JOURNAL OF

THE TRANSACTIONS

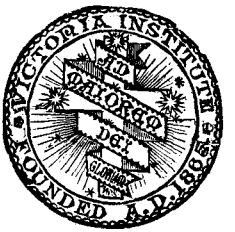
OF

The Victoria Institute,

OR,

Philosophical Society of Great Britain.

VOL. LVII.



LONDON:

(Published by the Institute, 1, Central Buildings, Westminster, S.W.1.)

1925

677TH ORDINARY GENERAL MEETING,

HELD IN COMMITTEE ROOM B, THE CENTRAL HALL, WESTMINSTER, S.W.1, ON MONDAY, APRIL 20TH, 1925, AT 4.30 P.M.

SIR GEORGE KING, M.A., IN THE CHAIR.

The Minutes of the previous Meeting were read, confirmed and signed, and the HONORARY SECRETARY announced the following elections:—As a Member, the Rev. F. W. Pitt, and as Associates, the Rev. Alexander Hodge and Mrs. F. M. Smith, B.Sc.

REVELATION AND EVOLUTION: CAN THEY BE HARMONIZED?

By GEORGE MCCREADY PRICE, M.A., Professor of Geology, Union College, Nebraska, U.S.A.

Being the Langhorne Orchard Prize Essay for 1925.

I.

THE Evolution doctrine has its astronomical and cosmic aspects; but for our present purpose the term may be narrowed down to that portion of the general theory which deals with the origin of the plants and animals of our globe. The latter theory is more generally termed "Organic Evolution"; and such is the sense in which the term *Evolution* is used in the present essay. By "Revelation" we mean the Bible, the embodiment of those facts and doctrines upon which Christianity has been built. So that our subject may be more specifically stated: "Can the theory of Organic Evolution be harmonized with the teachings of the Bible?"

The Bible describes the origin of our plants and animals by what may be termed a *fiat creation*, that is, a creation brought about by the fiat or directly exercised will of God. The question of how long ago this creation took place is not important, neither is the question of how much time was occupied in this original creation; though on both of these points the Bible has made very interesting and important declarations. But for our present discussion, that is, with regard to the aspects of the

subject which are related to the theory of Organic Evolution, the chief feature of the Biblical account of Creation is that this Creation is very definitely stated to have been a *finished work*, something very different from those processes of natural law by which the present order of Nature is perpetuated or reproduced. Not only is this aspect of the case very clearly stated in the first and second chapters of Genesis, but, in addition, we have the record of the institution of the Sabbath, which was primarily designed as a memorial of a *completed* Creation, thus emphasizing the idea that this original Creation was something quite different from those processes now prevailing under which the organic kingdoms are perpetuated or sustained.

In marked contrast with this, we have as the prime idea of Organic Evolution the notion that our plants and animals have come about by a long process of development under precisely those processes of Nature which now prevail round us. In other words, the Evolution theory measures all events in the past by the present; it says that the present is the real measure of the past, and the measure of all the past, including the so-called origin of life and of all organic existences. In explaining this theory, the emphasis is always placed on such present-acting processes as variation, heredity, and environment; and we are constantly impressed with the idea that these present-acting processes or laws of organic nature are quite sufficient to explain how our present complex array of plants and animals have arisen by purely natural processes from simple beginnings, and ultimately from the inorganic or the not-living.

In short, the theory of Evolution is only a special form of the general theory of *Uniformity*, the latter being a view of the Universe which denies that there is any real contrast between the beginnings of things and the present order of Nature under which the world around us is being sustained and perpetuated. In contrast with this idea, we have the Bible picture of a real beginning, a real Creation, distinctly different both in the degree and in the character of the Divine power then manifested, from the present exercise of God's power in sustaining and perpetuating what He then originated.

Practically all scientific writers who have dealt with this aspect of the question have emphasized the marked contrast between Evolution and Creation. It is only some very modern theologians who, by an utter confusion of thought, have tried to smooth out all difference between the two ideas.

ERASMUS DARWIN, the grandfather of Charles Darwin, declared:—

"The world has been evolved, not created; it has arisen little by little from a small beginning, and has increased through the activity of the elemental forces embodied in itself, and so has rather grown than suddenly come into being at an almighty word."—(Quoted in *Readings in Evolution, Genetics, and Eugenics*, p. 3. University of Chicago Press; 1921.)

HENRY EDWARD COMPTON has also spoken very clearly of the emphasis which the theory of Evolution places on the philosophic concept of uniformity:—

"The doctrine of Evolution is a body of principles and facts concerning the present condition and past history of the living and the lifeless things that make up the Universe. It teaches that natural processes have gone on in the earlier ages of the world as they do to-day, and that natural forces have ordered the production of all things about which we know."—(*The Doctrine of Evolution*, p. 1; 1911.)

On the other hand, the Bible teaches that the things which are seen, that is, the material things around us, "were not made of things which do appear" (Heb. xi, 3); or in other words, they did not come into existence by any process which we could call a "natural" process. Creation is the term applied to this beginning of things; and the Bible always speaks of it as a completed work, not as something now going on. It may likewise be borne in mind, that when arraigned by the Sanhedrin for exercising miraculous powers of healing on the Sabbath, Jesus declared: "My Father worketh hitherto, and I work" (John v, 17); thus intimating quite plainly that the continued exercise of miraculous power on the part of God or Christ is perfectly consistent with the primal fact that the Sabbath was given to mankind as a memorial of a *completed* Creation.

It is thus very evident that there is no similarity between the idea of Evolution and that of Creation; it is all contrast. The two terms are antonyms; they are mutually exclusive; no mind can entertain a belief in both at the same time; when one notion is believed, the other is thereby denied and repudiated.

