

Theology on the Web.org.uk

Making Biblical Scholarship Accessible

This document was supplied for free educational purposes. Unless it is in the public domain, it may not be sold for profit or hosted on a webserver without the permission of the copyright holder.

If you find it of help to you and would like to support the ministry of Theology on the Web, please consider using the links below:



Buy me a coffee

<https://www.buymeacoffee.com/theology>



PATREON

<https://patreon.com/theologyontheweb>

PayPal

<https://paypal.me/robbradshaw>

A table of contents for *Journal of the Transactions of the Victoria Institute* can be found here:

https://biblicalstudies.org.uk/articles_jtvi-01.php

JOURNAL OF
THE TRANSACTIONS
OF
The Victoria Institute,
OR
Philosophical Society of Great Britain.

EDITED BY THE HONORARY SECRETARY

VOL. I.



LONDON:

(Published for the Institute)

ROBERT HARDWICKE, 192, PICCADILLY, W.

1867.

ALL RIGHTS RESERVED.

ORDINARY MEETING, JULY 16, 1866.

THE REV. WALTER MITCHELL, VICE-PRESIDENT, IN THE CHAIR.

The minutes of the previous meeting were read and confirmed; and the names of the following Members and Associates were announced as having been elected since last Ordinary Meeting:—

MEMBERS:—John Corderoy, Esq., 3, Kennington Green; Rev. John Philip Gell, M.A., St. John's, Notting Hill; Malcolm Goldsmith, Esq., H.M. Civ. Ser., 43, Addison Road, Kensington; D. J. Jenkins, Esq., 61, Marquis Road, Canonbury; Frederick Prideaux, Esq., Barrister-at-Law, Reader on the Law of Real Property to the Inns of Court, Castelnau Cottage, Barnes; J. Hornsby Wright, Esq., 2, Abbey Road, Maida Hill.

ASSOCIATES,—1ST CLASS:—Miss Broke, Marlborough Buildings, Bath;
2ND CLASS:—Peter Carthew, Esq., 15A, Kensington Palace Gardens, and Woodbridge Abbey, Suffolk.

The following paper was then read:—

ON THE VARIOUS THEORIES OF MAN'S PAST AND PRESENT CONDITION.—BY JAMES REDDIE, ESQ.,
Hon. Mem. Dial. Soc., Edin. Univer., HONORARY SECRETARY.

THERE are three leading doctrines or theories current in the present day, which claim our attention as professing to account for the facts of man's past and present condition. The oldest and first in importance is what we have all been taught as children, that God created man a little lower than the angels, and gave him dominion over the inferior creatures. This might well be called *the Monogenist, or the Historical Theory*, but on the present occasion I prefer to give it another name, and will call it *the Religious Theory*. The second in importance, because, although the latest put forward, it is antagonistic to both the others, is *the Darwinian Theory*, which derives man from the ape. And the third is *the*

Polygenous Theory, which, without descending quite so low for an ancestor, nevertheless propounds that the primitive men were savages, but lower than any known race of savages, inasmuch as, according to the theory, men originally could not even speak.

There may be minor distinctions and sub-theories perhaps, but still it will be convenient to keep to this classification. There may be polygenists, for instance, whose imagined primitive men were not all of the same low caste,—all merely speechless savages of different colours, white, yellow, red, and black. And it is surely not worth while to have a polygenous theory at all, if merely physical differences are all it can account for. There would certainly be a greater similarity between men of all the existing varied races, while in the same savage, low condition, than between men of identical race when savage and when civilized. The physical race-characteristics of a people might not much differ, through such a change in their mental character,—or rather, let me say, the physical differences would be only and literally superficial,—whereas the differences, between savage and civilized races, when regarded in a mental, moral, and social point of view, are well-nigh infinite. But then, the polygenist, who would make only some of his primitive men to be low-caste savages, and others an elevated race of superior clay and capacity, would be involved in contradictions as to his very theory of creation, or, if he denies creation, in his theory of man's origin and development. And, in point of fact, no such theory has yet been propounded, at least not in such a way as to lay hold upon men's minds, or to call for further examination. Some, who have not studied the whole question, may vaguely speak as if they held such a theory. They may have been puzzled at seeing the marked differences between the various races of mankind as now developed; and, influenced by the persistency with which a diverse origin for each has been urged by some eminent physiologists upon scientific grounds, they may not have inquired what science and equally eminent physiologists have said upon the other side.

But here Darwinism comes to the aid of the religious theory, and decides in favour of a monogenist hypothesis, professedly upon scientific grounds. Not that there may not be, again, a sub-class here, who are Darwinians and yet polygenists. At one time I thought that not possible; but on arguing before the Anthropological Society of London,*

* *Anthropological Review*, vol. II. p. cxv *et seq.*

two years ago, that Darwinism "gets rid of the polygenous theory, by assigning to us the ape for an ancestor, mediately through the negro," I was answered thus:—

"Mr. Bendyshe could not perceive how the transmutation theory could get rid of the polygenous theory. Mr. Reddie appeared to suppose that, admitting the transmutation theory, man must have descended from a single ape; but that by no means followed. Man might have descended from several different apes. The question of the origin of man from one or from many Adams was not settled at all by the transmutation theory."*

To this it was replied, that "Mr. Bendyshe's suggestion of 'more apes than one,' to reconcile transmutation with the polygenous theory, is at any rate something new; but if these apes are all to be found in the 'equatorial regions,' to which Sir Charles Lyell refers us for a search, we are still relegated to the 'unimprovable' negro races for the first ancestor of civilized man! If it could be established that low-class savages could raise themselves, one difficulty in this theory would be got rid of—that would be all. But if this cannot be established, the theory is incredible, as being impossible."†

Mr. Bendyshe is Vice-President of the Anthropological Society of London; but I am not aware how far his opinions are shared by others, or even if there really exists a class of Darwinian Polygenists in this country. On the Continent, Professor Carl Vogt is a Darwinian, who derives mankind from three kinds of apes; and he denounces, as irreconcilable with facts, the Darwinian monogenist theory. But it will be observed that this view of more apes than one, to obtain for the human race a polygenous origin, only brings us back, after all, to the other polygenous theory we have glanced at, which gives us "merely low-caste speechless savages of different colours" for the ancestors of all the races of mankind. If there be any great difference between the two theories, so far as anthropological considerations are involved, it is only this, that the one gets entirely rid of the special creation of man. In that respect Darwinism is completely antagonistic both to the religious theory and to all such polygenous theories as recognize the necessity for the intervention of a Creator, in order to account for the existence of "the paragon of animals"—man.

But the two best-known advocates of Darwinism are monogenists. Professor Huxley has become a convert to it as a

* *Anthropological Review*, vol. II. p. cxxxii.

† *Ibid.* p. cxxxiv.

monogenist, and has urged its probability upon physiological grounds. Mr. Alfred R. Wallace, who (upon Mr. Darwin's frank acknowledgment) may be regarded as the joint author of the theory, and ought therefore to understand it, pleads for it exclusively on monogenist grounds. The Darwinian is, therefore, so far in agreement with *the Religious Theory*; but only *so far*.

Still it is useful to have an eminent physiologist and anatomist, like Professor Huxley, strenuously declaring upon scientific grounds that he has no difficulty in understanding how all the varieties of the human race may originally have sprung from a single pair. His scientific dicta and arguments counterbalance what may be put forward, also as scientific dicta and arguments, on the other side. It is of great consequence also to have Mr. Wallace, as a distinguished naturalist, traveller and ethnologist, upon the monogenist side; even although other travellers and ethnologists, also eminent, have come to totally opposite conclusions. This being so, the holders of the religious theory may fairly say, that at least nothing is scientifically determined by physiology, comparative anatomy or ethnology, on the one side or the other. And this leaves us free to study the matter with regard to other considerations, if it does not indeed compel us to do so, in order to understand on what side is the weight of evidence and probability. It is to these other considerations I now wish especially to call attention.

But there may be also monogenists, who, while rejecting Darwinism, do not hold the religious theory. They may believe that all mankind are of one species, and have sprung from a single pair, but yet they may consider the primitive man to have been a savage. If there be such a theory, it practically differs little from the Darwinian, *after* (but only *after*) we have arrived at man upon the theory of transmutation. The difficulties of Darwinism begin, however, long before we have got to man.

The classification adopted may, therefore, suffice for a tolerably complete review of the leading theories opposed to that of Scripture, which differs essentially from the others, in this, that it not only holds the special creation of man, but also that man was created not a low-caste, speechless savage, but a man in perfection. All the theories recognize the fact that there has been some kind of development or change in the human family; the chief differences between them all relate to the origin and character of the primitive man.

