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## Some Byways of Creation

The thesis of my paper can be put quite simply – the dilemma of Christianity is nothing less than the dilemma of creation. While the problems on both sides have altered dramatically over the centuries, the importance of creation as a determinative factor in the formulation of Christian world-views has remained. This is as true today as at any time in the past. I have mentioned the *dilemma* of both because, certainly since the Reformation, radical alterations in Christian thinking have accompanied large-scale modifications of the creation concept. The uneasiness and bewilderment of much present-day theology is an eloquent testimony to this two-fold dilemma.

If the concept of creation is of such importance for the rest of Christian doctrine, a number of questions must be asked. Why have views on the nature and content of creation changed? What part has been played in this movement by science and philosophy? Has the movement been inexorably away from a biblical view? Indeed what do we mean by a biblical view of creation? Is this a legitimate way of speaking, and if it is, to what extent – if any – is such a view determined by contemporary scientific concepts? And then finally, where do we stand today on this question?

Clearly, on such a vast topic I will have to limit myself to one particular approach to the subject. What I intend to do is to analyse the aims and influence of certain biologically-orientated exponents of pre-Darwinian natural theology. In doing this I will trace the ways in which these approaches prepared the ground for the conflict between natural science and religion, with the consequent demise by Darwin of much natural theology, and unfortunately in the eyes of many of Christianity as a whole.

It might be useful to start with a brief glance at the present situation. I would suggest that, on both the humanist and religious fronts, a dominant theme is: the dispensability of God. At the best the idea of God is outmoded and unnecessary, while at the worst He is dead. Whatever the exact expression used, however, the reason for coming to the conclusion is the same. Modern science, particularly in the form of evolution, has made the hypothesis of God untenable. There is now neither need nor room for the supernatural. Why? Because the earth, together with all the animals and plants that inhabit it, was not created but evolved.<sup>1</sup> As a result man can now dispense with the childish model of creation.<sup>2</sup> From here it is but a short step to the 'death of God' theologians, who maintain that the contemporary Christian must take his culture seriously. As, in their view, this is a post-Christian culture, a culture for which God is dead,<sup>3</sup> and as the Christian faith should be interpreted in a manner compatible with the empirical temper of modern culture,<sup>4</sup> God is indeed dead theologically as well as culturally. The difference between this position and that of the exponents of 'religionless Christianity' would appear to lie in their interpretation of the secular, because here again it is the secular life, as opposed to the religious, which is of overriding importance.<sup>5</sup> In this case, however, the *idea* of God is retained, at the expense of a drastic revision of His image.

The importance of this analysis for our purpose lies in the underlying assumption that modern science has, or at least should, force us to revise our concept of God. We are told that a personal God was a useful model for an age which compared living things with man-made machines, and which pictured the world in static, mechanical terms. With the passing of such thought-forms, the relevance of the god-hypothesis has disappeared, and man is left to construct more suitable hypotheses for a dynamic, indeterminate and naturalistic universe.

What is clear from this is that the picture of God which is being discarded is one which is closely linked to a now outmoded view of the universe. An integral part of this picture of

<sup>4</sup> T. W. Ogletree, *ibid.*, p. 40.

<sup>&</sup>lt;sup>1</sup> J. Huxley, Essays of a Humanist (Penguin), 1966, pp. 82-3.

<sup>&</sup>lt;sup>2</sup> J. Z. Young, Doubt and Certainty in Science (Galaxy), 1960, p. 147.

<sup>&</sup>lt;sup>3</sup> J. B. Cobb, quoted by T. W. Ogletree, Is God Dead? (S.C.M.), 1966, p. 18.

<sup>&</sup>lt;sup>5</sup> L. Morris, The Abolition of Religion (I.U.F.), 1964, p. 49.

God is, or perhaps I should say was, His activity as creator. A machine must have a beginning; in the case of the universemachine this was God. Furthermore, a machine must have a designer, and so with the universe this was again God. But as the universe is no longer a machine there is no longer place for a creator or designer. Hence, no God; or if one has religious presuppositions it may allow for a radically different sort of a God.