II.

A similar relationship of contrast and mutual exclusiveness is seen when we consider the bearings of Creation and Evolution toward the problem of sin, or moral evil.

The Bible has a clear and understandable explanation of sin, or moral evil, as having been brought about by the free choice of a created being, or beings. We may not be able to explain entirely the origin of sin; for to "explain" it, in the sense of showing a cause for it, would be to defend it, and then it would cease to be reprehensible. Sin is due to an abuse of freedom; it has no other explanation. But God has permitted it for the sake of teaching essential lessons to the Universe. And the risk of sin occurring is a risk inseparable from the endowment of free moral choice, which the Creator bestowed on angels and men. But the Bible clearly teaches that God from the beginning made provision for this desperate emergency, whenever it should arise; and the whole history of God's dealings with mankind is simply the record of God's method of dealing with this situation, which has arisen because of the abuse of that freedom, or the power of free moral choice, which the Creator bestowed on some of the higher orders of His created existences.

From this it follows that sin is an intruder, an anomalous situation; its essential nature is that of a revolt, a rebellion against the established order of the Universe, as the latter is an expression, and a perfect expression, of the will of the Creator. Thus, sin is not a primal or an original condition; it is wholly secondary, in point of time. From this it follows further that suffering and death (on the part of animals and man) are also wholly secondary, and are not a part of God's original design in Creation. "God saw everything that He had made, and behold it was very good" (Gen. i, 31). God created man "upright" (Eccl. vii, 29), "in His own image" (Gen. i, 27), with no bias whatever toward evil. But "by one man sin entered into the world, and death by sin; and so death passed upon all men, for that all have sinned" (Rom. v, 12).

All this is the uniform and absolutely unanimous testimony of the Bible from Genesis to Revelation. The Bible gives no sanction to Manichæism, or the doctrine that evil has existed from the very beginning of things, that it is coeval with the good.

But the latter, however, is exactly the teaching of the Evolution doctrine. Evolution gives us no solution of the problem of the origin of evil; it merely pushes the problem back into the shadow, where we cannot see anything distinctly. In the last analysis, Evolution either makes evil the deliberate work of God, in forming beings with a bias toward evil; or it makes evil an inherent property of matter, beyond the reach of God's

power, something in the very nature of things, which God Himself could not help or overcome when He started the Universe evolving. This theory of a "finite God," as taught by J. S. Mill, William James, and others, seems to have become very popular with modern philosophers who have accepted the Evolution theory; but it certainly is not in accord with the Bible. It is a sort of modern Manichæism, wholly antagonistic to the Christian religion.

This is the testimony of LE CONTE:—

"If Evolution be true, and especially if man be indeed a product of Evolution, then what we call evil is not a unique phenomenon confined to man, and the result of an accident [the 'fall'], but must be a great fact pervading all nature, and a part of its very constitution."—(*Evolution and Religious Thought*, p. 365.)

But any one who will take the pains to compare this view of evil with that taught by CELSUS, the Neo-Platonist, and the first pagan writer to devote an express work to attacking Christianity, will see that this modern evolutionary philosophy is identical with the ancient pagan view of the world in this respect. There is certainly nothing Christian about such a view; it is paganism, pure and unmixed.

We have been considering the primary or the more remote cause of sin, evil, suffering and death. If we consider briefly the nearer or the proximate cause of these things, we find that, according to Evolution, sin is simply inherited animalism. It appears to make no difference to the advocates of this view that many very evil propensities, such as pride, envy and rebellion against God, seem to have no possible connection with animalism; there really is nothing else in the Evolution view of the case to which we may trace the multitudinous propensities of what the Bible calls the "carnal heart."

As JOHN FISKE expresses it:—

"Theology has much to say about original sin. This original sin is neither more nor less than the brute-inheritance which every man carries with him."—(*The Destiny of Man*, p. 103.)

Dr. E. W. MACBRIDE, at the Oxford Conference of Modern Churchmen, expressed himself on the same point as follows:—

"If mankind have been slowly developed out of ape-like ancestors, then what is called sin consists of nothing but the tendencies which they have inherited from these ancestors: there never was a state

of primeval innocence, and all the nations of the world have developed out of primitive man by processes as natural as those which gave rise to the Jews."—(*The Modern Churchman*, Sept., 1924, p. 232.)

On the same occasion, Dr. H. D. A. MAJOR made a similar declaration :—

"Science has shown us that what is popularly called 'original sin' . . . consists of man's inheritance from his brute ancestry." —(*Id.*, p. 206.)

From these statements by representative Evolutionists, we are safe in concluding that the teaching of the Evolution doctrine is in vital and complete antagonism with the historic teachings of Christianity. If it should be objected that the Bible does not use the expression, "the fall of man," it may be replied that the idea of a fall, as an explanation of the great fact that man is a sinner, runs like a scarlet thread through the entire Bible from beginning to end.

From the profusion of references which might be cited on this point, the following from JOHN WESLEY may suffice to show the place which this doctrine of the fall of man occupies in Christian theology :—

"The fall of man is the very foundation of revealed religion. If this be taken away, the Christian system is subverted, nor will it deserve so honourable an appellation as that of a cunningly devised fable."—(*Works*, Vol. I., p. 176.)

Also the following from the same author :—

"All who deny this, call it original sin, or by any other title, are but heathens still in the fundamental point which differentiates heathenism from Christianity."—(*Id.*, Vol. V., p. 195.)

