CREATION AND EVOLUTION

by D. Gareth Jones

The world in which we live can have experienced few tragedies so great as the conflict between religion and science. The contrast between the Puritan scientists of the seventeenth century and the scientists and churchmen involved in the Darwinian controversy of the nineteenth century is fundamental, and marks a disastrous revolution in the approach to nature of both Christians and non-Christians. Whereas the Puritans regarded science as an ally of true religion, most of those engaged in the first flurry of the evolution débâcle were ranged into opposing camps depending upon whether they were scientists, evolutionists and unbelievers, or theologians and anti-evolutionists. The legacy of this radically changed attitude has remained with us and even today is a determinative influence in much of our religious and scientific life. The reasons for the change are complex, and will only partly concern us here.

Whatever else may be true of the evolutionary controversy, one point is clear—emotional and philosophical considerations have predominated, at the expense of theological and scientific principles. To many of the scientists, the theory of evolution was soon transformed into the dogma of evolutionism, thereby providing them with a satisfying philosophical alternative to the doctrine of special creation. To such, all reality is evolution. Not only is it an entirely natural process, but it is an all-inclusive process, containing within itself the potential for explaining the whole of the cosmos. Generally, such a system dispenses with either the need for, or the relevance of, the supernatural; or if a god is allowed, it is a god of evolution. At the other extreme were the hyper-traditionalists for whom the literal interpretation of the early chapters of Genesis, in the context of a static world-view, completely ruled out the possibility of change in living forms. Such a position could not be affected by science, the findings of which were irrelevant except in so far as they were branded as ‘atheistic’ and ‘of the devil’. The modern representatives of this school of thought may allow for limited change, perhaps sometimes speciation, but their views on evolution itself are unchanged.

On one point both positions are agreed—evolution is a philosophical system. To the one, it affirms the freedom of nature and the dignity of man; to the other, it is a denial of God as God. Unfortunately the way in which the term ‘evolution’ is used is invariably not mentioned, so that no distinction is made between its scientific and philosophical connotations. To fail to distinguish between observation and hypothesis, limited generalization and broad generalization in science is simply misleading, especially when the end result is presented as an incontrovertible law with universal applicability. On the other side, it is not unduly helpful to ignore the legitimate scientific aspects of evolution because these do not fit neatly into a particular interpretation of the Bible.
Before proceeding further it is essential to distinguish between the different usages of the term 'evolution'. Kerkut\(^9\) recognizes: (a) the special theory of evolution, according to which many living animals can be observed, over the course of time, to undergo changes so that new species are formed, and (b) the general theory of evolution, which asserts that all the living forms in the world have arisen from a single source which itself came from an inorganic form. In that the special theory is scientifically verifiable, it cannot be rejected; as it involves the formation of new species it is correctly classed as evolution\(^10\). The general theory involves a number of assumptions, e.g. living organisms have been derived from non-living matter, life originated only once and all living forms are genetically related. Some of these assumptions are quite reasonable, and in the present state of our knowledge form a useful basis for our thinking about the possible relationship of living forms to each other, and about the possible origin of life. However by their very nature, certain of them will never be capable of rigorous scientific proof. As an illustration of this, it may be possible at some time in the future to bring into being in the laboratory a self-reproducing living organism from such essential compounds as amino acids. Such an achievement would demonstrate that a similar event could have occurred in the past, but it would not prove it.

The reliance we place upon these assumptions depends on our philosophical presuppositions. For the non-Christian they are essential if he is to have a coherent and unified picture of the world. By contrast, a Christian with a biblically-orientated world-view is free to accept or reject such assumptions\(^11\). I do not believe that the possibility of his acceptance of these assumptions involves him in an anti-Christian philosophy\(^12\). The controlling principle is the scientific evidence.

This distinction between the scientific and philosophical approaches to evolution is a vital one for the Christian. A scientific hypothesis, such as the general theory of evolution, is a probability statement\(^13\), in that it interprets the whole of nature in terms of limited evidence. Further research will determine the accuracy of this interpretation. If it is seriously inaccurate it will have to be modified or even discarded. The conversion of this scientific hypothesis into a materialistic philosophy opposed to Christianity is totally different. The claim that 'man has risen, not fallen'\(^14\) is the outcome of an ethical judgment infected into evolutionary thinking from outside. In the same way, the discarding of an external purpose in evolution\(^15\) and the belief that man's destiny is to be the agent of the world process of evolution\(^16\) have no scientific foundation.

From the above, the detailed mechanism of biological evolution is of no concern to the Christian as a Christian, and I will not discuss these issues. However anti-evolutionists have made much of difficulties in the theory of evolution. Their criticisms cover a wide field, and include the fact that large mutations are generally deleterious, the lack of intermediate forms in the fossil record, the apparent contradiction between the entropy of the second law of thermodynamics and evolution, and the inconsistency of radioactive dating. Some of the criticisms, such as the lack of intermediate
forms, are valid and are generally recognized, others, such as the inconsistency of all forms of radioactive dating, are grossly exaggerated.