While acknowledging in what respect the religious theory differs from all the others, it must also be pointed out in what

essential particular Darwinism differs from them all,—from all, at any rate, that admit the distinct creation of man; for they all may be regarded as beginning with man in a state of manhood; whereas Darwinism, of necessity, begins with a human infant which had not human parents. But long before we arrive at that development under this theory, we are forced to ask, in our endeavour to realize what it professes to explain, “How possibly the first young mammal was nourished in its struggle for existence, if its immediate progenitor was not a mammal?” No answer has ever been given to that inquiry; not even by Mr. Wallace in the ingenious paper* which he read before the Anthropological Society of London two years ago, in which he endeavoured to work out in some kind of detail the Darwinian hypothesis applied to man. Nor does Mr. Darwin make any attempt to explain this, in his own elaborate volume. But the question is really a very old one, now revived. It differs nothing from that discussed in the *Symposiacs* of Plutarch, namely, “Which was first, the bird or the egg?” And I must say, to the credit of those ancient inquirers, that when they started a theory, they did not shrink from discussing it in all its bearings. The same question—which really involves the theory of creation—has been more ably and fully discussed than anywhere else, so far as I am aware, in the work called *Omphalos*, by our Vice-President, Mr. Gosse, F.R.S.

But passing over that, with all other difficulties which lie against Darwinism long before we come to its application to the origin of man, and contemplating “the lowly stock whence man has sprung,” as Professor Huxley expresses himself, it has also been pointed out that “to this physiological difficulty there is added one that is psychological; for, even if we see no difficulty as to the physical rearing and training of the first human baby which some favoured ape brought forth, we are forced to ask the transmutationist to favour us with some hint of the educational secret by which the monkeys trained and elevated their progeny into men, when we ourselves are scarcely able, with all our enlightenment and educational efforts, to prevent our masses falling back to a state rather akin to that of monkeys and brutes.”

To this, again, no answer has ever been given; and there is even a prior difficulty, which I may say has been suggested by Mr. Wallace himself. For, in the paper already referred to, he laid it down that the intellect of man and his speech would be developed together; in fact, he recognized that they are

* *Anthropological Review*, vol. II. p. clviii, et seq.

correlative. And, granting this, he was asked to explain how, "upon any principle of natural selection, this intellect came at all? We have only as yet the animal—something between the man and the gorilla; but it could not speak nor think. From whence then did intellect and speech proceed?"—Now I beg your especial attention to all that Mr. Wallace could reply to such an essential question. He said: "Mr. Reddie also wants to know how the intellect came at first. *I don't pretend to answer that question, because we must go so long back.* If Mr. Reddie denies that any animal has intellect, it is a difficult question to answer; but if animals have intellect in different proportions, and if the human infant, the moment it is born, has not so much intellect as an animal, and if, as the infant grows, the intellect grows with it, I do not see the immense difficulty, if you grant the universal process of selection from lower to higher animals. If you throw aside altogether this process of selection, you need not make the objection about the intellect."* Now, in the first place, there is an *ignoratio elenchi* in this reply; for the objection has been urged expressly to enable us to test the theory (assuming its possibility) on a point in which we can test it; and, besides, Mr. Wallace ought to have seen that he had also answered himself. It is his own proposition, that speech and intellect would go together; and if that be so, then the inferior animals have *not* the intellect, so defined, that goes with speech. But the difference between the intelligence of the dumb creation and the intelligence of speaking man might well form the subject of further investigation, which might fitly be brought before this Society. No doubt the intellect of the child grows with its growth; but then the child is the child of intelligent and speaking man; and let me ask, would its intellect grow even now as it does, if the child was not taught to speak? The problem Mr. Wallace had to solve, and failed to solve, was how intellect and speech could come of themselves, to endow an animal whose progenitor had neither one nor other?

Before I bid farewell to Darwinism, I must notice Mr. Wallace's reply to another pertinent objection raised in the Anthropological Society. He said: "Dr. Hunt asserts that archæology shows that the crania of the ancient races were the same as the modern. Well, that is a fact I quoted on my own side, and his quoting it against me only shows that you can twist a fact as you like. I quoted it as a proof that you must go to an enormous distance of time, to bridge over the difference between the crania of the lower animals and man.

* *Anthropological Review*, vol. II. p. clxxxiii.

I said, perhaps a million, or even ten millions, of years were necessary."

I beg leave to recall attention to the fact, though no doubt known to many present, that the famous Neanderthal skull, of which so much was made both by Sir Charles Lyell and Professor Huxley as probably a specimen of this missing link—which is still, however, missing—between men and apes, has been proved to be merely an abnormal formation, arising from synostosis or ossification of the sutures, and that similar deformed skulls of perfectly modern date are in existence. And so we are still without a single specimen of the crania that, if found, would be considered as bridging over the gulf between man and apes.

Having mentioned Sir Charles Lyell's name in connection with Darwinism, I must observe that, in his *Antiquity of Man*, he adopts the theory, and recommends it as "at least a good working hypothesis," in the absence of any proof of its probability, or even possibility, upon the sole ground that the geological record, which at present contradicts it, is so very imperfect. This has been characterized as not merely an instance of *non-induction*, or "hasty generalization," based upon a limited or partial knowledge of facts, which is so rightly and strongly condemned by Lord Bacon, even when the facts we do know are not inconsistent with the hypothesis we adopt; but as, indeed, a "glaring specimen of positively false generalization, the hypothesis being not in accordance with any recognized facts or principles whatever, but directly in the teeth of all our knowledge and experience."

Having made use of the word Darwinism, I also feel bound to notice, that Mr. Darwin has not himself worked up his theory so as to apply it to man's development, though Professor Huxley is no doubt right in saying, plainly, that that is the goal to which it tends. Strictly speaking, Mr. Darwin has not professed to prove anything beyond "the origin of species" by his theory. And all that he has proved as a naturalist, is the fact, that numerous varieties of plants and animals are developed within the limits of each particular species. He has not proved a single instance of development beyond these limits of nature's laws; and most certainly no permanence of development in any such case. He has indeed shown that the classifications of naturalists may probably in some cases be at fault, and that what they may have called different species are sometimes only varieties. But this rather goes against his theory, and may be the true explanation of the few exceptional and only apparent approximations to the origination of new species which he almost claims to have observed. But

even were we to grant that a new variety might, under special influences, become so distinct as to form a new species, that would still leave us very far short of transmutation from one genus to another, and farther still from the change from vegetable to animal life, or from any of the inferior animals to man. All beyond the probable, but not proved, origin of species, is mere speculation, with not a ghost of a proof in support of it. And when Sir Charles Lyell admits that the palæontological facts are as yet against the theory, what does that mean? Namely, that, so far as we know, there have not ever been the necessary graduated forms in existence which the theory requires before it can be thought possible even by its advocates. But, of course, we must remember, that even if the gradations in nature were found to be finer and more shaded off one into another than they are yet known to be, that would not by any means prove that any one form had been developed out of another. At present, and within the historical period, this does not happen, and has never happened. To suppose that it did take place continually, though "a long time back," is to assert that nature's laws have been reversed. I do not understand how that can ever be established upon scientific or inductive grounds!

* [At the meeting of the British Association at Birmingham last year, I ventured to oppose the polygenous theory, chiefly by an appeal to all the facts of which we have knowledge relating to the savage and civilized races of mankind. The monkey theory was then left out altogether; for, to say truth, it had not a single advocate who ventured to raise his voice in the Ethnological section! Mr. John Crawford, the venerable President of the Ethnological Society, plainly denounced it; though he is one of the most strenuous advocates of the polygenous theory which derives all the civilized races of mankind from savage progenitors. But when he was asked to give a single instance of a savage race who had civilized themselves,—as some justification of his extraordinary faith that all the civilization of the world owes its origin to savagery!—he was ominously silent.

As the discussion of this question has thus already been approached from the point of view both of the so-called Darwinians and of those who hold a polygenous theory which makes out man to have been originally a savage,—there can be no reason why, on the present occasion, and especially in this

* *Vide* Note, p. 214.

Society, the subject may not be contemplated from the nobler stand-point which is furnished us in Holy Scripture, in contrast with all conflicting hypotheses. What our religion teaches us of man's origin is nothing new. And, to examine it freely, we need not go beyond the scope of the objects of this Society, by entering upon theological discussion or exegesis of Scripture. Our arguments, on the contrary, may be exclusively rational and based upon our knowledge of nature. They may be directed—like miracles at the foundation of our religion—to those who believe not, and not merely to those who believe the Scriptures. But we have no right to conceal the fact, that we have not invented the theory we may have adopted. And my endeavour shall now be to prove that, apart altogether from its origin, the religious theory ought to be adopted by all rational men, as being in accordance with all evidence and analogy, and with all our experience and knowledge of the human family. Surely there is no appeal to natural things in Scripture, that is not an appeal to man's reason, and to all he can investigate and discover with respect to the nature that surrounds him. When St. Paul argues that the invisible things of God—His Eternity, His power and Godhead—are clearly witnessed by the things that do appear,—that is, by the whole visible creation,—is not that an appeal to man's reason, which throughout the whole world, except among the few most degraded races or rather tribes of mankind, has been universally and rationally responded to? Is not the beneficence of the Creator—"filling our hearts with food and gladness"—equally a matter of rational proof, appreciable by all mankind? And so, when it is recorded that God created man in His own image, and gave him dominion over the inferior creatures, have we not a hypothesis of man's place in nature, that also appeals to all we can discover of man's past history, and to all we know now of mankind throughout the world?

