

The Bible and Science¹

DOUGLAS SPANNER

In the minds of many Christian believers the rise and progress of science, particularly in the last two centuries, has been one of the principal influences in undermining the authority of the Bible. This is true, they think, not only because the physical sciences have measured the size and age of the universe and found them vastly greater than had ever been thought before; not only because the biological sciences have examined and solved to their satisfaction the problems of heredity and of how the vast and constantly changing panorama of life through the ages has come to pass; and so on—but also because many scholars and theologians, dazzled and made envious by the unexampled success-story of science, have applied its methods to their own studies and come up with some very destructive results. For these two reasons, at least—that scientific advance seemed to challenge certain biblically-based opinions, and that scientific study of the Bible itself has seemed to undermine its divine origin—the impression has gained ground that science is the enemy of faith, and especially of biblical faith; and that the defence of biblical faith therefore necessarily means that science must in some sense or at some point be opposed. In other words conflict has come to be regarded as inescapable, and the believer to have a duty to be ready to do battle. I think this widely held opinion constitutes a sad state of affairs, and one that plays into the hands of the enemy; an enemy who, in the form of secular humanism, has been only too ready to encourage it. For this reason I am not going to attempt to defend the Bible against Science, but rather to show how much science owes to the outlook fostered by the Bible, and also how it can in a small way pay back some of the debt it owes. Any fault there is for the climate of opinion noted must be laid squarely at the door, not of science, but of the perverse human heart, ever ready to seek to justify itself for its ungodliness by whatever arguments seem plausible. Science is not the only one of God's good gifts to be perverted in this way in the interests of man's fallen rebelliousness. Art has similarly suffered. So in a sense I want to defend science, not oppose it, confident that being a gift of God it must have a positive contribution to make to faith.

The origins of Science

It is a remarkable fact that science arose not in the populous, clever and diligent nations of the East, but in the West. Its early beginnings were among the pagan Greeks, so it would not be fair to claim that it was the religion of Israel that first initiated the scientific enterprise.

But though its springs were in Ancient Greece there were certain elements in Greek culture that gravely hindered its growth. There was for instance the deification of nature; then there was the overvaluation of purely speculative thought; finally there was the undervaluation of manual work. All of these tended to discourage the experimental approach: if nature was divine, experimenting on her was impious; if rational speculation could discover the truth by itself, experimentation was unnecessary; and since manual work was a task for slaves, experimental work was demeaning. Each of these tendencies the religion of the Old Testament, and still more if possible the religion of the New powerfully corrected. The Genesis account of creation, clearly establishing nature as God's handiwork, not itself possessing the status of divinity; the necessity of revelation rather than speculation for authentic human life (as in Deut. 29.29; Job 11.7); and the bold metaphor of God working with His hands (Ps. 119.73; Isaiah 64.8)—all of these features of Old Testament religion clearly acted to correct the impediments in Greek thought to the growth of experimental science. And when we come to the New Testament these things are equally or even more powerfully present: the fundamental distinction between the creature and the Creator (Rom. 1.25); the folly and incompetence of purely speculative thought (1 Cor. 1.21; Luke 10.21) and the mystery of the Incarnation, when the Godhead took flesh and as a carpenter, worked with His hands. It is no wonder therefore that it has come to be realized that the growth of experimental science owes a tremendous amount to the faith of the Bible, and that it was only when the Bible had come to dominate our thinking on a large enough scale (after the Reformation) that modern science really took off. 'Metaphorically speaking', writes Prof. Hooykaas, 'whereas the bodily ingredients of science may have been Greek, its vitamins and hormones were biblical'². Even before the Reformation, as the philosopher A.N. Whitehead noted, the foundations of the scientific movement were laid by the fusion of the Greek emphasis on the rationality of things (an idea latent also in Israel's concept of 'wisdom', see for example Job 28.25ff; Jer. 10.12) with the biblical teaching about the 'personal energy of Jehovah', the God in whose hands were all the common happenings in nature (Ps. 104; Ps. 107.23ff.; Isaiah 40.26).