We may safely conclude from all these testimonies that the theory of Organic Evolution is in hopeless antagonism with the teachings of the Bible regarding the subject of the origin of sin. I cannot see how this direct antagonism can be reconciled. The Bible gives us an account of the beginnings of sin which makes sin the result of a deliberate wrong choice on the part of the parents of the human race. Because of this first disobedience, the nature of mankind has become degenerate and depraved; man is naturally a sinner, out of harmony with his Creator and the fundamental laws of the Universe. But the Evolution theory says that man's "sinful" tendencies are simply his inheritance from his brute ancestors; man is not a fallen being, but a rising being; sin is but the "growing pains" of the race, something

which impedes and hinders us, it is true, but something which the race is gradually outgrowing. As for the origin of these " sinful " tendencies, Evolution has no explanation, except to make them an inherent part of the very Universe itself, something which God Himself could not avoid or eliminate when He started the process of an evolving Universe—if, indeed, we can suppose any such deliberate or purposive beginning of the Universe on the part of a personal God. In this respect, the Evolution theory seems to be merely reverting to the crude pagan ideas which had long occupied the mind of the world when Christianity came with the light of its Divine Revelation.

III.

As Christianity and Evolution are in direct contrast in the matter of the origin of sin, so also we may notice, next, they are in the same diametric opposition when they come to deal with the problem of the remedy for the sin and evil of our world.

The Bible treats of sin as a desperate condition, something ensuring eternal death, eternal separation from God, unless it is remedied. And it offers that unique remedy for sin which is called the Atonement. The desperateness of the situation called sin can be estimated only in the light of the amazing remedy for it, namely, the death of a Divine Sacrifice. In the very nature of things, this awful remedy would not have been required if mankind could have been saved from sin in any other possible way. Indeed, Peter declared that there is no salvation in any other way (Acts iv, 12).

But what conceivable place is there for a substitutionary Atonement in the scheme of Organic Evolution ? Not only is there no room for such a remedial system through the death of the Son of God, but almost to a man Evolutionists and " advanced " theologians seem to exhibit a strong antipathy to any such idea. The following from Sir OLIVER LODGE is quite typical of this class :—

" As a matter of fact, the higher man of to-day is not worrying about his sins at all, still less about their punishment. His mission, if he is good for anything, is to be up and doing ; and in so far as he acts wrongly or unwisely he expects to suffer. He may unconsciously plead for mitigation on the ground of good intentions, but never either consciously or unconsciously will any one but a cur ask for the punishment to fall on someone else, nor rejoice if told that it already has so fallen."—(*Man and the Universe*, p. 204.)

The implacable hatred shown towards the Bible doctrine of the Atonement, on the part of Evolutionists, may be further illustrated by the following from DURANT DRAKE :—

"What sort of justice is it that could be satisfied with the punishing of one innocent man and the free pardon of myriads of guilty men ? The theory seems a remnant of the ancient idea that the gods need to be placated ; but by the side of the pagan gods, who were content with humble offerings of flesh and fruit, the Christian God, demanding the suffering and death of His own Son, appears a monster of cruelty."—(*Problems of Religion*, p. 176.)

These two quotations sound very strange as coming from men who call themselves Christians, DURANT DRAKE even being a well-known teacher of a certain form of "advanced" religion.

But we can better understand the logic of the situation from the following pungent statement of ROBERT BLATCHFORD :—

"But—no Adam, no Fall ; no Fall, no Atonement ; no Atonement, no Saviour. Accepting Evolution, how can we believe in a Fall ? *When* did man fall ; was it before he ceased to be a monkey, or after ? Was it when he was a tree man, or later ? Was it in the Stone Age, or the Bronze Age, or in the Age of Iron ? . . . And if there never was a Fall, why should there be any Atonement ? "—(*God and My Neighbour*, p. 159 : Chicago, 1917.)

There is surely no need of multiplying testimony on this point, to prove that Evolution and Christianity are as far asunder as the poles in their attitude toward the remedy for sin. The Bible, as the Divine Revelation of Christianity, comes to a focus in its remedy for sin, through the vicarious death of the divine-human Sacrifice on the Cross of Calvary. The utter repudiation of this provisional remedy for sin has long been familiar to the historian, from the writings of CELSUS and PORPHYRY, down through the long line of sceptics and atheists, such as HUME, VOLTAIRE, PAINE, and INGERSOLL. But in our day this rejection of the basic idea of Christianity finds its chief support in that widespread theory of the origin of man which makes the doctrine of the Atonement meaningless, through its explanation of sin as mere inherited animalism, and nothing really very bad after all. As R. J. CAMPBELL has expressed it—If there ever was a "fall," it was a fall "upward" !

Surely, there is no possible method, consistent with logical and honest thinking, by which this inherent teaching of Organic Evolution can be harmonized with the historic form of Christianity, as represented by the Bible.

IV.

Evolution's forecast of the future of the human race is by no means cheering. Until the outbreak of the World War, its picture of the future was roseate and glorious, like that of a bright summer morn. Man was a rapidly rising being; he had already progressed so far that the future was assured. Soon the war-drums would throb no longer, and the battle-flags would be for ever furled in the parliament of man, the federation of the world! But the sad and grim reality of the past ten years has changed all this. To-day the most hopelessly pessimistic of the world's prophets, for example, H. G. WELLS, are those who have most completely adopted and assimilated the doctrine of Organic Evolution. The more enthusiastic followers of Marxian Socialism, with its programme of the dictatorship of the proletariat, are, so far as I know, about the only Evolutionists who take at all a cheerful view of the world's future. The others all paint the picture in dark shadows: the collapse of civilization, the utter extinction of the race of mankind, are the favourite titles.

