Faith and Thought

A Journal devoted to the study of the inter-relation
of the Christian revelation and modern research

Vol. 92 Number 2 Winter 1961

R. E. D. CLARK, M.A., PH.D.

The Design Argument and the Limits of Science

(A COMMENT ON THE PAPER BY MR G. E. BARNES—SOME REFLECTIONS ON THE EVOLUTION CONTROVERSY*)

WARMEST thanks to Mr Barnes for his useful and interesting paper. His summaries of some of the thought movements of our day are most valuable and timely, and their value is in no way diminished by the presence, in the paper, of a relatively minor amount of matter with which many will be disposed to disagree. It is with these parts only that the following comments are concerned. And it should be stated at the outset that the quotations from Mr Barnes' paper are taken as representative of widely held views, in no way peculiar to him.

Design and Evolution

The mention of Kant (p. 161) gives a wrong impression. Kant showed that you cannot, *with logical certainty*, prove God's existence from nature, but he strongly *commended* the Design Argument, believing that it leads to a highly probable conclusion. Again, the reference to Paley is wrong. Paley develops the Design Argument in his *Natural Theology*, not in the book mentioned by Mr Barnes.

Mr Barnes states that a major part of the evidence for the Design Argument was concerned with 'the fitness of the environment to sustain life, and the intricate adaptations of organisms to the environment'. He then asserts that the doctrine of natural selection enables this aspect of natural order to be 'explained mechanistically' (p. 162). Later, in his conclusion, he says, 'The theory of natural selection has undermined what was probably the strongest argument of Natural Theology, the argument from Design' (p. 174).

Something seems wrong here. Manifestly, natural selection cannot in any way alter the status of the argument for Design in so far as the

* *Faith and Thought*, 1960, **91**, 158–176.

latter is based upon the 'fitness of the environment'—as, indeed, Lawrence Henderson and Pantin have pointed out.[1] And even if we allow all that is claimed for natural selection, it can hardly be true that the Design Argument as a whole would be substantially destroyed thereby. The best-known statements of the Design Argument in pre-Darwinian days are given in the Bridgewater Treatises, and of the nine volumes of these, only two are devoted to anatomy (3 out of 13 in the later 13-volume edition).

Natural Theology

Having argued that the Design Argument is invalid, Mr Barnes asserts that it is unbiblical. To prove this he quotes from the Bible but twice, and neither passage is pertinent. The question posed by Zophar the Naamathite (Can you find out the deep things of God? Can you find out the limits of the Almighty? Job xi. 7, RSV) is surely irrelevant. Even if we adopt the older rendering, is it seriously suggested that we, as Christians, should base our views on Zophar's perverse theology which, we read, moved the Lord to wrath (Job xlii. 7, 9)? The second citation, that of, Corinthians i. 21, is a pure statement of fact; it does not tell us whether this is what *ought* to have happened—whether the world *ought* by wisdom to have found God. If we take it to disprove Natural Theology we must suppose (*a*) that by wisdom Paul meant or included the study of natural science (which seems unlikely), and (*b*) that men of the 'world' appraise evidence honestly (they certainly do not).

If the biblical case against Natural Theology rests on such texts as these, it must be weak indeed. Why does Mr Barnes forget the many occasions on which Natural Theology is taught or implied in the Bible? What about Psalms xix. or Acts xiv. 15-17, for example? Or what could be clearer than St Paul's words: 'What can be known about God is plain to them, because God has shown it to them. Ever since the creation of the world, his invisible nature, namely his eternal power and deity, has been clearly perceived in the things that have been made' (Rom. i. 19-20).

[1] L. J. Henderson, *The Fitness of the Environment*, (1913); *The Order of Nature* (1917); C. F. A. Pantin, 'Organic Design', *Advancement of Science*, **8**, (1951), 138. For a modern summary of the argument, see R. E. D. Clark, *The Universe, Plan or Accident* (3rd. edn., 1961).