Without presuming to fathom all that is meant by man being created in God's image and likeness, and taking merely the generally understood and universally accepted idea among Jews and Christians for ages, that man was created a perfect being, "upright," "very good" (for how, if created at all, could he come otherwise than perfect from the hand of God?),—taking that as what religion teaches us of our origin, I wish to show what a wide field of investigation and inquiry we may have in this Society, without in the least trenching upon the territory of the theologian or the Scripture expositor. Not that I undervalue theology or Scriptural exegesis, any more than I would admit that religion is not one of the

most important considerations affecting anthropology. If this were disputed, indeed, I might appeal to other quarters, which might possibly have greater weight with some, outside this Society, who do not with us accept Holy Scripture as "the key of knowledge."

For instance, in M. Boudin's *Etudes Anthropologiques*, published in Paris in 1864, he begins by citing Cicero as one of the most eminent philosophers of antiquity who has defined man as a religious animal. "There is not, in fact, any other animal," says Cicero, "who has knowledge of God. And there is no nation so barbarous or so savage, that even if it is ignorant what deity it ought to have, does not at least know that it ought to have a deity of some kind." (*De Leg.*, lib. II. cap. 8.) Boudin then goes on to quote Plutarch, as saying, "You may find peoples in cities deprived of walls, of houses, of gymnasia, of laws, of monies, of literature; but a people without God, without prayers, without oaths, without religious rites, without sacrifices, is what nobody has ever seen." (*Adv. Colleton.*) In citing Cicero's definition of man as a religious animal, Boudin refers, in a foot-note, to a curious exception, or rather attempt to make an exception to this, which I quote as having a peculiar value in the present day. He says, "Buddhism alone has the credit of attempting to teach religion to beasts. The author of a Tibetan work, translated into the Mongol tongue, and from Mongol rendered into French by Klaproth, who treats of the origin of the progress of the religion of Buddha in India and in other Asiatic countries, recounts the following: 'When the veritable religion of Chackiamouni (*Çakya-Muni*) had been spread in Hindostan and among the most distant barbarians, the high priest and chief of the Buddhist faith, not seeing any others of mankind to convert, resolved to civilize the large species of monkey called jaktcha or raktcha; to introduce among them the religion of Buddha, and to accustom them to the practice of duties, as well as the exact observance of sacred rites. This enterprise was entrusted to a mission under the direction of a priest regarded as an incarnation of the saint *Khomchim-Botitaso*. This priest succeeded perfectly, and converted a prodigious number of apes to the Indian faith.'"—You smile at this story, as so recounted, even although you may before have heard of the sacred monkeys kept in the Buddhist temples. It is doubtful whether the story would be accepted in the Ethnological or Anthropological societies. But, if you reject it here, and laugh at it; if the notion of monkeys being taught religious duties and observances by men is truly ridiculous; how much more ridiculous and absurd must be the

notion that mankind owe their own faith and ideas of religion, and even themselves, to a monkey origin! Well may M. Boudin observe, that "just as the diseased eye bears everything better than light, so the mind diseased with the evil of pride, accepts anything rather than the truth;"....."and instead of attaching itself to transcendent truths which enlighten, it gives itself over to astounding errors which delude."

Not long ago I observed it was argued in an article in the *Anthropological Review*, that, in order to study history aright, we must step out of our libraries—a hint, perhaps, in other words, that we may as well burn all our books! And you cannot fail to have heard of late years that anthropology, or the study of man, is quite a new science. Before you can believe that, you must, indeed, walk out of your libraries! The oldest books in the world, the oldest history, sacred and profane, and the oldest poetry of the ancients, alike disprove it. It is not only, as our own poet has it, "the noblest study of mankind," but it has been, in truth, the oldest and most universal. Nor could we find a more fitting motto for a work on anthropology—unless, indeed, we borrowed the language of holy Scripture, that "God created man"—than the words of the Delphic oracle, "Know thyself."]

Assuming, then, man's creation in a perfect condition, or as "made upright" by God,—as having intuitive wisdom, the highest intellectual power, the gift of speech, and moral faculties all in perfection,—we must yet remember that he had not possibly the kind of knowledge that comes alone by experience; and that he was necessarily at first without those artificial adjuncts of an elevated or civilized condition which we are now, perhaps, too apt to confound with the true essentials of civilization or elevation of character. The "many inventions," whether for good or evil, whether for man's comfort or destruction, which were readily found out, were yet not all discovered in a moment; and, as necessity is well said to be the mother of invention, we should remember that, as at first man's necessities in a fruitful and genial clime were probably few, inventions of arts of some kinds would come but by degrees. Nevertheless, as we have assumed the greatest intellectual capacity for the primitive man, as part of our hypothesis, we may fairly deduce from this, that man's first strides in invention and in art would be stupendous, and even more than equal to his absolute necessities. And so, just as we might have anticipated upon these suppositions, we find,

in the earliest chapters of Genesis, while Cain and Abel were, the one a "tiller of the ground," and the other a "keeper of sheep," that Enoch, Cain's first-born, built a city; and we afterwards read, not only of those who dwelt in tents, and of others who were breeders of cattle, but also of the invention of harps and organs, and of artificers in brass and iron. Again, immediately after the Flood, we have the account of the building of Nineveh and other great cities, and of the projected building of the tower of Babel; and then, afterwards, of the dispersion of mankind, and their separation into diverse nations and communities. After this general indication of the primitive history of the world, the Scriptures almost exclusively narrate the history of the descendants of Abraham, or of other peoples only when their history comes in contact with that of the Jews.

We therefore naturally turn to profane records, and to the monuments of antiquity, to discover what they tell of the past history of mankind. But we have no other such systematic written history of the world at large as we find in the sacred Scriptures. If we turn to Herodotus, "the father of profane history," we find he deals with particular nations merely, and with peoples comparatively modern; and only repeats vague traditions as to their origin and first migrations. But still let us observe the character of the facts as well as of the traditions he narrates. Invariably he introduces us to peoples more or less civilized, having the arts and ornaments and other appliances of civilized life, though a civilization differing from ours. And we find that all the traditions of their past relate to preceding civilizations, and those frequently superior to that of their then present condition. In no instance is there a record, and apparently not any knowledge, of the existence of mere savages without civilization, its arts and appliances. Barbarous and horrid customs are no doubt alluded to as practised by some of those ancient peoples, but yet there are none of them (not even those least known, about whom the traditions recorded are most vague,) without some adjuncts of civilization.

It is much the same if we turn to Homer or Hesiod as poets. They also introduce us to men who had noble sentiments, though heathens; to men who knew something of astronomy, understood agriculture, erected fortifications, wore armour, and wielded well-made weapons of war; whose women also worked embroidery, and taught their children in their tents or houses to emulate the noble deeds and speak the dignified language of their fathers.

I may venture to say that ancient history knew nothing of

savages, such as have been discovered now to exist in remote corners of the earth, furthest away from the traditional place of the origin and dispersion of mankind. Is it not then a fair question to raise, Whether, at the times of the history recorded by the most ancient historians, human nature had so far degenerated as to have arrived at the savage state?

For, when we turn from written history to the still older monuments of antiquity, what do we find? The pyramids of Egypt, the remains of Thebes, of Memphis, of Rabek (the Scriptural *On*, and *Heliopolis* of the Greeks), the ruins of Persepolis, Nineveh, Babylon, of the Giant Cities, of Khorsabad, Birs Nimroud, Balbek, and Palmyra. In India, Ceylon, Japan, China, Central America, Italy, Greece, everywhere almost throughout the whole world, evidences may be adduced of man's possession of knowledge, ingenuity, art and science, in the ages long past. Even in North America, on the banks of Ohio and Mississippi, the latest discoveries of archæology and geology go to prove, as Sir Charles Lyell bears witness in his *Antiquity of Man*, that an anterior civilization had also existed there,—where “the noble savage ran” in later times—older than that savagedom of the Red Indians which was found to exist when the modern Europeans first visited America.

But while noticing this testimony to the antiquity of civilization in America, which surely goes somewhat towards proving that the Red Indian savages are not specimens of “the primitive man,” as some have supposed, but really a degenerate race, we must keep in mind that the absence of any such proof of the former civilization of the oldest dwellers in America would by no means have established the contrary. Nomadic tribes sunk in barbarism, and in process of degeneration to savagery, whose remote ancestors might have been civilized, might of course migrate into regions previously uninhabited altogether; in which case the local geological record could afford no evidence of the stock whence such a people might have really sprung.

Again, if we trace the thread of civilization backwards, begin where we may, we have the same results. If we begin with ourselves and our own authentic history,—comparatively recent though it be,—we are led back to Rome, to Greece, to Phœnicia, and so on, till civilization becomes lost in time immemorial; and then the vast ruins of magnificent and giant cities, of obelisks, pyramids and temples, speak to us where all written history—save that of Holy Scripture—is silent.

That there are difficulties in dealing with man's past his-

tory, whatever view we may take of his origin and primitive state, no one who has given the least attention to the intricacies of the problem, or to the volumes that have been written upon it, by the ancients and moderns alike, can have any doubt. I can only hope to be able to bring forward a few of the most important considerations and salient points which affect the question, in order to elicit truth and to show what theory, if any, is free from difficulties which are insuperable.