But the Bible, taken seriously, not only sets the scene for the scientific enterprise and encourages our race to engage in it; it positively lays upon us the obligation to do so. This is the meaning of the mandate given to man at the Creation: '. . . fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air, and over every living thing that moves upon the earth' (Gen. 1.28). This dominion involved the acquisition of knowledge of the creation by man, of which the first step was the giving of names to what God brought to his attention (Gen. 2.19), a

step which still holds in scientific practice whether the new objects of attention be hitherto unknown species, new cosmical structures (like quasars) or new physical effects (like the Mossbauer effect). The Bible has set the pattern. It is similarly so with the related spheres of art and technology; Genesis records at the outset the provision for these in the 'gold, bdellium and onyx' which were to be found in the lands surrounding Eden. Similarly Deut. 8.9, although not part of the Creation mandate, speaks of provision for technology. It was in accordance with God's directive that Solomon 'spoke of trees . . . and also of beasts and of birds, and of reptiles and of fish' (1Kings 4.33)—that is, of matters of scientific interest. But the Bible goes even further than this in linking God with science. Of course, in spiritual and moral things God is readily acknowledged as the great Teacher of men. But He is also Teacher, along different avenues, in other and lesser things. Thus though Ephraim did not know it, it was God who taught him to walk, that is how to make progress in the common affairs of life (Hosea 11.3f.). Again, consider what Isaiah says. In a remarkable passage (Isaiah 28.23ff.) he discusses the way in which the farmer learns how and where best to grow his crops, and then how best to harvest them. It is of course (speaking in common terms) by a process of trial and error, of testing out and seeing how it works in practice that he learns this: in other words by a simple application of what we now call experimental procedure! Nevertheless, Isaiah says, *it is God who is teaching him*. From this we conclude that just as our Heavenly Father makes His sun to rise on the evil and on the good so He providentially orders the world of science (as of all history), giving one great scientific achievement to a godly man, and another to an ungodly.³

So scientific knowledge is God-given knowledge, to be received with thankfulness and used with responsibility, to His glory. And this has been recognized by Christian men of science for a long time, very significantly by the founders of the Royal Society in 1660.

To summarize, the rise of modern science owes an immense debt not only to the Greeks but also to Israel, in particular to the biblical doctrine of God the Creator, who established His creation and rules it by wisdom, law and energy. As such, it is worthy of man's dedicated examination and study (Ps. 111.2). Indeed, the Bible lays an actual obligation upon man to study it and to engage in science and technology with a view to exercising dominion (under God); and in the process of doing so it says, God is his Teacher. It is He who introduces men (good or bad) to discoveries of the secrets of nature. All this underlines, of course, a very positive relationship between the Bible and science. But the positive relationship does not end there; further analysis of this relationship is helpful in the realm of what is dear to all of us, the proclamation and defence of the gospel.