I have no hesitation in agreeing with this argument. Such a god is dead. Modern man must live without a god of this nature. And yet this god is taken as representing the Christian God by many people, who by discarding this image of god think they are discarding Christianity. What has gone wrong? Why all this tragic confusion?

The answer I think lies in large part at the door of much natural theology – especially that of the early nineteenth century. In the analysis which follows I am generalizing, and I am not suggesting that all scientists fall within the area of my criticisms. Many evangelicals particularly would be exempt. However, the influence of these exceptions was not nearly so great as that of the main stream of natural theology with which I am concerned here.

After the natural theology of Greek philosophy, with its later expression in St. Thomas Aquinas' five proofs of the existence of God, it was summarily dispensed with by Luther and Calvin, both of whom denied the power of unregenerate reason to rise unassisted to a knowledge of God and His attributes.<sup>6</sup> This meant that, although the Reformers and their followers encouraged the scientific study of nature, the Calvinistic worldview especially proving conducive to its study, natural theology with its logical deduction from innate ideas was distrusted.<sup>7</sup>

This disregard for natural theology was continued by the Puritans, but as the seventeenth century wore on greater emphasis was laid on a rational approach to nature. Basically, however, to men such as Boyle, Newton and Addison, science

<sup>&</sup>lt;sup>6</sup> J. C. Greene, Darwin and the Modern World View (Mentor), 1963, pp. 39-40. <sup>7</sup> R. Hooykaas, 'Science and Reformation', The Evolution of Science (Mentor), 1963, p. 283.

was a religious task; it was 'the disclosure of the admirable workmanship which God displayed in the universe'.<sup>8</sup> These men were themselves professing Christians, and as they approached the world around them they were filled with awe and wonder at the majesty and glory of God. They did not need nature to demonstrate to them the *existence* of God. They knew this from biblical revelation. What they saw in nature of God's handiwork confirmed what they already knew from *outside* nature.

But not only did they recognize God's actions in nature in a *general* way, they saw His purposes and design in even the most *detailed* events. In the construction of the eye, the rotation of the earth, the inclination of its axis, the proportions of land and sea and in many other things, they found a pattern of divine benevolence.<sup>9</sup> It was Boyle who, long before Paley, used the analogy of a clock in arguing for the existence of a designer. It was then against the background of the Newtonian world-view, in which the world was regarded as an intricate machine following unchangeable and precise laws, that the argument from design was first put forward with apparent scientific backing.

Had it remained thus, as a *subsidiary* argument in favour of the existence of God, it would probably have gained little notoriety and in time would have become a historical curiosity. Unfortunately, in the scientific climate of the day, with powerful scientific backing for the idea and with the increasing importance of reason in religious things, the possibility of approaching God through the intellect alone was becoming accepted. The door had been opened for dispensing with revelation. What was to become important was God as creator, as opposed to God as redeemer.

As an illustration of a possible end-result of this process I will briefly mention the Deists of the eighteenth century, although I am not principally concerned with them here. For them, God the creator replaced completely God the redeemer. Having

<sup>&</sup>lt;sup>8</sup> R. Boyle, quoted by I. G. Barbour, *Issues in Science and Religion* (S.C.M.), 1966, p. 37.

<sup>&</sup>lt;sup>9</sup> I. G. Barbour, *ibid*, pp. 38-9.

created the universe, He had then vacated it. Natural theology became a substitute for revelation, so much so that Bishop Butler attempted to vindicate revelation by its analogy to natural theology.<sup>10</sup> A cosmic designer with no care for the present world is no god at all, and such was the plight of God in the deistic system which in the end completely dispensed with Him. With this the Deists became vociferously anti-Christian, Christianity to them failing to be a religion of reason.

It may be instructive to note the general similarity between the final Deist rejection of God and the rejection, or radical modification, of the idea of God today. In both cases the knowledge of God to be gained from revelation is of little importance compared with the knowledge obtainable by reason. What is more, the rational approach stems from what is assumed to be the scientific position of the day – in one instance a mechanical view of nature and in the other an evolutionary view of nature. However, both have transformed a general scientific hypothesis into an all-embracing materialistic world-view. Lacking the knowledge obtainable by revelation, and hence starting from a non-Christian set of presuppositions, this transformation is inevitable.