In the mean time there is one thing more to be noticed as regards the religious theory, in which it is in marked opposition to all the others. When we take the Scriptural view of man's creation, we can at once comprehend and read aright all those evidences afforded by the remains of antiquity and of profane history of his wonderful original capacity and early civilization. We thus get over all difficulties we might otherwise feel as regards the time in which he would arrive at this artificially cultivated condition, and accomplish these stupendous monuments of his genius and pristine glory. We can then understand our old chronology, which makes the world to be but some six or eight thousand years old; and so also perceive the value of the conclusion arrived at by the most critical of our modern authors, the late Sir George Cornewall Lewis, who in his last work, *The Astronomy of the Ancients*, considers that we have little ground for believing in any chronology of the ancient Egyptians and Babylonians, beyond about 3,000 or 4,000 years prior to the Christian era.

I cannot, of course, enter here upon any discussion of the long antiquity claimed for the world upon geological grounds. In my opinion these long leaps into the past make few of the difficult problems of nature a whit more easy. But I will say this, that those who ask for millions or tens of millions of years, in order to get over the difficulties of their own invented theories,—whether they start the world with a nebulous fire, or man with an ape,—are really moderate in their demands for time, compared with what they ask of our faith. They might multiply their millions of years by millions more, and yet not have time enough to develop this real world we know—full of teeming life and intelligence—out of fire-mists, monads, and monkeys!

The religious theory, on the contrary, throws light upon history and experience. Supposing mankind to be highly endowed, with the highest intellectual capacity, at the time of the confusion of their language and dispersion in the East, it also presumes they would carry with them, in greater or less degree, the primitive traditions and the acquired knowledge which would be retained by individuals in each family

or tribe. The men, in short, who combined together to build Babel, are supposed to be dispersed in different directions in the richest virgin countries of the earth, and the result to be the sudden erection of magnificent temples, pyramids, palaces, and cities. In confirmation of this view, we have the actual remains of antiquity, which puzzle or excite the admiration of our modern architects, engineers, and mathematicians, as to how some of those ancient works were accomplished; and yet, according to all trustworthy chronology, they were executed about the period we speak of. To enable us to realize this the better, extraordinary as it may appear, I cannot do better than quote from a newspaper paragraph of recent date. We can only properly judge of the past by a wise consideration of the present, or understand what our predecessors upon earth may have done, by considering what men do now in our own age. In *The Times*, then, of 28th June last will be found the following pregnant words in an article relating to the American iron-clad turret-ship *Miantonomoh*:—"To say that the Americans are a great people is but to repeat a universally acknowledged aphorism. They build a city, launch a fleet, or set an army in the field, in about the same space of time it would occupy us in this grand old but slow-moving country, to discuss the preliminaries."—Let us consider this. The capital of the United States of America is not yet one hundred years old; and there, as also in Australia, we see what an intelligent and civilized community of emigrants can do in a very few years; and that too, remember, in our commercial times, when not under the rule of absolute kings, or chiefs of castes, like those who in former times bestowed their energies chiefly upon works that would redound to their pride and glory. If we also merely consider the changes in the cities of London or Paris within a hundred or even fifty years, we ought to have no difficulty in realizing how much could be done in Egypt, India, Assyria, Etruria, Greece and Rome, in some hundreds of years, granting that three or four thousand years ago men were intelligent and civilized, and not degraded savages. In America also, we find already, in the course of one or two generations such a change in the very physique of a people, as enables us, within our own experience, to see how new races would come to be developed out of an originally common stock.

[With these hints for reflection, I must now pass on, to glance at the opinions of those who, notwithstanding what all history and archæology attest, have come to conclusions diametrically opposed to what is here advanced.

No answer having been given last year at Birmingham, when the question was asked, What single instance could be adduced of a savage people having civilized themselves? I afterwards wrote a brief paper, with the title, "Man, savage and civilized—an appeal to facts," and published it in the *Ethnological Journal* for October, 1865, embodying the same arguments and repeating that question; from which paper I beg leave to make the following brief extract, by way of introducing the answer it received:—

The thesis I now venture especially to maintain is, not only that civilization is older than the savage state, but that it *must* be so. Here I appeal to all our knowledge of mankind, moral, social, and metaphysical, as well as to all the facts of history, both as regards the course of civilization throughout the world and all that we know of savage races.

. . . . Setting out with M. Guizot's famous sentence, that "Civilization is a fact," I argue, from its very existence now, that it must always have existed since man was. We are not here, of course, concerned with minor details respecting the various phases into which civilization may have been developed. I speak of "the civilized man" only as an elevated, intellectual, and moral being, apart from his peculiar circumstances.

I argue that civilization (in this proper sense) must always have existed since man's creation:—First, because I am not aware of any civilization in the world which has not either always existed among the civilized race from time immemorial, or has had its origin attributed to the prior civilization of another race, brought *ab extra* to the race becoming civilized. We can scarcely consider that the Greeks were "savages" before the introduction among them of written language and Egyptian civilization; nor that the Britons (with their chariots) were savages when invaded by the Romans. But, be that as it may, the civilization of Egypt and of Rome had at least a prior existence; which is enough for my main thesis.—And, Second, because we know nothing of any truly "savage" race having raised itself to a state of civilization; while it is questionable whether there is any thoroughly savage people that can be said to have become civilized through the influence of a superior race. But, even could such a case be adduced, it would not of course disprove the priority of civilization. The real point to be established by those who dispute my position is *the proof that savage races can civilize, or have ever civilized, themselves.*

To this, two answers appeared in the *Ethnological Journal* of November last; one by a writer signing "A. B.," who began by explaining why no answer was given by the President of the Ethnological Society at Birmingham. He says: "I fear the explanation amounts simply to this, that Mr. Crawford may have thought the theory the mere coruscation of a too exuberant fancy which needed no extinguisher. But

as your contributor now repeats his challenge, and, above all, as this is not the first time that the strange crotchet has been propounded, I shall attempt a refutation of it."

It is amusing to hear what had frankly been called "the old tradition of the creation of Adam," characterized at once as "a theory" of mine, as "the mere coruscation of a too exuberant fancy," and as "a strange crotchet," by a writer who forgets, while he is writing, his admission that he had heard of it before! It is high time surely that this sneering tone should cease in discussing such questions. I trust the institution of this Society will do something to put a stop to it. Before eminent ethnologists or physiologists talk thus of crotchets, or parade that in their opinion "no competent man of science believes in Adam and Eve," they had better be sure that the theories they have adopted, as so superior to what they call "*time-honoured and strongly-rooted prejudices*," are not themselves mere crotchets, that will never either become "time-honoured," or succeed in establishing a prejudice in thinking minds. Even traditions must have had a beginning, and strong prejudices may exist in favour of what is merely new, as well as for what has stood the test of time, and withstood not a little antagonism.

But to return to our ethnologist.—He says, "Let us see what this supposed civilized man and woman must have been when first created. If they had the persons of Apollo and Venus, and the brains of Newton and Elizabeth, they must still have been cowering, helpless savages, for they had everything to acquire. The imaginary civilized pair must have been at first without language, without fire, without tools, without clothing. They had to learn even to walk and to run. . . . They must have fed on the dead carcasses of fish, reptiles, birds, and quadrupeds, or starved. In fact, the civilized man of your imaginative contributor turns out to be a more arrant savage than a native of Australia, of Tierra del Fuego, or of the Andaman Islands; for all of these had made some small progress." This is ruthless—I had almost said savage—logic! to which the only reply of a rational being could be, that if the "imagined civilized man" was really a savage that could not even walk or talk, he could not have been supposed to be elevated or civilized.—Of course, you all know very well who are the real authors of this imagined animal, that "a long time back"—no doubt a very long time!—had neither intellect nor speech, and it seems (unlike all other animals) not even power to walk! Although, also, we know as a fact, that perhaps the great majority of the human race have lived, and do probably now live, upon vegetable food, yet

the primitive man, we are assured, "must have eaten dead carcasses" or starved!