Mr Barnes adds that 'the Bible undoubtedly speaks of God's revelation in nature', but adds that this revelation 'can only be accepted by faith' (p. 174). Natural Theology does not deny an element of faith in the conclusions it would draw, any more than does natural science (for scientific discovery may involve faith of no mean order).[1] You cannot by observation prove that atoms exist or that the earth has a core, but it is none the less true that natural science leads to these conclusions. But Mr Barnes seems to refer to theological faith only, for he says that you must believe in God first before you can 'learn something of His glory and wisdom from the world He has made'. But this assertion is surely in head-on collision with what Paul teaches in the passage cited, 'Men who, by their wickedness, suppress the truth (of Natural Theology) . . . So they are without excuse; for although they knew God (potentially, that is, by Natural Theology) they did not honour Him as God . . . but they became futile in their thinking and their senseless minds were darkened.'

If faith in God is a prerequisite to the appreciation of 'the witness of nature' what does such language mean? In what sense does God make plain or show His power and Deity to wicked men by means of created things, and in what sense do such men know God and then suppress this knowledge—*except in the sense* that Natural Theology is God's witness to all men, including those *without faith* in Him?

Creation as a Phenomenon

The Design Argument implies, or might imply, that God creates order in nature by intervening in its affairs discontinuously. What would be the nature of such intervention?

Mr Barnes (p. 159) states that, according to the theory of special creation an imaginary observer, watching the event, would have seen the equivalent of a conjuror (invisible?) producing a rabbit out of thin air. This view, he says (p. 160), is equivalent to spontaneous generation and stands in antithesis to evolution.

I find this difficult to follow. I develop a photographic plate in a darkened room and a picture of a rabbit appears where there was none visible (or even detectable) before. I dissolve saltpetre in hot water and let it cool when beautifully formed needle-shaped crystals make their appearance as if by magic. Indeed, early scientists spoke of 'natural magic'. An observer, present at the creation, could not have

[1] R. E. D. Clark, *Christian Belief and Science* (1960).

discovered by observation whether God was intervening or not: it is no easy matter to identify magic when you see it.

Nor can the point be evaded by postulating an *imaginary* observer—a clever daemon or Laplacian deity, endowed with superhuman powers. Such a being, though he might have observed the individual atoms as they were placed in position in the first specks of living matter (or in the first rabbit) could not distinguish by *observation alone* the difference between a miracle and a rare, unpredictable event. In addition, there is the difficulty that, by his observation, he would disturb the *status quo*.

I conclude that no real or imaginary observer could, in principle, distinguish between 'evolution' and 'creation'. The introduction of a conjuror (or magician) into the argument does not help. We are concerned with interpretation, not with observation as such. Seeing is not always believing.

Mr Barnes claims that creation or spontaneous generation and evolution are in antithesis. Now spontaneous generation means generation of order *without cause*, or *spontaneously*. It would be spontaneous generation if the atoms in some slime were to come together without cause to produce a man. This is not at all the idea of creation. If we accept creation, we believe that a cause is present—a direct action of a spiritual being on material particles. (It is irrelevant whether such action is possible: if we deny the possibility, then we deny that creation is possible. We must not tell the person who accepts creation that he believes in spontaneous generation—for this is precisely what he does not believe.)

Evolution, on the other hand, in its materialistic form, seems to presuppose that there is a creative power in matter so that genes and chromosomes become more complex as generation succeeds generation. Natural selection merely serves to preserve the favourable *spontaneously generated* mutations or changes. If the changes are due to purely fortuitous movements of molecules, working within the rules of probability, this is scientifically possible. But there is evidence, impressive (on this Mr Barnes agrees), if hard to formulate, that seems to show that much more than this is involved. Yet if this be the case, evolution itself becomes a disguised version of spontaneous generation, and the disguise is only plausible because the finished product is formed slowly. Speeded up on a ciné film an evolution and a series of spontaneous generations producing chromosomes as the product would be indistinguishable.

Discontinuities and the Limits of Science

Mr Barnes states that the theory of evolution postulates that new forms [why the reservation? Is the origin of life excluded from the discussion?] of animals and plants have come into existence by means other than by discontinuities ('scientifically inexplicable discontinuities'—in the context); that the laws that govern the regularities of the universe also govern the novelties. There are thus only two possible views of the control of the universe: 'either God is active all the time in everything or else He is not active at all' (p. 172). 'We have now learned that all phenomena are, in principle, capable of being investigated or explained by the scientific method. The field of scientific exploration is co-extensive with the universe' (p. 173).

