physical things, and the question with which I am concerned is why there are natural laws and physical things at all.

There is available again the simple explanation of the temporal orderliness of the universe, that God makes protons and electrons move in an orderly way, just as we might make our bodies move in the regular patterns of dance. He has *ex hypothesi* the power to do this. But why should he choose to do so? The orderliness of the universe makes it a beautiful universe, but, even more importantly, it makes it a universe that humans can learn to control and change. For only if there are simple laws of nature can humans predict what will follow from what—and unless they can do that, they can never change anything. Only if they know that by sowing certain seeds, weeding and watering them, they will get corn, can they develop agriculture. And humans can acquire that knowledge only if there are easily graspable regularities of behavior in nature. It is good that

there are human beings, embodied minicreators who share in God's activity of forming and developing the universe through their free choice. But if there are to be such, there must be laws of nature. There is, therefore, some reasonable expectation that God will bring them about; but otherwise that the universe should exhibit such very striking order is hardly to be expected.

The form of "argument from design" that has been most common in the history of thought and was very widely prevalent in the eighteenth and early nineteenth centuries is the argument from spatial order. The intricate organization of animals and plants that enabled them to catch the food for which their digestive apparatus was suited and to escape from predators suggested that they were like very complicated machines and hence that they must have been put together by a master machine-maker, who built into them at the same time the power to reproduce. The frequent use of this argument in religious apologetic came to an abrupt halt in 1850, when Darwin produced his explanation of why there were complexly organized animals and plants, in terms of the laws of evolution operating on much simpler organisms. There seemed no need to bring God into the picture.

That reaction was, however, premature. For the demand for explanation can be taken back to a further stage. Why are there laws of evolution that have the consequence that over may millennia simple organisms gradually give rise to complex organisms? No doubt because these laws follow from basic laws of physics. But then why do the basic laws of physics have such a form as to give rise to laws of evolution? And why were there primitive organisms in the first place? A plausible story can be told of how the primeval "soup" of matter energy at the time of the "big bang" (a moment some 13, 500 million years ago at which, scientists now tell us, the universe, or at least the present stage of the universe, began) gave rise over many millennia, in accordance with physical laws, to those primitive organisms. But then why was there matter suitable for such evolutionary development in the first place?

With respect to the laws and with respect to the primeval matter, we have again the same choice: saying that these things cannot be further explained or postulating a further explanation. Note that the issue here is not hwy there are laws at all (the premise of the argument from the cosmological argument), but why the laws and the matter-energy have this peculiar character of being already wound up to produce plants, animals and humans. Since the most general laws of nature have this special character, there can be no scientific explanation of why they are as they are. And although there might be a scientific explanation of why the matter at the time of the big ban

had the special character it did, in terms of its character at some earlier time, clearly if there was a first state of the universe, it must have been of a certain kind; or if the universe has lasted forever, its matter must have had certain general features if at any time there was to be a state of the universe suited to produce plants, animals and humans. Scientific explanation comes to a stop. The question remains whether we should accept these particular features of the laws and matter of the universe as ultimate brute facts or whether we should move beyond them to a personal explanation in terms of the agency of God.

What the choice turns on is how likely it is that the laws and initial conditions should by chance have just this character. Recent scientific work has drawn attention to the fact that the universe is fine-tuned. The matter-energy at the time of the big bang has to have a certain density and a certain velocity of recession; increase or decrease in these respects by one part in a million would have had the effect that the universe was not life-evolving. For example, if the big bang had caused the quanta of matter-energy to recede from each other a little more quickly, no galaxies, stars or planets, and no environment suitable for life would have been formed. If the recession had been marginally slower, the universe would have collapsed in on itself before life could be formed. Similarly, the constants in the laws of nature needed to lie within very narrow limits if life was to be formed. It is, therefore, most unlikely that laws and initial conditions have by chance a life-producing character. God is able to give matter and laws this character. If we can show that he would have reason to do so, then that gives support to the hypothesis that he has done so. There is available again the reason (in addition to the reason of its beauty) that was a reason why God would choose to bring about an orderly universe at all—the worthwhileness of the sentient embodied beings that the evolutionary process would bring about, and above all of humans who can themselves make informed choices as to what sort of a world there should be.