This brings me to what was undoubtedly the cornerstone of pre-Darwinian natural theology – the argument from design. I will consider this with particular reference to Paley, who as we have seen did not originate this argument, but in whose hands it developed into a full-scale *apologetic* for Christianity, with *social* inferences drawn from nature.<sup>11</sup>

By the time of Paley's writing his 'Natural Theology' in 1802 the process by which natural theology had displaced revelation even in supposedly Christian circles was complete. Without revelation, God had to be known by way of natural theology, and so it was that the heavens no longer declared the glory of God to the eyes of faith. Instead, the heavens were used to *argue for* the wisdom of a creator.<sup>12</sup> Natural theology had become the heart of the Christian apologetic. Without it Christianity would

<sup>&</sup>lt;sup>10</sup> I. G. Barbour, Issues in Science and Religion (S.C.M.), p. 61.

<sup>&</sup>lt;sup>11</sup> C. C. Gillespie, Genesis and Geology (Harper), 1959, p. 35.

<sup>&</sup>lt;sup>12</sup> J. Dillenberger, Protestant Thought and Natural Science (Collins), 1961, p. 153.

collapse. The whole of Christianity rested upon God as creator of the universe, and He was known to be creator *solely* because of the evidences of the design and harmony which people recognized in nature. Remove design and purpose from the universe and you remove God as creator, and remove God as creator and the foundation of Christianity has gone.

To express it in another way: 'the proof of the existence of God was based on what science had accomplished, and the proof of His continued activity on what it had not'.<sup>13</sup> Inevitably therefore as the sphere of science expanded, that of theology receded. The dependence of natural theology on contemporary science was its downfall. This should have been obvious even within the Newtonian world-view, but when this world-view itself was replaced the results were catastrophic. Up to the time of Paley empirical evidence from science had always led *towards* God, to the advantage of Christianity. Under a different world-view it might lead *away* from God, or at least in an irrelevant direction.<sup>14</sup> The natural theologians failed to appreciate that science could be a two-edged sword.

Perhaps the key to Paley's thought is *expediency*,<sup>15</sup> or in more graphic terms it, like eighteenth century natural theology, can be described as 'Cosmic Toryism'.<sup>16</sup> Whatever is, is right. The universe is complete and perfect, the *status quo* being God's intention. Consequently, in order to find out the will of God, one finds out what works. If it works, it must be the will of God. The chief consequence of this viewpoint was seen in the approach of people, such as Paley, to the *social* issues of their day. As one might expect they accepted the *status quo* in the social arena, and so Chalmers in one of the Bridgewater Treatises argued that a poor law would be contrary to the law of nature, while the fact that the means of subsistence were insufficient to sustain the population demonstrated the benevolence of God in that it impressed upon man the necessity and

<sup>&</sup>lt;sup>13</sup> Gillespie, op. cit., p. 220.

<sup>14</sup> Ibid., p. 223.

<sup>&</sup>lt;sup>15</sup> Ibid., p. 36.

<sup>&</sup>lt;sup>16</sup> B. Willey, *Eighteenth-Century Background* (Chatto and Windus), 1940, chapter 3.

virtue of prudence, industry, self-denial, thrift and forbearance.<sup>17</sup>

One of the most crucial points in the argument from design was that the world had been created in its present form. It left no room at all for change. This of course is implicit in the last point - if the universe as it stands is perfect, then any other form of the universe would be imperfect. So vital was this point to the argument that the existence of apparent exceptions to the perfect harmony, in the form of catastrophies, pain and evil in general, were explained away by saying that overall harmony outweighs occasional anomalies, or that God has higher purposes than we can conceive.<sup>18</sup> Development, by definition, was excluded. What mattered was the constitution of things, and the construction of nature. As long as it mirrored a static scientific world-view it was safe, but as soon as science took on a dynamic appearance, it was lost. And the first science to be concerned with the history of nature rather than its order was geology.19

The natural theologians lacked any sense of *historicism*, that is, change as an integral part of their world outlook rather than change as an isolated and occasional phenomenon. Richardson<sup>20</sup> has gone so far as to say that: 'the real challenge to the nineteenth century revolution in human thinking lay not in the realm of natural science but in the realm of history'. Although he was here speaking about the application of historical methods of biblical criticism, I believe the statement is true in a much broader sense. God's creativity had been exalted at the expense of His *providential* care of the world. Furthermore, merely to account for the *balanced* condition of nature is inadequate when the time factor also has to be taken into account. Now, the way in which nature is *governed* has taken on importance. At this point the argument from design became outmoded and inadequate.