We Believe in God

Recently the Doctrine Commission published a report entitled 'We Believe in God', a second 'contribution to the Church of England's task of intellectual discipleship' (Report, p.ix). In this report a comparison is initiated between knowledge in religion and knowledge in science (p.21). The comparison, we suspect, promises to be an important one first, because of the immense prestige which science holds in our contemporary world, and secondly, because the knowledge which it has put into our possession seems to rest on such an unchallengeably firm foundation. However, the authors of the report do not major on this last aspect of science. Rather they choose to emphasize that scientific understanding is 'unquestionably incomplete, provisional, approximate and open to correction', and that it is in the very nature of things that this will always be so. True as this is, in the hands of the authors it has an unfortunate thrust. They seem to be implying that our knowledge of God, even in terms of the images which the Bible itself gives us, is of the same order. No understanding of Nature therefore can be regarded as other than 'profoundly corrigible', and this may lead to massive corrections of its own past or present, to be 'no doubt themselves eventually superseded in part by new understandings'. True they are using the language just quoted about science, not theology; but this is the force with which their arguments came across to me. The whole section comparing science and religion is ill-conceived, it seems to me. 'We cannot be completely right, but we can be completely wrong'—presumably a reference to the replacement of Ayer's Verification Principle by Popper's Falsification Principle—would not immediately strike most readers as a fair way of speaking about science, and it is certainly a very discouraging way of speaking about faith in God. It does not help us in the quest; it neglects the enormous amount of positive and useful knowledge that science has given us and about which we can be absolutely certain; and it seems instead to major on the provisional nature of its often sophisticated and esoteric theories which seek to bring into mathematical order what lies right on the boundaries of only just possible experience—like the data of high-energy physics. This is a futile procedure. Faith in God is for the common life of everyday; and any useful parallel in science should refer to its findings which bear on the common life of everyday too. Of both, we should maintain that real certainty is equally possible. At the boundaries of theology, exactly how God relates to His created universe in the conceptual terms of abstract philosophy is no more an urgent matter of knowledge for the life of faith and obedience than is the correct interpretation of Quantum Uncertainty for the ordinary commerce of everyday affairs.

I think the trouble with this section of *We Believe in God* is that the analogy between faith and science is not drawn carefully enough.

Which terms in the first relate analogically with which terms in the second? We must decide on this before we can draw helpful conclusions. Let me try to draw the analogy more exactly. To begin with, we are considering the pair, the Bible and science. Let me deal with the latter first, and (for simplicity) consider science to refer to the physical and biological sciences i.e. to those sciences whose data are gathered by sense-observations. Psychology and sociology I shall omit for reasons which will not, I believe, affect my conclusions.

Science builds up its understanding on the basis of evidence gained through the senses. Can we further characterize this evidence? Yes; for as Michael Foster⁴ has argued, scientific evidence is marked by *being in principle accessible at will to man as man*. This means that anyone may confirm (or otherwise) an item of scientific evidence whenever he wishes. The 'in principle' is added because to do so may require him to acquire skills and perhaps spend money, neither of which he may at the moment possess. For most of us this would be the case if we wished to confirm reports of what the surface of the Moon or Mars was like. But the principle is clear: scientific evidence is evidence open to all whenever they want it; it is evidence reproducible at will.

Next, we observe that the object of scientific study is what we call Nature, but which the Bible refers to as the Creation (Rom. 1.25; 8.39), or 'the things which are seen' (Heb. 11.3). The result of this study is *a body of knowledge* (both experimental and theoretical) which itself we may call 'science'; and it is in this sense that I shall use the latter word. Now religion (to use a general word) builds up its understanding in a similar way, but with important differences. It uses the evidence of the senses (Deut. 4.3,12), evidence accessible to all and sundry. But it uses also evidence which comes through a different channel of perception. The Bible calls this 'faith', and it is very important for our purpose to recognize that faith in the Bible has this specific characteristic. Faith is not simply belief, or even trust; it is belief *in God's word*, trust *in God*. It has an unseen Object, and this Object it can be said legitimately to perceive. This is the implication of the Bible's frequent juxtaposition of faith and the senses: 'we walk by faith, not by sight'; 'Moses endured (by faith) as seeing Him who is invisible'; 'hear (by faith) and your soul shall live'; 'O taste and see (by faith) that the Lord is good'; 'men of little faith—do you not yet perceive?' (Matt. 16.8,9). The cases are too numerous to mention. Now it is clearly impossible either to compare or to contrast two things which do not share *a common property*. In comparing or contrasting faith and the physical senses that property is the furnishing of evidence. This means that we understand faith as a channel of perception, and this understanding is confirmed by the statement of Hebrews 11.1, 'Now faith is the substance (*hypostasis*) of things hoped for, the evidence of things not seen'; for just as sight provides

the evidence of things not open to being heard, or hearing of things (like the wind) not open to being seen, so faith provides the evidence of things not open to being seen, heard, touched, tasted or smelt.