A similar pattern of argument from various other phenomena such as the existence of conscious beings, the providential ordering of things in certain respects, the occurrence of certain apparently miraculous events in history and the religious experience of many millions is, I claimed in *The Existence of God*, available to establish theism (when all the arguments are taken together) as overall significantly more probable than not.

Or rather it would do if there is a satisfactory theodicy, an explanation of why a perfectly good God would allow humans (and animals) to suffer; and I sought to provide that theodicy in two chapters of *The Existence of God* and in a fuller and (it seems to me) more sat-

isfactory form in a later book *Providence and the Problem of Evil* (1998). I argued that a good God who creates humans would want not merely to make humans happy (in the sense of doing what we want to be doing), but he would want us to be good people and to be happy in being good people, and he would want us to become good people by our own choices. God would want to give us deep responsibility for ourselves and each other. So he takes a big risk with us. He gives us free will and the power to make a difference to our own future and to the future of each other, and leaves it up to us how we choose to exercise our power. We can only have deep responsibility for ourselves if we have the power to ruin our lives (for example, by taking heroin), or alternatively to live greatly worthwhile lives. We can only have responsibility for others if it is really is up to us whether things go well or badly with those others; so we must have the power to hurt them or neglect them, as well as the power to benefit them. And if we are to have great responsibility, God must allow us to hurt each other a lot. Humans are so made that each time we make a good choice, it becomes easier to make a good choice next time; and each time we make a bad choice, it becomes easier to make a bad choice next time. If I tell the truth today when it is difficult, it will be easier to do so again tomorrow. But if I lie today, it will be harder to avoid lying tomorrow. So gradually over time we may change the desires which influence us, and eventually form either a very good character or a very bad character.

Yet, if the only suffering in the world was that caused by humans (or allowed to occur through human negligence), many of us would not have very much opportunity to make those crucial choices which are so important for forming our characters. Humans need the pain and disability caused by disease and old age if we are to have the opportunity to choose freely whether to be patient and cheerful, or gloomy and resentful in the face of our suffering; and the opportunity to choose freely to show or not to show compassion to others who suffer, and to give or not to give our time and money to helping them. God cannot do the logically impossible – he cannot give us the freedom to hurt each other, and at the same time ensure that we won't. Hence if God is to give us the great goods which I have described, he must provide us with bad desires and pain and other suffering in significant strength – at least for the short period of our earthly lives.

IX. In Defence of Christian Doctrine

My trilogy was finished in 1981. It concerned merely bare the-

ism – the meaning, probable truth and relevance of the claim that there is a God. But Christianity claims a lot more than that. Along with many other religions, Christianity distinguishes human beings very sharply from ordinary material objects. And here I knew that entrenched very deeply in the modern worldview was a materialist doctrine – that a human is merely a very complicated material object, a highly sophisticated robot. That doctrine seemed to me, on grounds quite independent of theology, to be totally mistaken. So I devoted the next five years to developing a case for substance dualism – that there are two parts to a person, body and soul; the soul is the essential part, and the continuing existence of the soul constitutes the continuing existence of the person. Christian theology vitally needs this view – for if humans are to have a life after death, the essential part of the human person must be something other than their body which can be turned into ashes or chunks of energy. My defence of substance dualism and of connected doctrines about the nature of humans (such as that humans have free will) was published in book form in *The Evolution of the Soul* in 1986.