The future of mankind is made a biological fate, grim and ineluctable, after the example of the extinction of the trilobites, the dinosaurs, the dodo, and the greak auk. "Our little systems have their day; they have their day, and cease to be." True, each of these Evolutionary prophets has his infallible remedy which, if the world would but adopt it, would long postpone, perhaps entirely avert, the impending doom. But the stubborn race goes on, heedless of suggested panaceas; and accordingly these world-forecasters have become, almost invariably, preachers of world disaster and oblivion.

On the other hand, the Bible does not give a bright or hopeful picture of the world's future, so far as the present age or the present order of things is concerned. True, it has a bright future in store, when "there shall be no more death, neither sorrow, nor crying, neither shall there be any more pain" (Rev. xxi, 4). But it treats the present condition of the world as being hopelessly diseased; and only by the abrupt end of the present age, and the supernatural replacement of the present by the direct reign of CHRIST as King of kings and Lord of lords, can that reign of eternal joy and happiness be ushered in. But between this and that lies a dark shadow, like the death of the race; only on the other side of which can the vision of faith

discern the tearless eye, the fadeless cheek, and a social state unmarred by sin, hatred, or oppression.

The Evolution doctrine, even at its highest level of hopefulness, never had any such outlook. At best, it promised a sort of salvation of the race through the alleged perfectibility of mankind as a whole, and tried to cheer us with the hazy hope, as PHILIP MAURO expresses it, that the world might at some time "become a more comfortable place for the man of the future to sin and die in." But such a hope is pitifully inadequate as a message for those who, here and now, under this hideous handicap of sin, fail in the sad conflict with inherited animalism. Certain is it that Evolution has no message of salvation for the moral failures of our day, nor for those of all past ages, unless it may be supposed that, at some future time, such beings are to be reincarnated at a higher stage of the racial development, and provided with another chance under less hard conditions. And, of course, in the minds of those Evolutionists who hold such views, the programme of racial development, reincarnation, and all, is to be accomplished fatalistically, quite without the intervention of any Divine Mediator and the death of a Divine Sacrifice.

Most Evolutionists, however, have not been able to cheer themselves with any such hope, feeble and uncertain though it be. Most of them would probably express themselves in the pathetic language of BERTRAND RUSSELL:—

"Brief and powerless is man's life; on him and all his race the slow, sure doom falls pitiless and dark." . . . "The life of man is a long march through the night, surrounded by invisible foes, tortured by weariness and pain, toward a goal that few can hope to reach, and where none may tarry long. One by one, as they march, our comrades vanish from our sight, seized by the silent orders of omnipotent Death."—(*Mysticism and Logic*, p. 56.)

Are we as Christians asked to surrender our hope of immortal life, a hope that has been confirmed by the Resurrection of our Lord, that has cheered an innumerable company of the saints of all ages, in loneliness, in torture, at the stake, or in toil while proclaiming it in distant lands—are we asked to surrender this hope for such a gospel of despair as this, now offered us in the name of Organic Evolution?

The Christian view is that the present order is but a temporary condition; the time is coming when a great world-change will occur, when the world will come under the direct and special rule of the Lord Jesus Christ. This change is not a gradual

kind of transition; it is sudden and abrupt. In the Christian view of the matter, it is utterly unthinkable that the present order—involving innumerable births and deaths, with incomputable suffering and misery in the interim—should continue throughout eternity, world without end. Thank God, the Bible gives no countenance to such a hopeless world-nightmare; there is to be a change, and by many it is thought that the change is not far distant. However this may be, the chief point is that there is to be a change; and that ultimately the long reign of sinning, and suffering, and dying will become but a memory, if indeed even the relic of a memory will remain to fret and annoy those who are so happy as to become partakers of that bright immortal life. But the Evolution doctrine has nothing as a substitute for this hope of the world, as revealed in the Christian's Bible.

The utter futility of the Evolutionary programme for the future is well stated by Dr. JOSEPH A. LEIGHTON, of Ohio State University. Even if we may suppose that moral and humane progress goes on through the welter of industrialism, commercialism, and war, who, he asks, are to enjoy the final fruits of this progress? Is humanity, as it toils in history, "engaged in an endless and goalless task"? Or is the goal to be reached only by some far-off generation, while "all the preceding generations will have been mere 'hewers of wood and drawers of water' to serve the welfare of the final happy one"? "Is it the lot of the living members of each generation simply to toil, and suffer, and achieve somewhat, in order to hand on to the following generation a nest of problems, with (and at) which that generation, in turn, will labour, to pass to the grave, and be forgotten after a brief toil at an endless task—one which is never done, but continues and changes throughout the centuries and the æons without final goal?"—(*The Field of Philosophy*, p. 501; edition of 1923.)

There is no need for us to dwell on the utter inadequacy of such a system of philosophy, with its endless round of birth, struggle and death, world without end, or until our earth finally tumbles into the sun, or becomes frozen up by the exhaustion of the central heating-plant of the solar system. The one thing pertinent to our present discussion is to point out that such a scheme of cosmic despair is completely at variance with that portrayed in the Christian's Bible. And unless the latter is completely false, the former is merely the invention of ingenious unbelievers, who refuse to accept that

warm, joyful, inspiring solution of the enigma of life which has been revealed to mankind directly by the only Being in the Universe who can really know what the future is to be.

V.