These criticisms call for a number of comments. First, that there are weaknesses in the biological theory cannot be denied. However, as much should be asked of this theory as is asked of other scientific theories, and not more. The rejection, as unscientific, of anything which is not directly observable entails a view of science in which facts alone are valid. A science devoid of imagination and hypothesis would be sterile and would hardly constitute science in the modern sense. And yet the 'science-equals-facts' argument is still met today in anti-evolutionist circles.

Secondly, to expose the weaknesses of one theory in no way provides a workable scientific alternative to evolution. Christians, like non-Christians, cannot live in a vacuum. A positive alternative to the evolutionary theory, at the scientific level, must be provided and far too many anti-evolutionists have not even attempted this. From time to time schemes based on the universality of the Flood have been suggested by way of complete contrast to geological uniformitarianism and evolution. On the whole they have proved unsatisfactory. The most detailed forms of scientific creationism which have been proposed incorporate certain aspects of the biological theory of evolution.

We are now in a position to consider in some detail a number of possible interpretations of the first two chapters of Genesis, in the light of the previous discussion of evolution.

In the first place, any interpretation of these chapters must be valid exegetically. Starting from the premise that the Bible in its entirety is the inspired Word of God, we are obliged to try and discover what is the purpose of the passage in question, and what it is that God would have us learn from it. We can be satisfied with nothing less than this.

In the second place, our understanding of some of the details of Genesis one and two has undoubtedly increased as a result of our increased understanding of developmental processes. I cannot therefore follow those who maintain that the interpretation of these chapters must be carried out in complete isolation from modern science. I do not believe this is a realistic assessment of our situation.

The most general principle to be learned from the beginning of Genesis is that God is the Creator of the universe and of all in it. As one modern confession of faith phrases it: 'In the beginning it pleased God, for the display of His glory, power, wisdom and goodness, to create out of nothing the heavens and the earth, and all that is in them'. In other words, the creation was a free act of God, it marked the temporal beginning of the universe and pre-existing materials were not used. These ideas have historically formed the concept of creatio ex nihilo. Furthermore, we can consider the universe in general as 'good' because it is the production of God's command, while humanity in particular is 'very good' because made after the image of God himself.
Does Genesis present an historical account of the creation? In other words, did the events recorded in the first chapters of Genesis actually take place? The reading of the chapters themselves would appear to indicate that they did. This impression is strengthened by a number of New Testament passages which look upon certain events of the creative period as genuinely historical. Ridderbos would prefer not to apply the word ‘history’ to Genesis one because the historiography of the Bible differs in some respects from modern historiography, and in addition it is neither an eyewitness account nor the fruit of historical investigation. At the same time, he does not doubt its factual nature.

What is of importance is the distinction between its factual reliability, and mythology or untrustworthy tradition. This does not mean that is is purporting to give accurate scientific detail in the language and conceptual framework of the twentieth century, neither does it of necessity mean that it is giving a chronological account of what happened. Its arrangement may be schematic. Yet it does insist that the events took place, and that the account we have of them is meaningful and relevant, especially with respect to salvation.

One of the key problems in the interpretation of Genesis one is the definition of \textit{yom}, translated ‘day’. The word \textit{yom} is used in three different ways in Genesis 1:1 - 2:4. In Genesis 2:4 it is employed to embrace all the ‘days’ of Genesis one. From this, and bearing in mind the numerous other meanings which \textit{yom} has in different places in the Old Testament, it has been argued that it is impossible to give it any one meaning in Genesis one. Nevertheless a strong case can be made out for its meaning a period of approximately twenty-four hours—for the last three days at least, as opposed to a period of time lasting millions of years. The arguments put forward in favour of this view by Surburg include: (a) most Hebrew dictionaries do not recognize the interpretation of \textit{yom} as a period of time lasting millions of years; (b) when \textit{yom} in the Old Testament is associated with a definite numeral, solar days are meant; (c) the six days in Genesis one have light and dark portions, and this agrees with the method of recording time in the Mosaic period.

Young refuses to commit himself on the actual length of the days, beyond stating that they are periods of time which can legitimately be called days. The first three days are not solar days. Lever considers the days are not to be formulated on a physical basis of time, and so cannot imply periods of millions of years. Ridderbos seems to view them as real days, although of greater importance to him is the way in which they constitute an order, in the sense that Genesis tells us first of all that God has created everything. In Spanner’s view they represent elements, not of time, but of eternity, their actual length being irrelevant.

It is doubtful then whether the ‘days’ of Genesis one can be regarded as long periods of time.

The next issue to be faced is whether or not the order of events as recorded in Genesis one is intended to be taken chronologically. Closely
related to this is the same question concerning Genesis two.

A schematic, non-chronological view or, as it is sometimes called, the 'framework' hypothesis was ably supported by Noordtzij in a book published in 1924. More recently it has had another champion in the person of Ridderbos. In its turn it has been strongly criticized by Aalders and Young.