With this understanding of biblical faith comes a very important clarification. The distinctive evidence about the nature of Reality which faith brings to our attention *falls outside the scope of science*. It does so because it is not 'evidence in principle accessible at will to man as man', as we saw the evidence proper to science is. It is not evidence that anyone can gather just when he wants to, granted the necessary skills, (and money!). Why not? Because it has a *moral* requirement, which the Bible calls godliness. Another Will, besides man's, is intimately involved, and that Other Will lays down the condition for this channel of perception to be opened. (Is. 29.10-14; John 9.39-41; 1 Cor. 2.14 A.V.; 2 Cor. 3.16). Of course, this is a great offence to the ungodly man; he hates the thought that there is any approach to fundamental knowledge which is denied to his intelligence, training and industry. But the Bible insists that there is. Our Lord's words, 'I thank Thee Father, Lord of heaven and earth, that Thou hast hid these things from the wise and prudent and revealed them to babes', say as much; and so do Paul's, 'For since, in the wisdom of God the world did not know God through wisdom it pleased God through the folly of what we preach to save those who believe'. We must recognize therefore that while any man, godly, ungodly or indifferent, can read laboratory instruments, examine fossils or collect any other items of scientific data, only the godly man has access to the innermost secret of things. Many know about the outward historical circumstances of the crucifixion under Pontius Pilate; only those who have turned to the Lord understand its inward and ultimate significance. The fear of the Lord is the beginning of Wisdom.

Granted this essential difference however between the ways in which science and biblical religion make contact with Reality—the one through the physical senses, the other most significantly through the perception of faith—it is nevertheless obvious that there is a parallelism between them. Both are seeking understanding, though in rather different terms. Science seeks understanding in terms of what we may call mechanism, and its study is Nature. Theology (the appropriate description in view of how we have defined 'Science' as systematized knowledge) seeks understanding on the deeper level of what we may correspondingly call meaning, and its study is Revelation. My argument here is necessarily very abbreviated; but if we are right in saying that theology is concerned with meaning, then meaning implies Mind (a Mind that is, behind things), and the proper word for the process by which such a Mind communicates itself to lesser minds is clearly Revelation. Finally, with the recognition that for any who call themselves Christian there is nothing accessible with

a claim to be called Revelation remotely comparable to the Holy Scriptures, we arrive at the following comparison:

Science develops from the study of Nature.

Theology develops from the study of Scripture.

This is a comparison with a very old and honourable pedigree. The great Elizabethan philosopher of science, Francis Bacon, made much of the 'two books', Nature and Scripture, through which God instructs man. 'Bacon thought that man could never search too far either in the book of God's word or in the book of God's works, in divinity or in science' (Hooykaas p.40). 'As the schoolmen had proudly substituted their own inventions for the oracle of God's word', so men had left the oracle of God's works and exalted their own speculations, or ancient authorities such as Aristotle. Bacon in taking this line became a considerable influence in launching the modern scientific movement. I do not know when the analogy of the 'two books' was first suggested, but Origen (c. 220 AD) had remarked

he who believes the Scripture to have proceeded from Him who is the Author of Nature, may well expect to find the same sort of difficulties in it as are found in the constitution of Nature.

(A quotation on the tomb of the great Bishop Butler, 1752).

Much further back even than that it finds support in Psalm 19 for instance, which starts with 'The heavens declare the glory of God and the firmament showeth His handiwork', (a non-verbal revelation); and then moves to 'The law of the Lord is perfect, converting the soul, the testimony of the Lord is sure, making wise the simple', an obvious reference to the Book of the Law, (a verbal one). To this Paul adds his support in Romans 1.20; 3.2 where he speaks first of the Creation, then of the oracles of God. So here is our analogy in a rather more explicit form:

Science learns from the Book of Nature (*nullius in verba*, 'taking no man's word for it', as the Royal Society's motto puts it)

Theology learns from the Bible (in the same spirit).