If, in our consideration of the question before us, we should confine ourselves strictly to its narrower and formal aspects, there would be no need of our considering the contingency of the truthfulness of the theory of Organic Evolution. Yet, unless we are content to leave our discussion in a very unsatisfactory state of incompleteness, we must consider, even though in the briefest way, the problem of whether or not the theory of Organic Evolution is an accurate and truthful explanation of the origin of the plants and animals of our world. The Christian may feel so confident of the Revelation which has been given him that he can say, "Yea, let God be true, and every man a liar," for it is certain that the theory of Evolution is not to-day any more confidently or more universally believed than was that old pagan view of the world in the Augustine age, against which Paul and a handful of fishermen pitted themselves in seemingly futile array. Again, the scientist may feel similarly confident that the results he has obtained by his research are to be trusted implicitly, regardless of what the Church may think has been revealed to her. It seems to me, however, that the modern world has been deadlocked in this fashion quite long enough. The time has fully arrived for those who think for themselves, and who do not entrust the keeping of their opinions to any set of supposed experts, to dismiss once for all the idea that man may possibly have arisen by a long-drawn-out process of development from preceding animal ancestors. Confident I am that in this year 1925 sufficient scientific facts are available to settle this long-debated problem in a way entirely satisfactory to the believer in the literal truthfulness of the first chapters of Genesis.

Much water has gone under London Bridge since DARWIN'S theory of Natural Selection captured the imagination of the world, by appearing to give a materialistic (and incidentally a very hideous) explanation of how a species could become so modified in the course of descent as to be changed over into some very different type of life. To-day Darwinism is as dead as the dodo, so far as its being regarded as a *vera causa* of the origin of species is concerned.

Mendelism has shown us how new types of animals and plants may arise by means of hybridization; and in this respect the results of experimental breeding constitute a valuable and permanent addition to our knowledge of the behaviour of living things. But its chief value lies in the fact that it shows how, by concentrating our attention on the "species" concept, as the crucial unit of Organic Existence, we have been looking at things too narrowly; we need to enlarge our ideas about the fixed units of life, and make the *genus*, or in some cases the *family*, the unit of biological work, so far as the discussion of origins is concerned. So far from showing us how really new kinds of plants or animals can originate by natural process, Mendelism has proved that in all our breeding experiments we are just milling around on the same old ground, merely marking time, so far as our being able to produce any types which could be spoken of as really new. In the light of our modern knowledge, we can substitute the word "family" for the word "species," in the famous aphorism of LINNÆUS, so that it will now read, "*Familiæ tot sunt diversæ quot diversæ formæ ab initio sunt creatæ.*" That is, there are as many families to be listed and spoken of by natural science as there were of different kinds originally created. And in the light of modern biological research, this statement appears to be literally and scientifically true.

Some little time before he died, ALFRED RUSSEL WALLACE left us the following very illuminating remarks:—

"On the general relation of Mendelism to Evolution, I have come to a very definite conclusion. That is, that it has no relation whatever to the Evolution of species or higher groups, but is really antagonistic to such Evolution. The essential basis of Evolution, involving as it does the most minute and all-pervading adaptation to the whole environment, is extreme and ever-present plasticity, as a condition of survival and adaptation. But the essence of Mendelian characters is their rigidity. They are transmitted without variation, and, therefore, except by the rarest of accidents, they can never become adapted to ever-varying conditions."—(*Letters and Reminiscences*, p. 340.)

But one of the foremost of American biologists, EDWIN GRANT CONKLIN, of Princeton University, has told us that: "At present it is practically certain that there is no other kind of inheritance than Mendelian" (*Heredity and Environment*, p. 99). Accordingly, if we put this fact alongside the statement given above from

A. R. WALLACE, we are safe in concluding that all our modern knowledge regarding breeding and heredity "is really antagonistic" to the theory of Organic Evolution.

We may draw a similar conclusion from the following words of Dr. E. W. MACBRIDE :—

"I well remember the enthusiasm with which the Mendelian theory was received, when it was introduced to the scientific world in the early years of this century. We thought that at last the key to Evolution had been discovered. As a leading Mendelian put it, whilst the rest of us had been held up by an apparently impenetrable hedge, namely, the difficulty of explaining the origin of variation, Mendel had, unnoticed, cut a way through. But, as our knowledge of the facts grew, the difficulty of using Mendelian phenomena to explain Evolution became apparent, and this early hope sickened and died. The way which Mendel cut was seen to lead into a *cul-de-sac*."—(*Science Progress*, Jan., 1922.)

But since Mendelism seems to give us rock-bottom facts in all this field of variation and heredity, why is not the suspicion very naturally suggested, that any theory of origins which finds itself in a *cul-de-sac*, or a blind alley, because of these Mendelian facts, must itself be wholly wrong and unscientific? Certainly, no other conclusion seems to me to be adequate to the present situation.

It is safe to say that many modern scientists, if not going quite so far as this, are at least becoming much less confident regarding the general subject of how our animals and plants have become what they are. For example, in his Presidential Address before the Botanical Section of the British Association, at the Liverpool Meeting, in 1923, Dr. A. G. TANSLEY stated that in the light of recent developments in botany, the search for common ancestors among the great groups of plants would appear to be "literally a hopeless quest, the genealogical tree an illusory vision."—(*Nature*, Mar. 8, 1924.)

In commenting on these declarations of TANSLEY, Prof. F. O. BOWER, of the University of Glasgow, declared :—

"At the present moment we seem to have reached a phase of negation in respect of the achievements of phyletic morphology and in conclusions as to descent. . . . I believe that a similar negative attitude is also to be found among those who pursue zoological science."—(*Id.*)

Similar statements could be given from such leading scientists as Dr. WILLIAM BATESON and Dr. D. H. SCOTT. These men still cling to the general idea of Evolution, but they expressly tell us

that they do so only as "an act of faith," for they cannot see any scientific explanation of how this process of organic development has come about. The former spoke as follows in his Toronto Address :—

"We cannot see how the differentiation into species came about. Variation of many kinds, often considerable, we daily witness, but no origin of species. . . . Meanwhile, though our faith in Evolution stands unshaken, we have no acceptable account of the origin of species."—(*Science*, Jan. 20, 1922.)