My treatment of this issue was a prolegomenon to the treatment of specifically Christian doctrines; and I went on over the next twelve years to write a tetralogy on Christian doctrine. Appropriately , this change of direction coincided with my move back to Oxford in 1985 as 'Nolloth Professor of the Philosophy of the Christian Religion'. In my tetralogy. I claimed that reflection on the nature of the God to which the arguments of natural theology lead shows the various central Christian doctrines probable to various degrees. Thus in virtue of his perfect goodness, a solitary divine person will seek to share in perfect love all that he is and has with an equal; and perfect love involves not keeping the beloved selfishly to oneself but cooperating with the beloved in loving a third person. A threesome of equals, each of whom supports each other one in loving the third is necessary and sufficient for perfect love. Hence one would expect a perfectly good divine person to keep in being from all eternity two other such persons who would reciprocate by sustaining the first divine person. Hence the Christian doctrine of God as a Trinity – Father, Son, and Holy Spirit. Likewise if, as I have just been arguing, God makes humans suffer for a good reason, he should suffer with them. So it is to be expected that he would live a human life on earth for a while. Hence the doctrine of the Incarnation. Humans have wronged God a lot by failing to acknowledge God as their creator, and by hurting each other and wasting their lives. Hence they need to repent and apologise and to try to make some reparation to God; for we rightly require more than repentant apology from those who have done serious wrong. But humans owe so much to God anyway and are so prone to wrongdoing that they are in no position to offer

reparation. When a wrongdoer cannot make reparation, a friend may help him to do. Hence we might well expect a loving God to provide that reparation for us – if we so choose – to offer back to him. A suitable reparation for misused human lives would be a perfect human life. Hence we might well expect an incarnate God to make available his perfect human life as one which we can offer back to him saying 'Please accept instead of the life I which I ought to have led, this life'. Hence the doctrine of the Atonement.

Like both of the two great late medieval philosophers, Thomas Aquinas and Duns Scotus, I claim that there are necessary moral truths independent of the will of God – for example, that is wrong to tell a lie and that one ought to keep one's promises (at any rate barring very exceptional circumstances). But among those necessary truths are the truth that one ought to please one's benefactors. God is our supreme benefactor – he sustains us in existence from moment to moment, and all the good things which others give us they can give us only because he sustains in them the power to do so. Hence the commands of God create further obligations. One reason why God might command us to do acts which would not otherwise be obligatory is because he doesn't want us to be people who merely fulfil a small set of obligations. He wants us to be very good and holy people; and that means doing more than merely fulfilling a small set of obligations. So, like a good human parent, he may command us to do what would otherwise be supererogatory (more than we are obliged to do), in order to get us into the habit of doing very good actions. Thus, while it may be a necessary truth independent of the will of God that we ought to care for our parents and our children, it is hardly a necessary truth that we ought to love our neighbour (in the sense of everyone with whom we are in contact), as ourself. But Jesus said that we ought to do so (Luke 10:25-37). In order to impose obligations on us, God needs to tell us what they are; hence the need for revelation. We may need revelation also in order to make it more evident to us what are the necessary moral truths independent of the will of God, and to tell us more about what God is like and has done for us in order that we may react to him in the right way. So we might expect God to make it clear by some miracle that the teaching of some prophet was revealed teaching – and the most natural way for this to happen is that God incarnate should do this himself. If he did, he would need to make available some means for future generations to have access to this teaching and to interpret its consequences for them in their circumstances with their way of thinking. Hence we might expect that God would provide for us a church.

I argued for these claims that we would expect a perfectly good God to be like what Christians have claimed (e.g. a Trinity) and to do

the things which Christians have claimed that he did (e.g.become incarnate, make available an atonement, and reveal truths) in the first three books of my tetralogy on Christian doctrine. These were *Responsibility and Atonement* (1989), *Revelation* (1992) and *The Christian God* (1994). The final volume of the tetralogy was *Providence and the Problem of Evil* (1998) which, although primarily concerned with what is a problem for anyone (not just Christians) who believe that there is a God, also showed how Christian doctrines (such as that God shared our suffering, and makes available a life after death) make for a fuller and more satisfactory theodicy.