To throw light upon this tissue of mere assertions and "musts," I ought to explain that Mr. Crawford, in his *History of Cannibalism*, puts it forward in greater detail, and imagines that all races of mankind must have passed through a cannibal era, which followed one during which they were content to pick up what he calls "the dead carcasses of animals," which may have died. This theory found few, if any, adherents in the British Association last year, where it was discussed; and it is worthy of notice that, notwithstanding all we do really know of the Cannibal Islands and Dahomey, Mr. Crawford comes to the conclusion, that "although in Northern and Western Europe the quality of the race of man was of the highest order, yet, owing to unpropitious conditions, it was precisely in this cold quarter of Europe that cannibalism probably, and human sacrifices certainly, lingered the longest!" Such doctrine, I think, might well make any man shudder who is not rather inclined to exercise a peculiarly human function, and to laugh, in thinking of the contrast between a theoretical and the actual world! Well may we smile, once more, with Voltaire's *Vieux Solitaire*, at the notions of those speculators (a race of men not yet extinct), *qui ont créé l'univers avec leur plume!*

But our critic goes boldly on: "How the declaration of Solomon, that 'God hath made man upright,' comes to be in accord with the paradox, is more than I am able to guess; for it simply means that a *vertical attitude was given to man*, to distinguish him from the beasts of the field that had a horizontal one. In truth, the declaration of Solomon seems as little in accord with the theory as is the wisdom of Solomon." Now, this was not only printed and published in London in 1865, but it occurs in what was specially praised in a literary notice in a famous London journal, on 10th November last, "as an excellent paper on savagery and civilization!" I must observe that the word rendered "upright," in the passage of Scripture referred to (Eccles. vii. 29), is *yashar* in the original. It occurs about 120 times altogether in the sacred volume, in the same or in cognate forms, and in every instance it refers solely to moral or spiritual uprightness. It is several times applied to describe the character of God Himself; thus making Solomon's declaration throw light upon that of Moses, that man was made in God's spiritual image, or in uprightness like to God. I have referred to this argument as an instructive illustration of how both science and Scripture are sometimes handled in our day, and not without applause

in certain influential quarters. And perhaps I may be permitted to add, with reference to the discussion at our first ordinary meeting last month, that I do not consider I am trenching in the least upon the province of the Scriptural exegetist, in merely ascertaining and noticing what is the unquestionable sense of a word or the undisputed meaning of a passage of Scripture. I doubt whether there exists a second man who in any reputed organ of the press would venture to say that *yashar* only means *perpendicular*!

But our ethnologist made use of such arguments and ventured to write in such a tone, although obliged to make the following important admissions: "The Greeks and Romans (he says), who might have written an account of savages, *knew of none*. They knew many 'barbarians,' but never saw a savage.....The races inhabiting Europe that came under the notice of the Greeks and Romans were all of a high quality.....Among the most backward known to the ancients were our own forefathers, the Britons; but, in possession of herds and flocks, of iron and corn, they were very far advanced beyond the savage state. The other civilized races of the old world, such as the Egyptians, the Jews, and Assyrians, the Persians, the Hindoos, and the Chinese, were probably in the same state of ignorance of the existence of savages, such as were found in America and the isles of the Pacific, as the Greeks and Romans were. They had experience of many barbarians, as they have now, but of no savages."

This, you will perceive, is precisely my argument. I had appealed to all these facts, which my opponent cannot deny; and asked for facts upon the other side. The only reply was this: "But those who are now civilized *must* once have been barbarians,—the barbarians *must* have been savages, and the lowest savages known to us, as in the example of the Australians, *must* have been once lower still,—*must* have been once without language, fire, and implements. We can hardly be said to have any authentic account of savages rising to the ranks of barbarians; but we are notwithstanding satisfied that, from the nature of things, such a progress *must* have taken place."

Of course, these reiterated "musts" all go for nothing. They are mere strongly-prejudiced assumptions of the point at issue; and being contrary to the ascertained facts within our knowledge and experience, they are false assumptions against analogy and induction. I am glad to say that such views were emphatically repudiated by Professor Rawlinson (an ethnologist who yet pays some respect to history), while **presiding in the Ethnological section of the British Association last year:—**

“ Professor Rawlinson protested against the assumption that human beings were originally in that poor and destitute condition, which had been described, and that they all rose from a state of barbarism. He held the very opposite opinion, viz., that they were created in a state of considerable civilization, and that while most of the races had declined into absolute barbarism, some races had never done so. The Egyptian, Babylonians and Jews had never so declined.” (*Rep. of Brit. Assoc.*, 1865.)

And now, mark the importance of the facts contradicted by such assumptions. If this theory of the savage origin of mankind were true, is it not utterly incredible that not a single civilized people should have a knowledge, not even a tradition, of their immediate ancestors having been savages?

But some further important admissions have been made in confirmation of the religious theory. Our critic admits that “ empires have fallen through their own vices and the inroads and conquests of barbarians,” and also that “ there are a few examples of civilization ending in barbarism;” nevertheless, he has the hardihood to conclude by telling me that “ my theory,” (as he will call our common old tradition of the Bible,) “ is an idle attempt to turn the order of social progress bottom upwards;” and he patronizingly advises that, “ as I evidently possess both knowledge and ingenuity, I should henceforth use them logically and forswear paradox!”

My other critic in the *Ethnological Journal* was scarcely another, for his views are much the same. His conclusion is, that, “ scientifically considered, primitive man *must* be viewed as naked, speechless, defenceless, and ignorant.” This is surely “ science made easy”! If a “ needs must” is thus “ scientifically” to be employed to drive us into distance and darkness beyond all our knowledge, what does science mean? Then he tries to evade the evidence of all history by saying, “ history can know nothing of the remote times of man unless by divine revelation, and to bring in this is to remove the question out of the domain of scientific discussion.” But may it not rather be said that, *therefore*, divine revelation may be the very means to enable us to complete our science? At all events, we surely keep within the scientific domain when we subject the theory we adopt—whether its source is believed to be divine or human—to every possible test of experience, and never once say that it “ must” be so, except upon rational grounds, and because it is in accordance with human history and human knowledge of facts and nature. This objector also admits that social degradation is easily intelligible and may happen to any people, though he does not

appear to consider that that would eventually result in a concomitant "physical degradation." He calls the theory of degradation "Darwinism read backwards," to which he objects; and yet I venture to say that, if there is any truth in Darwinism at all, it will be found, whether as regards plants or animals,—when all is left to "nature," and mere "natural selection"—to tend, though even then within certain limits, rather in this downward direction. The question now, however, is, whether or not this has been the case in respect of mankind.]

We must remember, however, that the fact of the antiquity of civilization, as proved by all history, tradition, and archaeological remains, is only one of many converging proofs, all bearing in favour of the religious theory of man's past and present condition. There are also other proofs to be derived from the common knowledge among civilized races, which speak of a common origin, and of some previous intercommunication among them all. One of the most important of these proofs is derived from the astronomy of the ancients, more especially from the names and figures of the constellations still delineated upon our celestial globes. Similar figures are found upon the Dendera planisphere and zodiac of Esneh, and upon sarcophagi from Egypt, and landmark-stones from Assyria, which may be seen in the British Museum. The apparently arbitrary character of these figures, there being nothing in nature to suggest them, and yet their being found nearly identical among all the ancient nations of the old world, and sufficiently similar, even in America, to indicate the same ably common origin,—all combine to furnish a most important cumulation of proof as to the ancient intercommunication between peoples and races, besides those derived from comparative philology, comparative mythology, or the common traditional stories found among mankind. From all these sources may be urged other arguments in favour of the religious theory. [That derived from comparative philology was most ably treated by Dr. Thornton at the last meeting of this Society; and it will now also be seen, that the very origin of speech is bound up with the origin of man himself.] I venture to allege that no theory either about man or language which we can devise—even with all our after-knowledge of the facts now existing in respect of both—will so well account for all the facts of the case as our old religious and (I think I may still say) "*time-honoured*" theory of man's origin and the confusion of language at Babel.

Having now appealed, in proof of this, to all we can gather

from history and among the civilized races, there is one further appeal to be made, though one of less importance. It is to all that we also can discover from the traditions of the various savage races. The result of that appeal I must be content to state in little more than a sentence from the paper already quoted; namely, "That among all savage races (except perhaps the very lowest of the low, from whom we can gather nothing), there are traces, more or less, of an anterior civilization, or previous superiority of condition, that testifies to their being now in a literally *degraded* state. Even the poetical legends of the Viti Islanders, and the superstitious traditions of the Negroes, testify to something in their ancestors superior to themselves." In illustration of this, I quote from an independent source the following:—"The islands of the Pacific, under a general appearance of primeval simplicity, present here and there many remarkable evidences of a former civilization, as well as of a degree of connection between the several populations, which seems inconsistent with their present isolation."* I ought here perhaps also to observe incidentally, that among almost all the savage races when first discovered, the traditions connected with their corrupt forms of religion are found to have something about serpents, and trees, and woman.

So that here again the verdict of facts is still in favour of the priority of civilization, and a proof that the savage races have degenerated from a higher grade. On this point, too, I may refer to the Bosjesmen, as a known instance of the growth of a distinctive savage race within a few generations. Without going further into details as regards the savage races, I venture to claim to have pretty well established my thesis, and proved that the religious theory may now also be called with propriety *the Historical Theory*.

Since the foregoing was written, additional testimony of a valuable kind has come under my notice, and to this I beg leave very briefly to allude. At the last meeting of the Ethnological Society, held only on Tuesday, 10th July, a paper was read by the distinguished African traveller Mr. S. W. Baker, in which he gave an interesting account of *the various tribes of the White Nile Basin*. One of these tribes (the Kytch tribe), he says, is "hardly a remove above the chimpanzee, *except* (a most important exception) in the power of speech. They live in a marshy district and are wretched skeletons." Most of these tribes, it seems, know how to work in metals. But in one in the

* *Principles of Mythonomy*, by Mr. Luke Burke, p. 51.