The essence of this hypothesis is that, in order to impress upon our minds the fact that God is Creator of all that exists, the author speaks of eight divine acts of creation. These he distributes over six days, in such a way that God worked for six days and rested on the seventh. Although we are not told in what succession everything has been created, this does not mean that the order is arbitrary.

The arguments adduced in support of this position are firstly, the Israelite was accustomed to work for six days and then to rest for one day. The creative activity of God is described in similar terms because this was the only way to speak about something beyond human thoughts and words. The language, like much other language in Genesis one and two is anthropomorphic. Secondly, the whole of Genesis one is of a schematic nature. The six days fall into two groups of three days each. There is an approximate parallelism between the first and fourth, second and fifth, and third and sixth days. Furthermore, the eight creative acts are distributed into two groups of four each. Thirdly, as mentioned earlier biblical historiography differs from modern historiography, in that the biblical author frequently groups historical facts artificially and deviates from the chronological order without stating his intentions explicitly. Examples of this can be found in the contrast between Genesis one and two, and in the contrast between the temptation narratives of Matthew four and Luke four.

The main objection to this theory stems from the fourth commandment. However, in terms of this viewpoint, God did create in six days and rested on the seventh. His example holds as powerfully as with a chronological position.

Those who resolutely affirm that Genesis one speaks chronologically, have to concede that Genesis two speaks non-chronologically. The exegetical grounds for treating the two chapters differently are not convincing.

I would tentatively propose therefore that the first two chapters of Genesis be treated non-chronologically. This position has its exegetical difficulties, but so does a chronological scheme.

A non-chronological scheme in no way denies the historicity of the account. Its emphasis is upon the purposes of God in creation, rather than upon the details of creation. Neither does it suggest that the author deliberately placed the events non-chronologically. We have no evidence
that he knew the chronological sequence. What was important was the schematic arrangement.

The false identification of the phrase 'after its kind' with the concept of the 'fixity of species'\textsuperscript{36} engendered many difficulties for Christians, but fortunately is now virtually a historical curiosity. Many creationists allow for variation of living types within the limits set by the 'kinds' of Genesis. The 'kinds' are variously considered as corresponding to the 'phyla', 'orders' etc. of taxonomy. The first members of such a group would have come into being as a result of the creative activity of God. Natural processes would have been responsible for development within the group. In contrast to this, theistic evolution teaches creation from within, and recognizes a continuous line from the original cells to man\textsuperscript{37}.

The heart of the anti-evolutionist position lies, not in an impregnable interpretation of the first two chapters of Genesis, but in an interpretation of these chapters in terms of the idea of constancy. Instead of being of scriptural origin, this idea derives from Greek-pagan thinking\textsuperscript{38}, but has become such an integral part of our thought that to question it—as one must do in light of scientific data—is regarded as tantamount to questioning Scripture itself.

Theistic evolution, on the other hand, recognizes no limits to possible change. It accepts the current general theory of evolution, with the proviso that this is the manner in which God has created.

In my view neither of these positions accounts satisfactorily for both the scientific and Biblical evidence. The scientific evidence cannot be interpreted in Biblical terms; neither can the Biblical position be dictated to by the scientific fashion of the day. As I have attempted to show, each must be viewed primarily in terms of its own interpretative criteria. However I cannot go as far as some and separate completely the two realms. Neither can I support a supranaturalistic view by which God intervenes from time to time in his creation. This position rests on the assumption that nature is in some degree independent of God. Instead we must hold that nature is nothing in itself, but that like everything else is utterly dependent upon God.

Difficulties may arise over the points of intersection between the Bible and science, e.g. the interpretation of 'after its kind'. These should not disillusion us, as in the present state of our knowledge they are to be expected.

The difference between a Christian and a non-Christian view of nature lies not in the sphere of the data, investigations or hypotheses, but in their respective philosophies. Whereas the non-Christian limits his horizon to the material world, the Christian's attention is directed towards God as Creator and Sustainer of the world, and his desire is to discover more about God's purposes in the world.
REFERENCES


5. By ‘hyper-traditionalist’ I refer to one who, in attempting to be loyal to the Bible, has views far more rigid and dogmatic than the Bible itself. This in turn entails a disregard for scientific investigation, whenever the latter appears to question what he conceives to be biblical truths. See B. Ramm, *The Christian View of Science and Scripture*, (Paternoster Press) 1960, 22 - 5. Also J. O. Buswell, ‘A Creationist Interpretation of Prehistoric Man’, *Evolution and Christian Thought Today*, (Paternoster Press) 1961, 168 - 9.


13. Ramm, op. cit., 188.


24. Cf. A. Noordtzij, quoted by Young, op. cit., 45.


31. N. H. Ridderbos, *Is There a Conflict between Genesis 1 and Natural Science?*, (Eerdmans) 1957; *Free University Quarterly*, op. cit., 221 - 235.

32. For a summary of these positions and for a detailed discussion of their merits see: Young, op. cit., 43 - 105.

33. Exod. 20:9 - 11.

34. Young, op. cit., 74.


36. This idea was first put forward by John Ray (1628 - 1705).

37. Ramm. op. cit., 147.