Even though we might expect God to do certain things, we still need detailed historical evidence to show that he did these things through a particular prophet at a particular moment of history. But we do not need nearly as much historical evidence to believe in the actual occurrence of an event of a kind which there is prior reason to expect as we would do if there was no such reason. Given that point, it seems to me that there is quite enough historical evidence that Jesus of Nazareth lived the life and did the things which I have given reason to suppose that God incarnate would do. And there is also enough evidence that Jesus rose from the dead. By raising Jesus from the dead (and so doing a miraculous act which he alone could do) God would have provided his signature on the work and teaching of Jesus. There is also sufficient evidence to show that Jesus did establish a church to continue his work and interpret his teaching. I argued then points in the follow-up to my tetralogy, *The Resurrection of God Incarnate* (2003).

Much philosophical discussion about belief and in particular about religious belief is concerned with what makes a belief 'justified' or 'rational'. My view is that a belief is justified if and only if it is made probable by evidence available to the believer in the form of his or her other beliefs, or (in the case of basic beliefs, such as those derived from perception) by the fact that we find them forced upon us by experience. (You can't help believing what seems to stare you in the face when you open your eyes). So I claim that religious beliefs need to be justified either in virtue of being made probable by evidence about the physical world, or by the evidence of what others tell us (testimony), or by religious experience apparently of the presence of God. But there are various different philosophical views about the justification of belief; and I came to feel the need to argue for my own view, which led to my book *Epistemic Justification* (2001).

In all my works on the philosophy of religion my approach has been to start from where secular humanity and in particular secular philosophy and science stand, develop my own philosophy of that area of thought, and then show how that philosophy leads to a Chris-

tian understanding of things in some respect. In my earlier trilogy I began by exploring what are the inductive criteria implicit in science, before using these criteria to argue to God. In *Responsibility and Atonement* I began from our current non-religious understanding of obligation and supererogatory goodness, and argued thence to a conclusion about our moral status in relation to God. In the first part of *The Christian God* I considered issues about the nature of individual things, of causation, and of time, preparatory to using the results of that part to discuss the nature of God. There is no other way to proceed in the philosophy of religion if its results are to be made rationally acceptable to those who are initially non-religious. Hence the philosopher of religion needs to be more than an amateur in other areas of philosophy; and I have written, at least at article length, on most other such areas. And a few of my books have had a primary concern with issues which are not of immediate relevance to the philosophy of religion. All philosophy concerns exciting and important issues; and, hard work though it is, I have enjoyed discussing the issues with colleagues and students, learning from their work, and, I hope, advancing things a bit further in all the areas of philosophy in which I have worked.

I felt that if I could make my conclusions about religion at least to some extent plausible to contemporary philosophers, those conclusions would eventually become known more widely. But I have also written two short and more 'popular' books designed to be read without too much difficulty by people without any philosophical background. *Is there a God*? (1996) discussed, as its title implies, arguments for the existence of God; and *Was Jesus God*? (2008) discussed specifically Christian doctrines.

I retired from my Oxford Professorship in 2002. But all that retirement has amounted to is that Oxford no longer pays me a salary, and I have no duties to give lectures or supervise graduate students on a regular basis. I have continued to write books and articles; and have lectured a lot in other universities in various parts of the world. Inevitably I have come to see the need to amend some of my earlier writings in the light of new thoughts of my own and of the writings of others (both in criticism of me, and on related philosophical issues). I have also seen the need to set some of my views more firmly in the context of the views of philosophers and theologians of the past 2500 years. This need led me to produce second editions of *The Existence of God* (2004), *Faith and Reason* (2005), and *Revelation* (2007). These 'second editions' did not consist merely in the addition of an appendix to the first edition, but were entirely rewritten versions of the book. I have now come to think that I have quite a lot new to say about the issues discussed in *The Evolution of the Soul* – stronger ar-

guments for substance dualism and quite new arguments in support of humans having free will. These are issues about which neurophysiology has recently made interesting discoveries, and I want to respond to these. I have almost finished writing a new book on these issues, which will probably be called *Mind, Brain, and Freewill*, and which I hope will be published by the end of 2012.