Shir district, having no iron-ore, hard iron-wood supplies the people with a substitute for iron, like the hard stone used by the New Zealander, and flints by other savages elsewhere. Mr. Baker remarks that "the absence of articles and weapons of metal in no way proves their excess of savagery; but where there are no metals to work, there are no blacksmiths." Mr. Baker also describes "the tribes on the borders of Abyssinia, who are still in a state of superior civilization." They are sprung from a land inhabited by the only independent Christian community in the whole of Africa, among whom reading and writing are common, and where the features and forms of the inhabitants are closely allied to the European, forming a strong contrast to the tribes who inhabit the borders of the White Nile." At the same meeting, Dr. Beke, also a well-known African traveller, is reported as having made some remarks on the retrogression of civilization among the savage tribes. In his opinion, they are becoming more and more savage, and he asserts that nearly all travellers in Africa are of that opinion. I am glad that Mr. Crawford, the President, was present when this was stated in the Ethnological Society, as he is well known to entertain opinions opposed to those I have here ventured to advance.

[Still bearing intimately on our subject, and especially on an important point to which I am anxious to allude before I conclude, another paper was read the same evening, by Lieut.-Colonel Fytche, on attempts that had been made to civilize some of the Andaman Islanders, which had entirely failed, even the wearing of clothes producing consumption. Dr. Mouet, however, spoke of other similar attempts, and of one exceptional case, that of a young girl, in which the efforts made had proved successful.

It was no part of my case to prove that individual savages, or tribes, cannot be reclaimed and raised. That this may even be possible of races, I will not dispute, though it may be a question whether the process of degeneration may not sometimes proceed so far as to render the elevation of the race afterwards impossible. My argument has been, that these low races do not, as a fact, ever rise of themselves. The late Dr. Waitz has said further, that they neither do emerge from their barbarous state, nor do they exhibit any desire to leave it; and they even, in spite of example and teaching, rather tend to remain as they are. It is not a fact, then, that they rise, nor is it "natural" that they should, however easy and natural it may be that they should fall still lower and lower.

But, whence, then, it may be asked, if all this be true, has the idea of human advancement and progress come to enter men's minds at all? To that I reply, it has no doubt also been derived from human experience, and is best explained by the religious theory. Ours is no dark and fatalistic creed that always and only points downwards. We have, thank God, a knowledge and experience of advancement and human progress in the world's history, as well as of man's degeneration. The real fact is, indeed, that we have lived so much in the light of this state of advancement, in which we were born, that some of us have forgotten its cause, and that it is an absolute reversal of a previously existing state of things. Not a reversal of any natural law—let us leave that to those who believe that intellect and speech could come of themselves, and the noblest manhood be developed out of apes or speechless savages;—not a reversal of any natural law, but the introduction of a higher law, that claims to regenerate man, and to elevate his nature. Just as by our theory we believe that some thousands of years ago man was created very good by God, yet afterwards fell, and so the human race degenerated;—by slow degrees no doubt, for he always had a better spirit that strove within him, and an intellect that could not lose its lustre in a day;—so we also believe that some eighteen hundred years ago the progress of this human corruption was arrested, by a revival of new spiritual life and fresh power of becoming “upright.” We appeal equally to the facts of history, to prove both man's fall and his restoration. Since the second Adam came, in fact, the history of human advancement and of the highest civilizations, from the time the Roman empire fell, is little else than the history of the progress of Christianity. The students of “the science of man” will never understand their whole subject if they ignore this crowning fact of all, which completes *the religious theory* of man's past and present condition.

My argument required that I should chiefly dwell upon the downward course of humanity, but I gladly recognize that that is only half the truth with which we are concerned. “The question of questions for mankind (well says Professor Huxley)—the problem which underlies all others, and is more deeply interesting than any other, is the ascertainment of the place which man occupies in nature, and of his relation to the universe of things. Whence our race has come; what are the limits of our power over nature, and of nature's power over us; to what goal we are tending; are the problems which present themselves anew, and with undiminished interest to every man born in the world.”

These words of the learned Professor are worthy of the

theme. They recognize a power beyond mere nature, and show that the past and present of man cannot be well considered without reference also to his future. The institution of this Society has not been devised with the view of stifling or suppressing such problems, but to secure their more complete consideration. This paper, be assured, is no "idle attempt to turn the order of social progress bottom upwards," but rather an honest endeavour—however inadequate—to overthrow ill-grounded theories, which,—by ignoring the true source of all "our power over nature," and of that righteousness, or moral uprightness, which alone can raise a people, and secure for them a social progress that will last,—not only *cannot* tell mankind "to what goal they are tending," but have even failed to account satisfactorily for either the original existence or present condition of the civilized and savage races of the great human family.]

The CHAIRMAN.—I am sure it will be perfectly unnecessary for me to call upon you to pass a vote of thanks by acclamation to Mr. Reddie for the very valuable paper he has read. (Hear.) I can only say that it is adding one more to the many obligations which the Victoria Institute owes him. No one who has not been associated with him in the formation of this Society can understand how earnestly he has worked for its advancement; and the admirable and exhaustive paper which he has produced this evening shows how, in the midst of those labours, he has found time to devote himself to the great cause which this Society advocates. I have to announce that I have received a letter from our noble President (the Earl of Shaftesbury), in which he expresses his deep regret that he is prevented by indisposition from profiting by Mr. Reddie's paper. (Hear, hear.) I have only to add that I most cordially invite discussion upon this paper. I am sure Mr. Reddie will be disappointed if his paper does not provoke that free discussion which he considers the most wholesome feature of this Society's proceedings. (Hear, hear.)

Dr. GLADSTONE.—I rise to express the great pleasure with which I have listened to Mr. Reddie's paper this evening, and especially to the latter part of it; and I am quite sure that there are many here who have also felt, and who will express that same pleasure. I know Mr. Reddie likes discussion; he and I can never be together for two minutes without coming across one another; and he had not been reading his paper one minute this evening before he advanced an opinion which I could not adopt. The subject is a most noble one. It has been treated very extensively; it ought to be treated with all philosophical calmness; it ought to be considered with all the largeness of mind that can be brought to bear upon it. We ought, if possible, to remove every prejudice, and everything which would prevent philosophical consideration. I am quite sure Mr. Reddie has too much nobility of mind and too much courage to call people bad names when they don't deserve it; or

to give them a bad character without facts to justify him in doing so. He has, however, done this, I am sure unintentionally, in his paper, in using the classification which he adopted in dealing with his subject ; for he has called one theory a religious theory, and by doing so he has implied that the other theories are irreligious. (No, no.) Well, I think you will allow me to say that I do understand that it does imply that ; and that is the accusation which I have to bring against him. I have been curious to know what is the reason of the objection on religious grounds to the Darwinian theory. I am not going to speak now of the polygenous theory, or to defend it from the charge to which I think it lies open, of being irreligious ; but I am anxious to know what are the Scriptural grounds of objection to the Darwinian theory. The Bible declares that God created man. It tells us what sort of a being he was when he was created ; but it does not tell us how or by what process he was created. I have looked carefully into all the passages in which the Hebrew word for "create" occurs, and I do not find that any one of them indicates any particular theory of creation. The word "created" is never used in the Old Testament except in reference to the works of God ; but it may indicate either the calling of things out of nothing, or the bringing together of various parts, and putting them in a form in which they were not known before. In several cases it distinctly refers to ordinary generation. It never implies that all that was created or made by God was not called out of something that existed before. If we turn to the New Testament, we find that the equivalent Greek word has in only two instances been applied to the works of man. It is applied expressly to that which God makes ; so that, in the New Testament, as in the Old, there is no theory of creation laid down. I do not say we ought to accept the Darwinian theory ; but we have no other which gives us a possible solution as to how God made all those creatures He has placed in the world, and I do not see how it opposes any statement of Scripture. I think we ought to remove this impression, and consider the question upon its own merits. I am aware that Darwin himself not only never applies his theory to the creation of man, but that there are various expressions in his book which seem to indicate, by the idea of natural selection, the action of some kind of power independent of God. We are not, however, to suppose that some persons may not take this natural selection as in subordination to the will of God ; and it seems to me, that, if we were to come to the conclusion that God created great whales by natural selection, we should be as much in accordance with Scripture as if we supposed that He created them by some other process. We know the argument of Paley, that if a person going along the ground strikes his foot against a watch, and takes it up and looks at the various contrivances, and sees how it is made, he must come to the conclusion that it was the work of some intelligent being. But supposing, in continuing his walk across the common, he came upon a chronometer and a clock, he would arrive at the same conclusion as before ; but most likely he would think that different minds had been employed to create the different pieces of mechanism. But if it were revealed to him by some messenger from heaven or otherwise, that the clock was produced from the chronometer,

and the chronometer from the watch, and that the mechanism was so perfect that the one was evolved out of the other, then his idea of the intelligence of the artificer, instead of being diminished, would be exalted. But this analogy is not perfect, because in mechanism we cannot bring in God's work—we cannot bring in the laws of nature, that is, the finger of God. But whether God, in some inscrutable way, has called beings out of nothing, or whether He has acted in some such way as is indicated by Darwin, in either case we have God's direct power in creating and sustaining all things, and directing the processes by which He produced animal life, and lastly, man himself. I think I will close this subject with these few remarks. I am quite sure they do not detract in the least from the value of Mr. Reddie's arguments. I think he has shot most powerful shells into the hostile camp, although some of them may have fallen short of the mark.