The stage is now set for the appearance of Darwin. The main thrust of the Christian apologetic, or perhaps I should say of what passed as a Christian apologetic, was centred upon the

<sup>19</sup> Gillespie, op. cit., p. 39.

<sup>&</sup>lt;sup>17</sup> Gillespie, op. cit., pp. 215-216.

<sup>&</sup>lt;sup>18</sup> Barbour, op. cit., p. 39.

<sup>&</sup>lt;sup>20</sup> A. Richardson, The Bible in the Age of Science (S.C.M.), 1961, p. 49.

argument from design, which in its turn was viable only so long as the science underlying it had a static outlook. Darwin, aided by such forerunners as Hutton, Lyell, Lamarek and Chambers, provided the new scientific atmosphere which in itself was sufficient to topple the precarious superstructure of natural theology. The tragedy lay in the fact that to the public at large it appeared as the deathblow to the creative activity of God, to God Himself and to Christianity as a whole. The hypothesis of design, and in its wake God the Designer, was replaced by the hypothesis of chance, and in its wake atheism. This may be an oversimplification of the situation, but it does emphasize the radical reversal which took place in the first half of the nineteenth century, and which is still very much with us today.

What were the essential principles of Darwinism? Having observed that all individuals and species vary slightly, and that in all cases where there is a tendency to overpopulation there must be a struggle for existence, he postulated that under these circumstances favourable variations would tend to be preserved and unfavourable ones to be destroyed. This is the essence of his theory of natural selection, in which we can recognize a number of ideas. The variations are *random* and are inherited, more young organisms are born than can survive to parenthood, so that the individuals with variations conferring upon them an advantage in the competition for existence will live longer and have more progeny. Over a long period of time this will result in the natural selection of such variations, the individuals lacking these variations being less successful and finally being eliminated. In this way the species will be gradually altered.

The subsequent modifications and extensions of Darwinism into the present-day 'synthetic' theory of evolution, do not affect , the relevance for us of the conflict between Darwin and his religious opponents.

Evolutionary changes are explained purely in terms of natural forces and not in terms of God. The natural forces act upon chance variations and not upon predetermined and directed variations. As a result, there is no goal in view. Man is an incidental product of these processes, rather than being the one for whom the rest of the universe was harmoniously designed. The contrast between the pre-evolutionary view and the evolutionary view could not have been greater. The two systems were diametrically opposed. However, on one point they agreed. Both incorporated a mixture of science and philosophy and both set out to be total explanations of the world. Whatever may be the status of the underlying science in such systems, they are in the end philosophical constructions. The one had a bias towards the religious while the other had a bias towards the materialistic. This is not to say though that the one was Christian while the other was (and is) atheistic.

The point I am trying to make is that the religion-science conflict was based to a large extent on the fear of the religious exponents of natural theology that if God's role as an immediate adjuster of the material world was undermined, He would also be displaced as a governor of its inhabitants.<sup>21</sup> This fear was justified, but as the roles they assigned to God were derived from a philosophical assessment of a particular scientific formulation their position was not a strong one.

If the conflict then was caused by the head-on clash of two philosophical systems, were there any other contributory factors?

Where, for instance, did the biblical faith stand in relation to both natural theology and evolution?

There can be little doubt that the prevalence of a preevolutionary cosmology, which in very general terms favoured Christianity, had lulled Christians into a sense of complacency with regard to scientific issues. Until the end of the eighteenth century, natural science had not challenged a literal acceptance of the Genesis account of creation, any storms from palaeontology being weathered by catastrophism. The evolutionary forerunners of Darwin could not be ignored, but for various reasons their influence was limited and certainly exerted little effect on the interpretation of Scripture. With the advent of Darwin, therefore, most evangelicals felt that the Bible itself was being attacked. One of the foremost evangelicals to study the issue deeply and to write about it at length was Charles Hodge. While allowing that 'science has in many things taught the

<sup>21</sup> Gillespie, op. cit., p. 227.