I want you to notice this analogy very carefully. Science corresponds strictly to Theology, not to the Bible; it is Nature which answers to the latter. If we try to compare instead the Bible with Science we shall find that our lines have got crossed and that the comparison yields no sense. It is this, I am afraid, that the Report has sometimes done with very confusing results. Let me draw your attention to some of them.

We Believe in God

On page 3 we meet the statement (which to most readers will surely convey a rather disparaging sense) 'The Bible is not the kind of book which can easily be made to yield a single and consistent doctrine of God'. [Whoever said it was?]. The statement certainly seems to be meant to detract from the view of Scripture as wholly God-given, since it goes on to describe it as 'consisting of a large number of *attempts* (my italics) to speak about God . . .', the 'attempts' of course being human attempts and as such being imperfect and therefore liable to be inconsistent with one another. The logic of the passage seems to be that if you agree that the Bible is not the sort of book to yield easily a single and consistent doctrine (and most of us would in fact thoughtfully agree that it is not) then you must give up the faith that it is all consistently God-given. Now this is where the analogy of the two books comes in. For a quite parallel statement about Nature can also be made, and made validly: Nature 'is not the sort of book which can easily be made to yield a single and consistent doctrine' of say, matter (witness the wave and particle paradox). Yet no scientist (or theologian, for that matter) would ever agree that this denied Nature's unity and coherence! Why should we be left with the strong suggestion that the parallel statement denies the Bible's? 'The more carefully one studies the Bible, the more one becomes aware of ideas of God and responses to Him which seem actually to conflict with one another', continues the report. But a corresponding situation has become a commonplace in the 'more careful study' of Nature by the scientist! Yet it never shakes his faith in her unity and consistency. Why should it shake ours in the Bible's? Where's the problem then? My own guess is that many theologians have nowhere near such a strong faith in God as intelligible and consistent Revealer as most scientists have in Nature as intelligible and consistent metaphysical unity. The scientists' attitude to their source book is accordingly a standing rebuke to the theologians; to make out that scientific practice is a justification for the sort of theologizing it advocates, as the Report seems to be trying to do, is surely misconceived logic. All this appears quite unarguable, unless indeed the analogy of the 'two books' is invalid. But the gentle and brilliant genius of Bishop Butler (the author of the famous *Analogy* of 1736) would, I believe, have unequivocally and strongly supported it.

The Bible as *verbal* Revelation

One difference between the book of Nature and the book of Scripture is that the latter is in *words* whereas the former is in *phenomena*. Sacred Scripture, the Report points out, belongs 'to a particular period in a particular language and cultural setting':

If Christianity, along with other great religions, believes that God has revealed Himself through the medium of human speech and recorded

words, then it cannot look for fixed, normative and universally agreed doctrine.

This is a very confusing and probably confused statement. We can all agree that while men are men any two will often read given written matter with slightly (or even substantially) different nuances, for they bring different predispositions to the task. This is true even when the two are contemporaries and share the same language and culture. So it may be correct sometimes that 'human speech and recorded words' yield no 'universally agreed doctrine'. That this may be true of the Bible is borne witness to by such historical controversies as that between Calvinists and Arminians; but as every lawyer believes, it is possible to pen written matter so carefully that the absolutely vital things are not left in this state of uncertainty. It is not therefore an entirely unavoidable state of affairs that 'human speech and recorded words' have a meaning for ever inaccessible with substantial certainty to later generations. If it were, who would bother to read Plato? I do not think the authors of the Report are at all sure of their argument here; it is decidedly shaky. For while it may be true that a divine revelation given in words may not lead to 'universally agreed doctrine' (the divine Author may have felt it better to leave it that way, as in the case I have quoted), it is quite another thing to say that we cannot regard it as *normative*. If it is in fact divinely revealed it must surely be normative, even if like a vessel chained to an anchor whose exact position on the sea bed is unagreed our interpretations swing around it according to wind and tide. This brings their casual remark later (p.10) that 'Revelation may be less of a fixed point than it appears' under reasonable criticism too. As a matter of fact the authors of the Report seem at this point to be speaking somewhat tongue-in-cheek. Under cover of an argument invoking the cultural and time-conditioned relativity of language I suspect that they wish to deny or belittle the biblical doctrine of judgment as illustrated by the narratives of the Flood, Sodom and Gomorrah, the Captivity and so on. This seems a reasonable inference from their caricature of historically orthodox doctrine as including belief in a God