Captain FISHBOURNE.—It did not strike me that in using the expression "religious theory," any attack was made upon the opponents of it—not the least. I think Dr. Gladstone's exegesis is not fair. He attacks the term; but the term is used to express, shortly, what is the view taken by a class of persons from the stand-point of revealed truth. It means no more than that the class of persons to whom it especially refers, are those who accept the Scriptural account of the creation; and I think it is perfectly natural that their theory should be called the religious theory. I say, taking the whole argument in the paper, it is quite in opposition to the view Dr. Gladstone has taken of it. The argument throughout has been based on a rational, and not a mere scriptural consideration of the facts brought under our notice; taking them more particularly, too, from witnesses on the opposite side of the question; and it is only after Mr. Reddie has established his position, from the evidence of persons who exclude the religious view, that he introduces proofs of its being in accordance with what might be termed the religious view, or that which is drawn from Scripture. I think Dr. Gladstone is a little touchy about this. (A laugh.) I think Mr. Reddie has pointedly and distinctly, on more occasions than one, not only insisted, but emphatically insisted, that there was no intended antagonism to other views on any but rational grounds, or, at least, that there was no imputation of irreligion intended. I do not think it is right or fair, therefore, to fix upon a mere expression, and deduce from it an argument which neither anything in the paper warrants, nor anything which Mr. Reddie has ever said or written on any previous occasion. (Hear, hear.)

Mr. WARINGTON.—If I apprehend the matter rightly, I think the objection of Dr. Gladstone was not that he thought Mr. Reddie had charged those who did not accept the scriptural account of the creation with being irreligious, but that the term was not exactly the one which ought to be chosen to denote the particular views to which Mr. Reddie applied it, since there might be other views entertained on the subject that might be considered equally religious. Now I really must, on that point, go hand in hand very warmly with what Dr. Gladstone has said. It struck me, after reading Darwin's book on *The Origin of Species*, that it was quite possible

that it might be perfectly true that man originated in that way, and that devoutly religious men might therefore hold the Darwinian theory and also believe their Bible to be literally true. We believe God created all men. I think we should all deny the assertion that God only created the *first* man. We believe He has created all men. We make it part of our religion that we believe in God as *our* Creator. What do we mean by that? We don't mean that He has brought together a number of atoms from different parts of the world and made us just as we are at once. We believe He has made us by the process of generation; that we gradually developed into our present state. But what then? Does that make it the less true, at the same time, that He created us? I do not think there is anything irreligious in believing that the first man was developed from a lower animal; but, then, it does not follow that the animal had power of itself to develop us. That may be the opinion of Darwin, but it is by no means involved in his theory. It might be a power exercised upon the animal by some higher influence. We admit that all varieties have arisen on the principle of natural selection; but in the origin of these varieties, then, do we exclude the hand of God? If I find a plant, differing from all its fellows, growing in a different place from other plants of the same kind, I hold that that plant has come thus to differ by what is called the action of natural selection; but this does not by any means exclude the idea that God made that plant as well as all the others. On this account, it struck me that the term "religious theory" was scarcely the correct term by which to designate the particular theory to which it was applied. I have, further, one or two remarks to make in the way of criticism, with reference to the arguments of Mr. Reddie. I think there is nothing more dangerous than bad arguments. I believe that bad arguments are worse than no arguments at all; and if there be any weakness in those which have been used, I think it is our duty to point them out. There was an argument used by the essayist which seemed, at the first glance, to be very plausible—that was an argument with reference to language and intellect. He said animals did not seem to have an analogy to man, such as was necessary to make development possible, because they had no language. But though that may seem very plausible, it struck me as being really a most unsound argument; for if you take a child born perfectly deaf, that child has no spoken language, it hears no sound, and it cannot be taught any language—

Mr. REDDIE.—Oh, yes; it can.

Mr. WARINGTON.—It cannot be taught any language by *sound*; but yet that child develops its intellect, though unable to talk; for it can express its ideas by means of signs. (Hear.) Therefore it appears to me that the connection of articulate speech with intellect is not essential. There must be speech of some kind (hear, hear); but it is not at all necessary that it should be articulate language. Now Mr. Reddie is not surely prepared to assert that there is no inarticulate speech amongst animals, no signs or sounds by which they can convey their ideas to one another. (Laughter.) For instance, you see a dog in the street going and fetching another dog; by which it would

appear that dogs had some means of conveying their thoughts to one another, either by instinct, or reason, or intellect, or whatever you like to call it——

Mr. REDDIE.—Excuse me for the interruption ; but you are contending against an argument of Mr. Wallace, to which I alluded, and not to an argument of mine. I never raised that issue. But Mr. Wallace, in a paper which he read before the Anthropological Society, advocating the Darwinian theory, laid it down as a canon of that theory, that intellect and speech would go together. I have no objection to that view ; but I wish it to be understood that I gave no reasons in its favour ; because Mr. Wallace having laid down that theory, I merely adopted it as an *argumentum ad hominem*.

Mr. WARINGTON.—I was quite aware of that. I was simply endeavouring to show that the answer you gave to that was an insufficient answer. There is a kind of speech possible among animals, and a kind of intellect, as well as human speech and human intellect——

Mr. REDDIE.—I beg your pardon ; but if you had attended to the paper, I think you would have seen that I had almost said as much, and expressly reserved that point as one requiring further consideration.

Mr. WARINGTON.—Very well ; I will not further dwell upon that. The other point which I wish shortly to mention, is in respect to the possibility or impossibility of savage nations ever rising in civilization. We are told as evidence that they never could have risen, that there is no tradition existing amongst civilized nations of their having been previously in a savage state. Before we insist upon that argument, it would be necessary to look at this further point—Is it probable, if a nation had risen from savagery to a state of high civilization, that it would recollect, as a tradition to be handed down from one generation to another, that it originally belonged to a class near to the brute ? I put it to yourselves : Is that the kind of tradition you would hand down ? If you were aware of the fact that your immediate ancestor was a monkey, or some other species of brute (laughter), would you have taken care to hand that down to your children ? On the contrary, would you not try to conceal it ? I know I should. (Laughter.) Therefore, is it not possible that a nation may have risen from a state of savagery, and have forgotten it, from the people having concealed the fact ? Mr. Reddie has quoted evidence to show that particular nations look back to a higher state of civilization ; but is it not perfectly natural that they should do so ? Traditions of this kind, looking back to former glories, would be precisely those most likely to be handed down. This, it struck me, considerably weakened his argument. Again, is it not a fact which tells against the general position of Mr. Reddie, that there are traditions existing among nations who have attained to an advanced state of civilization, as to certain persons who were the inventors of the most fundamental parts of civilization ? Are there not traditions of those who invented the use of fire ? When we have traditions of that kind actually existing——

Mr. REDDIE.—Would you mention precisely *what* traditions you refer to ?

Mr. WARINGTON.—I believe the tradition exists amongst the Chinese, and amongst a number of other nations considerably civilized——

Rev. Dr. IRONS.—I doubt that.

Mr. WARINGTON.—I am speaking from memory ; but I am quoting from a book written by one of our best ethnologists (Mr. E. B. Tylor), who mentions a considerable number of nations in which traditions exist amongst the people as to those who first brought fire into their country. I think we might take a statement of this kind,—especially from a person who is extremely careful and cautious in all he says, and whose deductions have been always well considered,—I think we might take his statement as somewhat antagonistic to the general position which Mr. Reddie took up in his argument ; for surely this is a tradition of rising in civilization, or rising from a lower state in civilization to a state which was higher. I do not mean to say it is a rise from utter savagery (hear, hear) ; but it is a rise tending in that direction,—it is a tradition going against that which I thought Mr. Reddie insisted upon so strenuously, namely, the tradition of a fall from what was higher to what was lower ;—an item, therefore, of positive evidence, over and above the general probability that the traditions of a fall from a higher state would be remembered, while the traditions of a rise from a lower to a higher state of civilization would be forgotten.

Professor OLIVER BYRNE.—I have just one remark to make with reference to the arguments in the paper. We find that all those properties in creation that have come by little and little have more or less a complete gamut. We have, however, five senses ; but we have no positive gamut for any of them. Neither have we a gamut for any of the qualities of the heart. We have no gamut for friendship ; we have got no gamut for love ; we have not a single gamut for any of those perfect things of which we have experience,—consequently they never grew little by little. If they had grown little by little, there would have been a symbol for every change—there would have been a mark for all the powers and passions of the head and heart. For instance, there are three qualities of the head : we have got the power to analyze—the power of taking things apart and looking at them ; the power of putting them together ; and the power of alternation ; but we have got no gamut to show how we commenced to learn these mental processes. When we speak of science, also, we must recollect that true science depends upon positive proof. But Darwinism is not science : it is without proof—without axioms or definitions. Had man grown little by little, as the Darwinians say, every single power and passion of the head and heart would have had a nicely-formed gamut. But what is the fact ? Look at the man, for instance, who is employed in China tasting tea. He cannot teach a man how he tells the taste ; he cannot tell how he does it ; he cannot give a gamut for the taste that God Almighty gave him,—it cannot, therefore, have grown little by little : it must have been got altogether ; and so it is with all the perfect things in creation.