How much influence all this writing will ultimately have, I have, of course, no idea. But I believe I have already had a small influence in edging Christianity a bit further towards intellectual respectability; and I am immensely grateful for the privilege of having been allowed to do so – grateful to God; grateful to my atheistic philosophy friends for their tolerance and open-mindedness toward an odd colleague; and grateful to the public which, unknowingly and indirectly, has paid my salary for philosophizing for so many years. Nor, of course, have I been alone in trying to do the kind of work which I have described. A considerable number of philosophers in the Anglo-American tradition, mainly in the United States, have been working in their various ways to relocate Christianity in its proper place at the middle of a rational, scientifically sensitive worldview. I am immensely grateful for their work and their personal friendship.

X. Final Reflections

I am very conscious that my intellectual development has been largely a matter of systematizing and justifying what I believed in a very vague way fifty years ago. Although my views on lesser matters have changed, my worldview has not. I am well aware that I do not like changing habits or attitudes, and that there is an explanation of my intellectual development that has some initial plausibility – that I am simply too 'pig-headed' to allow myself to change my mind under the pressure of experience and the force of the arguments of my philosophical opponents, to which I have been exposed during my philosophical career. All that I can plead in my defense is that holding a true view about very big metaphysical issues matters to me enormously, and I do honestly believe that if I judged that experience or argument led to a position contrary to that of my youth, I would not have concealed that fact from myself. I have no wish to worship a God who does not exist, and in consequence I have sometimes

found myself beginning to pray, 'O God, if you do not exist, help me to see that fact'!

Do I ever doubt the central claims of the Christian faith? If the

question means, am I less than absolutely confident that those claims are true, the answer is yes. I am absolutely confident about very little, not even the existence of 'other minds' (that is, of conscious persons apart from myself). But I judge that there is an enormous balance of evidence in favour of the existence of other minds and a significant balance of evidence in favour of Christian theism. If the question means, do I devote time to examining objections to Christianity, the answer is obviously also yes. It's my job. But I think that everyone, Christian or non-Christian, ought to spend some time, in however amateur a way, examining the pros and cons of their creed; and not just once in youth, but at intervals throughout life.

Over many years whenever some objection has occurred to me, I have written it down as something to be explored more fully in due course. And exploring such objections more fully has, I believe, led me to see facets of truth that I would not otherwise have glimpsed. Thus, anyone with any moral sensitivity must consider the existence of suffering to constitute a prima facie objection to the existence of an all-powerful and all-good God. But taking the objection seriously, instead of concealing it from oneself, involves asking oneself what sort of a world we think an all-powerful and all-good God should have made. Starting to spell out in detail alternative possible worlds led me to see (as argued earlier) that if God made a world without suffering, it would be a world in which humans had little responsibility for each other and for other creatures. Seeing that that alternative is not obviously better than the present world led me to see something about human well-being – that there is more to it than tingles of pleasure; and about God – that his goodness is shown in the freedom and responsibility he gives to his creatures. I have found generally that what this simple example shows holds for more complicated and difficult examples. Doubt (in the second sense) is good for belief. And learning more about what God is like and in particular what his goodness amounts to is good for prayer.

Jesus Christ founded a church, and to be a Christian involves belonging to that church. But the church is divided, and so one has to belong to the church by belonging to a part of the church, that part which seems to one best to reflect the organisation and doctrine that Christ willed his church to have. I was baptized at the age of fifteen in the Church of England, that is, as an Anglican (in American terms, an Episcopalian), and I remained an Anglican until 1995. But I never felt altogether comfortable as an Anglican. No one ought to be content with belonging to a part of the church, preserving its independence from the rest of the church that Christ founded. We ought all to work for the unity of Christ's church, which is meant, I believe, to be the unity of an organization that would find its natural centre in the