correctly described as a being seated on a celestial throne who regularly consigns large numbers of human beings to a place of torment somewhere below the earth.

If I am mistaken in this I must apologize; but if not, then the authors of the Report are using the argument from the relativity of language in a rather reprehensible way.

But my comments on the Bible as verbal revelation are not yet finished. We are comparing theology and science, and we noted that whereas the textbook of theology is in words, that of science is in phenomena. Now what I want to emphasize is that just as words have

a certain cultural and historical relativity—verbal statements can mean something rather different in different cultures and at different times—*so can phenomena*. In saying this I am not thinking that (for instance) one culture can regard an earthquake as a token of divine displeasure while another regards it as merely the result of mechanical stress in the earth's crust—that is, that one age looks at it through theological spectacles while another looks at it through scientific ones; no, I am thinking that two scientific cultures both of which of course have on scientific spectacles can yet see it differently. Undoubtedly, the phenomena have a cultural relativity quite analogous to that which the Report draws attention to as inescapable in the case of written Scripture. If I can establish this then it quite undermines their argument at this point, an argument whose thrust is seriously to diminish biblical authority.

So let me come back to the argument about science. It has often been said in the past that a scientific theory confronted with fresh discoveries stands or falls according as it can accommodate or otherwise the new facts; the 'bare facts' (as they have been called) have it, and they can overthrow the theory if they are so inclined. Now the surprising realization has long since dawned in scientific circles that there *are* no 'bare facts'. All facts which are reported are (to use the current phrase) 'theory-laden'. This means that when the scientist makes his observations he necessarily looks through spectacles *already tinted by the scientific culture he has inherited*. He reports in terms provided by that culture; that is, in terms dependent on what Thomas Kuhn in *The Structure of Scientific Revolutions* called the reigning 'paradigm'. As a result the observations he reports are from the start biased towards fitting in with the culture he has inherited. Of course, new observations may obstinately refuse to fit in notwithstanding, and when this happens a scientific revolution occurs, and the whole scientific community (or most of it) shifts to a new paradigm; or to put it more picturesquely, discards the old spectacles for others of a new tint. As an example of a major shift of this sort we may note what happened when observations of the movements of the planet Mercury refused to fit in with predictions based on the classical mechanics of Newton, and Einstein's Principle of Relativity took over. Seen through the new spectacles of Relativity old concepts (like Time and Space) looked distinctly different! This was cultural relativity (pardon the pun) with a vengeance; yet in spite of it, the Book of Nature *never for a moment lost its supreme, accepted, normative position* for science, nor the scientist his faith that ultimately it would prove consistent and intelligible in its own terms. It has remained always his final court of appeal. Seen in this light therefore cultural relativity (or the 'new hermeneutics') offers no reason at all for qualifying Scripture as theology's final court of appeal. What does stand out, rather, is that theology's inherited

concepts, however venerable, should always be held as subject to correction by the word of Scripture.

I could add something concerning another emphasis of the new hermeneutics, that biblical truth is commonly presented in story form. True enough; but so are the deliverances of the Book of Nature. One does not find Nature's laws written there plainly in abstract form; every observation, every experiment even, tells a story. It is from these that our systematized understanding is built up. It is the wisdom of the scientist, moreover, to take them all as *true* stories! In a comparable sense, the theologian should do the same.