Church how to understand the Scriptures',<sup>22</sup> and while placing his reliance upon the Bible rather than upon any dispensable cosmology, he rejected Darwinism because of the atheistic implication inherent in the denial of design. He could not disengage any Darwinian hypothesis from a direct threat to a total Christian view.<sup>23</sup>

In a strict sense, I do not think the Bible was being challenged, but because of the complex interaction of biblical concepts, science and philosophy, many people, on all sides thought that this was so. What was particularly unfortunate was the similar terminology of biblical doctrines and natural theology. Hence both were concerned with God as creator of all, and yet the *content* of the term differed for the two schools of thought. In the biblical sense God is the One who has brought all things into being, out of nothing, and for His own glory. It is He, also, who upholds and sustains that which He has so created, and it is He who is responsible for the eternal destiny of mankind. The exact manner in which He created and upholds we are not told. By contrast the God of natural theology was the first cause, the divine architect, or the divine clockmaker. His concern with His creation was minimal. This is not creation in the biblical sense; it is nothing more than pointless mechanism.

Conversely, from the evolutionistic stand-point, ideas stating that the random features of evolution are incompatible with plan or purpose, and that despite this organic evolution exhibits progress,<sup>24</sup> cannot be substantiated from scientific investigation. They are philosophical speculations.

The challenge of the controversy should come to us in the form of driving us back repeatedly to the scriptures. What do they lead us to expect of God as creator? What details, if any, of the manner of creation do they give us? What place should purpose and design occupy in a biblically-orientated view of nature? We can take none of these answers for granted. We may not get full answers from the scriptures and if not, we should

<sup>&</sup>lt;sup>22</sup> C. Hodge, Systematic Theology (Scribner), 1872, 1, p. 171.

<sup>&</sup>lt;sup>23</sup> Dillenberger, op. cit., p. 244.

<sup>&</sup>lt;sup>24</sup> G. E. Barnes, 'The concepts of randomness and progress in evolution', *Faith and Thought*, 1958, **90**, p. 189.

tread warily that we do not try and impose our own answers upon the Bible, and then trade this belief as though it were indeed biblical.

This brings me to the place of the creation concept today. We cannot escape from the conclusion that we are living in a culture dominated by evolutionism, which in its turn is a hindrance rather than a help to Christianity. This has led many Christians to attempt various kinds of syntheses between their view of Christianity and evolutionary thinking. If you like, this is the present-day version of natural theology. Examples of such attempts on the scientific side are the 'creative evolution' of Bergson, the 'emergent evolution' of Lloyd Morgan, Smuts's 'holism and evolution' and now Teilhard de Chardin's 'convergent evolution'. In each case the religious is viewed in terms of the evolutionary, and is made dependent upon the evolutionary. In addition to these, all forms of theistic evolution incorporate extensive evolutionary thinking, which is interpreted in religious terms derived from outside evolution.

These attempts at synthesis are based on the presupposition that Christianity must be interpreted, if only in part, in terms of the prevailing scientific cosmology. At the other end of the scale are those who uphold the literal interpretation of the early chapters of Genesis, believing that such an interpretation is the only faithful one and that there is no scientific (as opposed to philosophical) evidence for change above the species level. Also at this end of the scale, although for different reasons, are the neo-orthodox, under the leadership of Karl Barth. This school completely separates scientific and religious questions, so that the doctrine of creation has nothing whatever to do with temporal origins. Rather, it is an affirmation concerning the fundamental relation between God and the world; it is not an event. Barth's questioning of evolutionary modes of thought was not a questioning of the theory of organic evolution, but whether the concepts of evolutionary biology were adequate or appropriate to express the Christian view of reality.<sup>25</sup> While rejecting the historical nature of the first chapters of Genesis, Barth's contention was that there are important dimensions of

<sup>25</sup> Greene, op. cit., p. 51.

reality that are inaccessible to science and cannot be expressed adequately in the forms of logical discourse.<sup>26</sup> Science for its part is given *complete* freedom of expression.