Similarly, Dr. D. H. SCOTT has declared that he still holds to the general theory of Evolution, "even if we hold it only as an act of faith"; but he tells us expressly that we do not know *how* the process of development came about :—

"For the moment, at all events, the Darwinian period is past; we can no longer enjoy the comfortable assurance, which once satisfied so many of us, that the main problem had been solved . . . all is again in the melting-pot."—(*Nature*, Sept. 29, 1921.)

In his work, *Extinct Plants and Problems of Evolution*, issued in 1924, SCOTT gives an admirable statement of the utter perplexity now confronting those who are face to face with the biological knowledge now available, who nevertheless feel that they must still hold to some form of Organic Evolution.

Up until recent years, the last stronghold of every form of a philosophic belief in Organic Evolution has been the Lyellian or Uniformitarian Geology. For if life has been appearing in various successive forms, age after age, with a more or less steady advance in the grade of life thus represented; and if this scheme of geology can scientifically prove this relative sequence of the great groups of living things, both plants and animals, the human mind will instinctively say that the higher and later kinds have probably grown by some natural development out of the lower kinds, which were earlier in point of time. Thus the Lyellian or Uniformitarian Geology might well be called an Evolutionary Geology; for some form of Organic Evolution would seem to be inevitably implied by this long-popular serial arrangement of the fossils in what was supposed to be a true historical sequence.

It may be permitted to add that, in works given to the world during recent years the present writer has placed a big question-mark after the evolutionary scheme of the fossils, and the gauntlet which has thus been thrown down has not so far been taken up by those whose opinions have come under undisguised attack. The question asked has taken the following shape : If the Cambrian

and the Ordovician forms of life are not actually older than the Cretaceous and the Tertiary, might we not reasonably expect to find some localities where the Cretaceous or Tertiary animals and plants were buried first, and the Cambrian and the other Paleozoic laid down afterwards? Certainly; and I have pointed to the famous area in Alberta and Montana, where, over an area some 500 miles long and 40 or 50 miles wide, *Cretaceous beds are below and Cambrian and other Paleozoic rocks on top, with every physical evidence that they were actually laid down in this relative order.* In the Salt Range of India, *Tertiary beds were manifestly laid down before the Cambrian.*

From these and many similar examples found in various parts of the world, I have drawn the conclusion—surprising, but seemingly inevitable—that intrinsically, and as of necessity, no particular type of fossil life is older or younger than any other. In other words, what we have in the rocks as the geological formations are merely the buried floras and faunas of the world before the great world-cataclysm of the Deluge, all of which were once living contemporaneously together. It is a purely arbitrary and artificial scheme by which the evolutionary geologists have arranged these buried floras and faunas, found in widely scattered localities such that no possible stratigraphical relationship can be made out for them, in an alleged chronological sequence. In a word, there are absolutely no solid scientific facts to hinder us from believing that these buried floras and faunas really represent the life of the Antediluvian world, which was destroyed and buried by this great world-cataclysm. That is, there is nothing to hinder us from believing this explanation of the riddle of Geology, except the sheer incredibility of there ever having been such a tremendous world catastrophe, and that mankind and the present surviving animals and plants must have lived through it. If the latter is admittedly possible, as the Sacred Scriptures seem to declare, the long popular scheme of Evolutionary Geology is a myth.

Here is, at least, a wholly new method of meeting the arguments of the Evolutionists. Whether or not it will be accepted by the scientific world, or even accepted by believers in the Bible, remains to be seen. Certain it is, this New Catastrophism, with Mendelism and the new light on Biology in support, stands alone between Christian people and the logical necessity of accepting the scheme of Organic Evolution, with its theory of man's animal origin, and all that this latter idea implies.

Discussion.

Mr. H. Owen Weller said that he was embarrassed by being called upon to open the discussion, as he was not in sympathy with the paper. At first sight it might attract people by its superficial orthodoxy, but actually it was dangerous. He contested the opinion that "only very modern theologians by an utter confusion of thought" had tried to smooth out the difference between the two ideas of Evolution and Creation. He, and many others, did it by seeing God working by some such gradual process as Evolution. A man of science might still be Christian. Further, he refused to accept the author's alternative between his "New Catastrophism" and "the logical necessity of accepting the scheme of Organic Evolution." And he deplored the intention, or effect, of the paper to drive a wedge between Christians and scientists. This had been done, or was being done, in America; he hoped that the quarrel would not be brought across the Atlantic.

Lieut.-Colonel G. Mackinlay said: I fully agree with the author in believing in the strict truth of the Bible in the subject of the origin of man, and I think the first pages of his address are admirable, and that he has quite proved his point; but, if I understand all his arguments aright, I cannot follow him in his last few pages—for instance, I cannot agree with his statement on p. 182, that "no particular type of fossil life is older or younger than any other." I should be glad if he would give his reasons for these words in his reply.

Rev. J. J. B. Coles said: The Professor's valuable essay should be circulated among those who attempt to use the doctrine of Evolution to exclude the equally true doctrine of Special Creation. Gen. i and ii should not be amalgamated.

"My Father worketh hitherto and I work." God's rest had been broken by the introduction of sin, and so God and Christ in long-suffering grace and mercy are "working" still.

Mr. Theodore Roberts remarked that, strictly speaking, the Bible was the divinely given record of the Revelation rather than

the Revelation itself, just as the fossils discovered were claimed to be the record of the Evolution which had taken place.