Science and Authority

It is often said that the spirit of science is anti-authoritarian, and the case of Galileo is cited, and even perhaps the motto of The Royal Society (*nullius in verba*).⁵ I think this is a serious mis-reading of the situation. What happened at the scientific Renaissance was similar to what happened at the Protestant Reformation, nearly a century earlier: the authority of human tradition, however venerable, was replaced by the authority of what is directly God-given, the Bible in the one case and the book of Nature in the other. Let me give you a few quotations that emphasize this. The first are from Thomas Henry Huxley, 'Darwin's bulldog' as he was called, the man who invented for himself the word 'agnostic':

[Science] is teaching the world that the ultimate court of appeal is observation and experiment and not [human] authority.

Sit down before fact as a little child, be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses nature leads, or you shall learn nothing.

The next is from Sir Cyril Hinshelwood's preface to his book *Chemical Kinetics of the Bacterial Cell*. Sir Cyril was President both of The Royal Society and of The Classical Society:

The question of whether the modes of thought and work to which the chemist is accustomed in dealing with inanimate systems help in understanding the behaviour of the living cell is one which must be asked—If the answer is negative nature will not hesitate to give it, but it is better to be put in one's place by her than by any other authority.

I think those quotations from two extremely eminent men sufficiently make my point: the scientist is a man who knows he is under authority. As a scientist he is bound to be true to his foundation documents, the book of Nature. This is his final court of appeal (and it always will be); and to it he constantly submits. It is a little ironical therefore that the Report, which shows such respect for science, stressing and appreciating its openness to correction, never comes near to accepting that theology must be open to correction in an

analogous way, by appeal to that to which our Lord appealed, the Holy Scriptures, which are 'profitable—for correction'. Just as all scientific formulations stand under the judgment of the book of Nature, and of this alone, so all theological formulations should stand under the judgment of the Bible, and of this alone. That is a logically consistent position.

Conclusion

I began this paper pointing out that the practice of science is part of the mandate given to man at his creation (Gen. 1.28). It begins with naming the objects brought by God to his attention, as the animals were (Gen. 2.19). It proceeds by observations and experiment, and in all this it is God who is man's teacher (Is. 28.23ff.). We should still look at science in this way. I noted that it is a sphere of human activity open to all men equally, the godly and the ungodly alike (the latter seem apparently foremost in Gen. 4.21,22). Further, the rise of modern science owes an immense debt to the biblical doctrines of creation and providence, and in fact began in earnest a generation after the Reformation. With this understanding of things and in view of the immense success-story of science we may well ask if science has any lessons to pass on to theology. Theology also seeks understanding of our world, but in terms of meaning rather than of mechanism and with a new avenue of perception—faith—available to it, *an avenue open only to the godly*. Here the old analogy of the 'two books' came into its own, Theology having the same relationship to the Holy Scriptures as science has to the book of Nature, that is, one of submission to Authority. Finally, if this analogy be accepted (and it has strong support both in Scripture and in Christian thinking) it appears that many of the statements in the report *We Believe in God*, statements which belittle the sufficiency of Scripture and deny its permanent and supreme authority, are seriously misleading. So far as the success of science has any lesson to offer it is that our theology should take again on its lips the words 'It is written', and abide by them.

DOUGLAS SPANNER was Professor of Plant Biophysics, University of London till 1978. He is now ordained (N.S.M.).

NOTES

- 1 This paper was delivered by Professor Spanner at Church Society's Spring Conference 1988, held at Swanwick, Derbyshire under the title: 'The Church under the Word of God'.
- 2 Hooykaas, R., *Religion and the Rise of Modern Science* (1972).
- 3 For example, the Electromagnetic Theory of Light to Clerk Maxwell; the Structure of D.N.A. to Sir Francis Crick and James Watson.
- 4 Foster, Michael, *Mystery and Philosophy*.
- 5 Roughly, 'Take no man's word for it'.