What is meant by 'scientific explanation' here? As P. W. Bridgman reminds us,[1] in any physical event, *some of* the features maintain permanence and so can be treated by the methods of science, while some do not. The radioactive atom has a certain mass, energy, momentum, etc., which are conserved and so are predictable even if it explodes. But there is no experiment you can do to find out whether the atom will break up within the next hour. In a growing crystal you can study, by scientific means, the molecular structure that emerges, the rate of growth, the rise of entropy in the process, etc., but no experiment you can do will tell you where the next crystal dislocation will be situated—though the habit of the crystal may be determined by this unpredictable event. You cannot, I suppose, determine by scientific means, when the electric lamp, nearing the end of its useful life, will fail; or the point at which a uniform wire will break when you pull at its ends.

Now in evolution, as in the physical examples, the important factors are often just those factors which cannot be investigated by scientific means. No experiment, real or imaginary, will tell you where the next mutation will occur in the reproducing gene, or what kind of a mutation it will be. *After* the event, of course, you may look back and cover your ignorance with words ('No doubt the same forces which are operating amongst the atoms all the time were operating in this event too!') but a disciplined scientist will frown upon such a procedure.

We cannot have it both ways. Either our after-the-event guesses are

[1] For example in, *The Way Things Are* (1959), pp. 118 ff.

not science at all (my view), in which case the scientific method cannot be applied to all phenomena and the field of scientific exploration is *not* co-extensive with the universe, *or* they *are* science in which case another difficulty confronts us. For it then transpires that in asserting that 'all phenomena are in principle capable of being investigated or explained by the scientific method' we are asserting precisely nothing at all (except, perhaps, that we are clever at guessing).

For an assertion to have meaning, we must be in a position to contrast it with the opposite assertion. 'Bats have wings' is meaningful, because it is possible to think of bats without wings: 'Bats boojo' is meaningless (to me) because it does not stand in intelligible contrast to 'Bats not boojo'.

Similarly, if scientific exploration and explanation means only that I can make after-the-event guesses, then it is surely impossible to say: 'There are some phenomena about which it is impossible for man to speculate scientifically'—for you have but to name the phenomenon to start the speculation! By merely asserting that X cannot be thought about in scientific terms, you make your assertion untrue.

To illustrate, let us try some difficult cases. Creation of the universe (see rewinding suggestions in Haldane's *Possible Worlds*); kettle freezes when put on the fire (laws of science are probabalistic); monkey hitting keys of typewriter produces Shakespeare (intelligent monkey, *or*, bound to happen occasionally, etc.); rabbit appears in thin air (inadequate controls against trickery, testimony doubtful, etc.); river runs uphill (new law of science to cover such cases); man rises from dead (observers reliable? Not really dead?); drunkard converted and leads a new life (subconscious was at work, brainwashing); etc.

The upshot of our discussion is this. Severely limit the field of science and there is plenty of room in God's universe for Him to act discontinuously upon nature when and if He pleases; spread your net and claim the universe for science and your claim itself becomes meaningless, whilst the science you proclaim becomes undisciplined speculation—you are back, in method, if not in jargon, at the stage of the Middle Ages. Just as Spinoza's philosophy, with its pantheistic god whose workings are equated with nature's ways, becomes, ultimately, indistinguishable from atheism; so pan-science which can investigate everything becomes indistinguishable from non-science.

It would seem, then, that instead of saying with Mr Barnes that 'all phenomena are, in principle, capable of being, etc', we should say 'Some aspects of all phenomena, etc.'. But it turns out that the aspects

in question are the ones that have least to do with the novelties. Nor can we allow that these novelties involve no scientifically inexplicable discontinuities—for many discontinuities are inexplicable by science.

In conclusion it may be noted that the claim that all phenomena are, in principle, capable of being investigated or explained by science, goes further than that made even by many materialists. Thus Mehlberg,[1] arguing from a logical analysis of the principle of verifiability, only concludes that those problems which cannot be solved by science are 'unsolvable by any other non-scientific method'-surely a more moderate claim.

[1] H. Mehlberg, *The Reach of Science* (1958).