Between these extremes there is I believe a third way -I reject the interpretation of Christianity and creation in terms of the prevailing scientific cosmology, for the same reasons as I have rejected the natural theology of the seventeenth to nine-teenth centuries. All such systems contain the seeds of their own downfall, or if they do attempt to adapt themselves to the changing scientific atmosphere they will be subject to continual reinterpretation. While such reinterpretation is part and parcel of the scientific enterprise, it can only be damaging to a religious system.

On the other hand the complete divorce of science and religion allows for no interchange between the spheres. This I consider is artificial as it ignores both the influence which biblical thinking has had upon the development of science, and the ways in which biblical interpretation has been modified by science. An example of the first interaction is the dynamic implicit in the doctrine of creation to the effect that the details of nature can be known only by observing them. In other words the universe is as it is because this is the way in which God has created it. It is the expression of God's will, and not the logical outcome of arbitrary first principles. Nature can be understood only by empirical investigation, and it was the acceptance of this essentially Christian viewpoint - as opposed to the deductive reasoning of Greek philosophy - which made possible the rise of modern science. As for the second interaction, one example from the early chapters of Genesis will suffice. The insistence of evolutionary geology that long periods of time were required for the development of living things as we see them today, has forced students of the Bible to reconsider the meaning of the 'days' in Genesis 1. and of the chronological sequences in Genesis v. This does not mean that the days have to be interpreted as long periods of time, but it does mean that their interpretation and their part in the scheme of creation have undergone serious reconsideration.

<sup>26</sup> Greene, op. cit., p. 52.

As a sequence to this, I think a literal interpretation of every statement in Genesis concerning the creation is open to serious doubt. Principally this is not because it conflicts with the natural science of today. I have already rejected interpreting Christian things in terms of a scientific cosmology. However, I believe we have to take seriously what appear to be scientific facts, distinguishing as this point what we believe to be factual and what is clearly philosophical. On this basis we can say that the earth would appear to be aged in terms of millions of years rather than thousands of years and that change characterizes both it and its inhabitants. The extent of this change is still I believe an open question. That God has brought all of this into being there can be no doubt from biblical revelation. That it is God who actively upholds this system there can be no doubt. That God is working out His purposes in and through it there can be no question. However, the detailed way in which He acts in these processes is a matter of speculation, while the fact that these processes can be described and to a certain extent explained in naturalistic terms in no way affects their reality. Our understanding of their external details comes mainly through scientific investigation, whereas our appreciation of their internal significance is a matter of revelation and faith. But I would stress again that these two aspects of the problem are not separated into watertight compartments.

We find ourselves in a world in which the *secular*, defined as the sphere which is intelligible for man, is rapidly eroding the *sacred*, defined as the realm lying outside man's understanding and control.<sup>27</sup> As the secular is determined by scientific knowledge, its sphere of control will undoubtedly continue to increase in the foreseeable future, and as secularization has of recent years been accompanied by the process of dechristianization,<sup>28</sup> the outlook for Christianity might look bleak. However, to quote Charles Davis, it can be argued that: 'Christianity itself with its exalted view of the sacred, with its insistence on the true transcendence of the sacred, . . . has been the fundamental cause of the secularization of the West'. It follows that:

<sup>27</sup> C. Davis, *God's Grace in History* (Fontana), 1966, pp. 14–15. <sup>28</sup> *Ibid.*, p. 11. 'modern secularization . . . may be regarded as a purification of our concept of the sacred'.<sup>29</sup>

In this I see our hope for the future. Christianity can only survive and flourish when it is true to itself, and this means when it is true to God's revelation of Himself and His purposes as given in the Bible. This basis is the stimulus to a true religion and a free science. What we must seek is an organic unity between biblical faith and natural science. In the words of Hooykaas: 'What the Bible urges upon man is a complete transformation in his relations to God and his fellow-creatures, and to the world which God has made.'<sup>30</sup> Only by a faithful reverence to God's word in life and thought, and by a diligent application of the principles of science in investigating the world around us, can we truly worship God as our Creator, Redeemer and Lord.

<sup>29</sup> C. Davis, God's Grace in History (Fontana), 1966.

<sup>30</sup> R. Hooykaas, Christian Faith and the Freedom of Science (Tyndale Press), 1957, p. 14.