primacy of honour of a reformed papacy. But there is also another reason why I was uncomfortable as an Anglican; and that is that the Church of England did not seem to treat with sufficient seriousness either the totality of commitment demanded of Christians or the importance of teaching true doctrine. When I was young, it was necessary to believe in (at least in the sense of 'have faith in') the doctrinal propositions of the Nicene Creed, if you were to belong to the Anglican church, and above all, if you were to be a priest. But in the course of the second half of the twentieth century, Anglican bishops came to tolerate their priests holding and teaching almost any religious belief, however far from traditional Christian beliefs. Of course most Anglican priests interpret the Creed in fairly traditional ways, but many do not, and much of the Anglican church doesn't seem to care. I came to feel that the Church of England had lost its sense that it was a vehicle of revealed truth and so I had to change my allegiance.

I have always believed (and argued at length in *Revelation*) that the identity of a body as part of the church founded by Christ was a matter both of its organization (e.g. the continuity of the way its officers are appointed, bishops being consecrated by bishops, back to the Apostles) and of its doctrine (e.g. as incorporated in the Nicene Creed.) I had felt during my earlier years that the Church of England just satisfied these requirements. But coming to the conclusion that it did not do so any more, I had to look elsewhere; and there were only two possible bodies to which I could belong, the Orthodox Church and the Roman Catholic church. I concluded that the Orthodox Church satisfied the requirements rather better than did the Roman Catholic church. And so in 1995 I was received into the Orthodox Church; and I am very glad that this happened. Communal worship with prayers hallowed by centuries of use is central to the life of the Orthodox Church; and it does not hurry its worship. Worshipping our Creator is the first human duty—to fail to acknowledge publicly and privately the goodness of God is a very deep failing of insensitivity to ultimacy and ingratitude to our supreme benefactor. And I have been pleased to worship, Sunday by Sunday, for the past nearly sixty years in the way in which God has provided, in the Eucharist, in the Anglican church and now in the Orthodox Church. The monastic life is strong in the Orthodox Church. The numbers of monks and nuns may have declined in some parts of Greece, but it has grown significantly on Mount Athos and in Russia. In my limited experience the Orthodox Church provides very good pastoral case for its members. Most Orthodox churches insist on regular confession to a priest (often the same priest, one's 'spiritual father'). I have made my confession every two months or so for most of my life (not a widespread custom in the Anglican Church); and found this of

enormous value in forcing me to make my inner life part of the Church's life. My own private prayer is often very 'dry'; and it is good that it is taken up into the richer prayer of the church.

Those who knew me well, and especially my philosophical and theological colleagues, were very surprised when I joined the Orthodox Church. This was because they found in Orthodox theological writing an emphasis on the mystery and incomprehensibility of God attainable through worship, which they felt did not fit well with my careful and rigorous arguments from public evidence. There has indeed been a suspicion of natural theology in the Orthodox thinking of recent centuries (arising not only from internal sources but from the influence of modern secular Continental philosophy in Orthodox countries.) But Orthodoxy has older roots; and many of the Fathers (the Christian theologians of the first millennium), and especially two much revered by the Orthodox, Gregory of Nyssa and John of Damascus, believed strongly in the availability of cogent arguments for the existence of God. After the end of the Cold War, the (largely American) Society of Christian philosophers set up 'Outreach to China' and 'Outreach to Russia' committees; and – in view of my knowledge of the Russian language and my Orthodoxy – I served as chair of the Russia Committee for some years. We began to hold joint conferences both with the Institute of Philosophy of the Russian Academy of the Sciences, and also with the Theological Commission of the Russian Orthodox Church. We are now in the middle of a large programme financed by the Templeton Foundation not merely of conferences, but also of summer schools and of translations of English language books on philosophy of religion into Russian. The gap between rigorous philosophy and Orthodox worship is bridgeable.

Although my family life has not been fully satisfactory, I have in all other respects led a blessed life. And despite my seventy six years, I am in good health and working hard and enjoyably on my academic projects. But it cannot be too long before I am called to give an account of my life to my creator. I pray that on that day God may have mercy on my soul.