He did not feel vitally concerned in the question of whether the theory of Organic Evolution up to man was true, as many believed it could be reconciled with Gen. i, but he pointed out that the thrice-repeated statement that God created man (twice adding "in His own image" (verse 27), and the more detailed record of chap. ii, 7, that He "formed man of the dust of the ground and breathed into his nostrils the breath of life," clearly indicated an immediate link between man and his Creator) which led to the Creator being described as "the Father of our spirits" (Heb. xii, 9) in contra-distinction to our natural parents. When God thus imparted to man's body—whether formed instantaneously of the actual soil or out of it gradually through some evolutionary process—an immortal spirit, He to some extent limited His own future action by thus creating a moral agent, capable of rebelling against Him, and therefore free to choose between right and wrong. Having endowed such a being with a spark of His own life, God in future could only influence that being by moral motives, and, in the sacrifice of Christ and His present Resurrection activity, He had brought the mightiest moral forces to bear upon the man He had thus created. If that man deliberately rejected all God's gracious pleadings, there remained nothing but eternal misery for him. The love of God revealed in the Gospel assured us that none would be in the lake of fire that God could by any means save out of it.

Mr. HOSTE said: I think the lecturer may fairly claim to have proved logically that a belief in Organic Evolution, as usually understood, with its dogmatic denials of acts of Creation, any fall of man, and, therefore, the need or fact of atonement, is not consistent with belief in the Scriptural account of such matters.

Of course, there are dilettante evolutionists who are better than their creed; they have never faced the fair deductions of the theory in question, and so retain their general faith in the Scriptures. Some yield to the clamour of the second-rank evolutionists, who ignore the fact that their theory is as far as ever from being proved and that the Darwinian theory (which in the closing decades of

last century was as loudly asserted to be a scientific fact as the parent doctrine to-day) is now bankrupt. If Evolution be reduced to "an act of faith" to such men as Dr. W. Bateson and Dr. D. H. Scott, how can it be scientific to acclaim it victor all along the line, as the Bishop of Birmingham, D.Sc., is said to do? No doubt it is convenient to unload our moral delinquencies on a putative anthropoid ancestry, but how can this be righteous when, as the Professor notes, the most patent of these evils are not found in any of these lower "ancestors"?

There is one point I would venture to ask the learned lecturer to reconsider, and that is the passage on p. 182, where he seems to ascribe the present geological formations to the great world-cataclysm of the Deluge. I have no desire to minimize this catastrophe, but what authority have we for associating with it the deposition of the great fossil-bearing strata, with all the tremendous upheavals and reversals implied. How could the ark have fared in such a general condition of topsy-turvydom, except by a perpetual miracle? Even Ararat would not have been safe. Is there any hint in the biblical narrative of such a stately cataclysm?

Rather the mountains are spoken of as already existing in stable form, and can they be dissociated from geological formation? The cretaceous deposits, known as the Dover Cliffs, took more than the months of the flood to be laid down. Is it not safer, then, to associate the geological formations with the interval which, as has before been noticed from this platform, is believed by many to exist between the first and second verses of Genesis, whatever conclusions one may come to as to the Professor's general theory?

Mr. SIDNEY COLLETT said: Mr. Chairman, I most heartily welcome the paper we have listened to this afternoon as a very fine contribution to the subject under discussion, because it goes to the very root of the matter, and shows that the evolution theory denies the statements made in the Word of God concerning the creation of man.

The very essence of the evolutionary theory is that man was evolved from a lower animal—a monkey.

Not only, however, does the Bible give no countenance to this, but its teaching concerning the origin of man is entirely different.

In Gen. i, 27, we read, concerning man's *spirit*, that God created

man *in His own image*. Surely any attempt to reconcile that with Evolution is nothing short of blasphemy.

Then, in Gen. ii, 7, we read, concerning man's *body*, "The Lord God formed man of the dust of the ground." Now, if man was formed from the dust of the ground, how can it be true to say he was formed from an ape?

Again, in Luke iii, 38, where the *genealogy* of the *Man Christ Jesus* is traced back to Adam, we are distinctly told that Adam was the *son of God*! Will any evolutionist, in view of this verse, dare face the logical result of their theory and say that our blessed Lord, in His Holy Human Nature, was really descended from an ape?

Ladies and gentlemen, the position is perfectly clear. The two teachings are absolutely incompatible and irreconcilable. So that if Evolution on this subject is right, then the Bible is wrong, and we had better throw it aside as being unworthy of our confidence. But if the Bible is right, then Evolution is utterly and entirely wrong, and deserves to be cast aside and rejected for ever.

Pastor W. PERCIVAL-PRESCOTT writes: Last year the general criticism of the members of the Institute upon Prof. McCready Price's paper, "Geology and its Relation to Scripture Revelation," was the sparse references it contained to the Bible. This year on the Langhorne Orchard Prize Essay, "Revelation and Evolution," Prof. Price merits no such criticism. He has clearly shown from the Bible that Evolution is entirely out of harmony with Revelation.

However, perhaps more space could have been devoted to the biological aspect of Evolution and the doctrine of the unity of type. The Darwinian theory is still held by many people to-day, among them leading religious lights like Bishop Barnes. The argument centres around the questions of Special Creation and the process of Evolution supposed to be proved by the similarity of type. In spite of the fact that the missing link has not yet been discovered, many still have faith in the Darwinian theory.

Now, it must not be supposed that this similarity of type is an argument in support of Darwin's theory of Evolution.

The fact that a unity of type is adopted where a unity of function is aimed at, and that increasing complexity of type is associated with increasing complexity of function, does not necessarily suggest that

C is derived from B, or B from A, but much more forcibly that they were all derived from the same source—the master mind of God.

Lieut.-Colonel F. MOLONY writes : I have edited your *Transactions* for some years now, but I do not think I have ever passed a discussion with so many misgivings as to its effects as I feel about this one.

In 1921 I had the privilege of reading a paper before this Society on " Predictions and Expectations of the First Coming of Christ." The main object of that paper was to prove the reality of inspiration, and our Secretary was so good as to say that I had proved my thesis up to the hilt.

We all know that the historicity of Genesis has been established as far back as the fourteenth chapter inclusive. And I myself believe in the inspiration of the whole book, but hold that we have no right to assume that inspiration includes infallibility.

May I, then, be permitted to point out that, although whole libraries of books have been written on the subject, Christian apologists need be very little concerned in defending the inspiration of the early chapters of Genesis.

Most of us believe that Moses wrote the Pentateuch : but how ? Surely he wrote Genesis as an editor of older documents, but the other four books as a witness. It is his reliability as a witness that is important for the defence of Revelation ; and it is very little affected by the trustworthiness of his judgment as an editor. To hold Moses responsible for all that is said in Genesis would be almost as unfair as to hold me responsible for all that is said in this discussion.

Our lecturer has offered us new ground for distrusting Evolution. But his geological theories are by no means accepted as yet on this side of the Atlantic. Yet, on the strength of them, we are apparently invited to open a new crusade against Evolution !

I think this would be a foolish thing for us to do, and beg to associate myself with Mr. Weller's remarks.

AUTHOR'S reply: I fully sympathise with our worthy Hon. Secretary in his incredulity about all the great geological changes of the past having been caused by the world-catastrophe of the Deluge. For one who has at all travelled about the world, it does seem preposterous to say that all the tremendous phenomena which we see were produced by one great world-convulsion.

But I have never affirmed this. I do not wish to dogmatise on this point. I don't know.

But one thing I do know. There is no method worthy of being called scientific by which we can affirm that the trilobites, for example, lived and died long before the ammonites and the mastodons came into existence. There is no way to prove logically that the trilobites and the graptolites may not have lived contemporaneously with the dinosaurs, or that the dinosaurs may not have been contemporary with the mastodons and the other elephants, or with man himself. Fortunately, I have already discussed this topic at some length in a paper read last year before the Victoria Institute ; hence I need not go into the matter further here. I would also refer the interested reader to my College Text-book, " The New Geology," where this subject is dealt with quite fully. This book may be obtained in this country through The Stanborough Press, Watford, Herts.

On this point we now have a very interesting recent discovery. *The Illustrated London News*, of May 9, 1925, gives a reproduction of a drawing of a dinosaur which has been found on the walls of a canyon in Arizona, U.S.A. This drawing was made by prehistoric man ; and it proves conclusively that, either the one who made this drawing, or some of his ancestors, must have been familiar with the form of the Diplodocus or some similar dinosaur in real life. An accompanying drawing found on the same canyon wall shows a man fighting with a mastodon or a similar kind of elephant, perhaps a Mammoth.

Thus we have objective proof that man was contemporary with both the dinosaurs and the ancient elephants. The latter were thus living side by side in the same world ; and thus we have one further proof from objective fact of that great principle of the contemporaneity of these ancient faunas, a principle which we have already found to be demanded by strict scientific logic.

Now, the problem before any common-sense view of geology is this : *How did all these great animals (and many other kinds could be included) become extinct?* No doubt we can easily work ourselves up into a feeling that any world-catastrophe sufficient to bring about such an extinction would be quite " impossible." I have little faith in such *a priori* methods of reasoning in the face of

objective proof, such as we now possess. At any rate, How did all these animals become exterminated from all over the world, and exterminated apparently at once?

This, I claim, is the great outstanding problem of Geology—or of all natural science, for that matter. A very large amount of new evidence has come to light which tends to support the views of the New Catastrophism in Geology. A re-examination of this entire subject is the next thing in order. In the meantime, it should be remembered that the strictest logic must be applied to all these studies regarding the early days of our world, the same hard rules of logic which we would apply to a problem in physics or chemistry or astronomy. For it is already as clear as sunlight that very many ideas now confidently held in the name of Geology will not stand critical inspection. The geological theory of the successive forms of life is without doubt the weakest point in the theory of organic Evolution. How long are we going to retain this part of the Evolution theory in our orthodox discussions of the problems of science and religion?

The following statements were made in the course of the proceedings:—

Before the reading of Prof. G. McCready Price's paper, the HONORARY SECRETARY read the following motion which had been passed by the Council, of which they invited the assent of the Meeting:—

> "Having heard with profound sorrow of the death of Mr. Arthur Warwick Sutton, J.P., F.L.S., this Meeting places on record its sense of the great loss sustained by the Victoria Institute, of which Mr. Sutton had been a member for twenty-two years, as well as rendering valued service as Member of Council, Treasurer, and latterly as Trustee. Held in high honour as a Christian gentleman, Mr. Sutton was a warm friend of the Institute, and his co-operation—ever courteous and worthy of confidence—will be greatly missed in the coming days."

The CHAIRMAN then called on Prof. G. McCready Price, M.A., to read his paper, the Langhorne Orchard Prize Essay, entitled "Revelation and Evolution—Can They be Harmonized?" and when it was finished, handed him, in the name of the Council, a cheque for 20 guineas, being the Langhorne Orchard Prize, founded by surviving relatives to perpetuate the memory of the late Prof. H. Langhorne Orchard, a Vice-President of the Institute. Dr. J. W. THIRTLE, the Chairman of Council, added a few words in memory of the Professor, and explained the founding of the Prize and the nature of the triennial competition in connection therewith.