Mr. FOWLER.—With reference to the remarks of the gentleman who spoke before Professor Byrne, I have one word to say. Mr. Warington's argument appeared to be, that it was quite possible that civilized man could have developed himself from a savage state. Now it appears to me, that we

must look at the question as regards the development of mankind, in the way it has been very ably put in Mr. Reddie's paper, but which, among the many other points referred to, has been somewhat overlooked ; namely, that there is no account of the history of mankind which does not essentially harmonize with the account we have in the Scriptures. If we look at the question as to how civilization grew up, we will find, as Mr. Reddie very properly observed, that the oldest uninspired account we have is that given by Herodotus, and if we examine his history, we do not find it inconsistent with the Scriptures. All we learn from it of the history of mankind thoroughly harmonizes with the account which we get in the Bible. Egypt is the oldest country of which Herodotus speaks in much detail ; but when he refers to the ancient accounts of transactions which occurred in the early part of the history of Egypt, he only mentions what he was told by the priests of that country. He does not appear to be able to vindicate all that he has written, or to speak with the accuracy and certainty which is evident in the inspired writings of the Bible. Now the same thing might be said with regard to the oldest accounts which we get from all other sources with regard to the history of mankind. And I think it is a point we ought especially to bear in mind, among the many able arguments that have been advanced in the paper, that we have no account of the early history of mankind which in any way contravenes the earliest account of all, namely that given us by the inspired writers of the Old Testament. (Hear, hear.)

Rev. S. C. ADAM.—I rise for the purpose of asking a question of some able Hebrew scholar with regard to the meaning of the Hebrew word *BARA*, *created*. I have always understood that it means that God gave a perfect existence to everything that He created ; and if so, He gave a perfect form to man in creating him.

Rev. Dr. IRONS.—It is an awkward thing to rise in order to answer a question so put. Without, however, professing to be a Hebrew scholar, I may say that I have read Hebrew for many years, and I may observe that the state of the language is so primitive that it is impossible for us to analyze the exact force of its roots, beyond a certain limit. You find instances in which the word in question has a definite meaning ; but they are very few, and it would be out of the question to attempt to build up a doctrine of philosophy on the etymology of a Hebrew word. It is used ordinarily in the same way as we use the ordinary English word "created," or "made,"—sometimes it means the one and sometimes the other. The idea of "creating out of nothing" is an idea we bring to the word, rather than extract from it. It is not an idea which belongs necessarily to the word itself. There is no doubt that is the traditional sense of the word ; but it would be impossible to push its force beyond a mere general sense, and to build an argument upon its etymology would be most unwise. Would you allow me to say in defence of our Essayist, that I think a little unfairness was used by Mr. Warrington and Dr. Gladstone in questioning what is or is not religious. Of course, Mr. Reddie used the word in its ordinary sense. We are not here merely to play with words. We are using terms in their common

signification. Every one knows that there is a religious view of all the subjects which engage us here ; and we must not be debarred from using common phrases in discussion. It leads people from the truth, and gives an appearance of pettiness to our discussions, to have issues raised in debate which are not worthy of debate. Now with respect to the Darwinian theory, I think it was incumbent upon Dr. Gladstone to define what he meant when he made a distinction between Mr. Darwin and the Darwinian theory. The force of his argument was that a man might be a good Darwinian and be at the same time a sound Mosaical theologian ; but at the present moment I am in doubt as to what he meant when he said that the Darwinian theory might be held by those who considered the Bible substantially true throughout. Of course I could put a meaning upon it, because in the Christian Church there has been a theory (though it has not been ordinarily discussed amongst us) which very closely approximates to that which I suppose to be the Darwinian theory, and it has been held by great men without the least rebuke. I remember, some time ago, reading a sermon by Father Ventura, preached in Rome and Paris, which received the direct approbation of the Pope, and it begins with a statement which I recently had occasion to quote. It occurs in a sermon on the certainty of the instruction of the Catholic Church ; and in it the preacher states : "There is no father of the Church, there is no doctor of Catholic antiquity, who does not acknowledge that everything in the system of grace is correspondent with something which had previously existed in the realm of nature." He attempts to show from that the truth, that there is nothing whatever in the new creation which had not its dim parallel shadowed beforehand in the previous operations of what we call nature. That I suppose may harmonize to a great extent with Darwinism. I remember distinctly, when I quoted this in a sermon, that several good old Churchmen were shocked at it, and said it was Darwinism. I suppose I must not mind being called hard names, but I think a Christian clergyman standing up in this metropolis of Christianity, in this city which we might regard as the centre of intellectual Christendom, ought not to be called names for maintaining a truth which, according to Le Père Ventura, and according to his present Holiness the Pope, has been laid down by all the doctors and fathers of the Church unanimously. But all this only shows that we might eliminate that whole discussion from our present debate ; and I think we might spare altogether that part of Mr. Warrington's observations. I do not think it was *ad rem* to-night. He came at last to the point. He came to consider whether there was anything like a tradition in the world, of a savage people having civilized themselves. Now, I think our essayist threw down the challenge boldly. And, indeed, this is not a matter in respect to which there need be any doubt. As to the obscure and more than obscure tradition existing in some races, that their ancestors had originally derived fire from the discovery of their fellow-men, I would put it to the conscience of Mr. Warrington, whether that tradition is not more like poetry than history ? It is a sort of imagination. Being accustomed to the comforts and blessings of fire, it was not unnatural, in the savage state to which they had sunk, that they should have some vague tradition of this

kind. But the very fact that there was such a tradition, attributing the origin of fire to some one who brought it to them, rather proves Mr. Reddie's case, and shows that they attributed even their knowledge of fire to some being wiser than themselves. (Applause.) It was not a thing discovered by their generation ; it was in the dim religious past. And so we find that traditions invariably take a religious turn. We all know that Prometheus suffered for stealing fire from heaven ; but then Prometheus was considered to be a demigod. (Hear, hear.)

Mr. BARRETT.—The impression left on my mind is similar to that which was left on the mind of Dr. Gladstone. As far as I can judge, Mr. Reddie appeared to think that Christianity must stand or fall by the objections to the Darwinian theory. (Cries of No, no.) Well I may be right, or I may be wrong, but that was the impression left on my mind. I think a greater disservice cannot be done to Christianity than dogmatically to assert that its claims depended upon refuting the truth of the Darwinian theory. Darwinism may be right or it may not ; but the Bible teaches us nothing at all about it. (Hear, hear.) The Bible teaches us nothing about science. It was not written to teach us science. It was sent to appeal to our affections, not to our intellectual nature. I do not think, therefore, it has any connection with the Darwinian theory—

Mr. REDDIE.—I am sure I will be excused for the interruption, for I must say that this is really not the question here. I have not said that Christianity must stand or fall by Darwinism, or the objections to Darwinism. I stated what Darwinism was, and I tried to oppose it, not by any words of Scripture, but by our experience and the facts of nature. (Hear, hear.)

Mr. BARRETT.—I was simply stating the impression left on my mind from hearing the paper—

The CHAIRMAN.—As I understood the paper, the subject has not been discussed from the Bible point of view simply, but from a consideration of the facts of nature, as opposed to the Darwinian theory.

Mr. BARRETT.—I was simply stating the impression left on my mind, which was, that it was argued that Christianity must stand or fall by the objections to the Darwinian theory ; and I thought I was justified in stating that I did not adopt that opinion.

The CHAIRMAN.—I must say I can see nothing of that kind in the paper. I regret the tone which has been imported into this discussion by Dr. Gladstone, unintentionally no doubt ; as it has drawn us away from the subject of the paper. I think Mr. Reddie was extremely cautious in not attempting to call names. But in dealing with a subject of this kind, it is sometimes very hard not to call things by their right names. There is a certain theory which we believe to be the religious theory ; and by the religious theory I mean that which a plain common-sense man will deduce from the word of God, reading it as a plain, common-sense man will read the Scriptures. I cannot conceive that a man is very much to be deprecated, if he calls that plain, common-sense view the religious view, as opposed to other

views which deduce theories out of their own conceptions rather than from the facts of nature. Dr. Gladstone referred us to a well-known simile—that of Paley—of a man going across a common and striking his foot against a watch. Now if Paley had known more of the question, he would have seen that this was a bad sort of simile to take for working out his theory from analogy; because if a man struck his foot against a stone instead of a watch, he would have found, upon an examination of it, that it contained a far more complicated structure than was to be seen even in a watch, and that it was the work of a far higher power. With regard to the observations which have been made in reference to the Darwinian theory,—and when I make use of that term, it is in no spirit of calling names,—I must say that those that advance that there is no such thing as a Creator, or no such thing as creation, claim (I do not say whether they do it rightly or wrongly) Darwin as a supporter of what I think every one must therefore admit to be an irreligious theory. But take his own arguments. I have not to go simply to statements scattered here and there in the volume of Mr. Darwin; I take the whole spirit of it. The whole gist of his argument is directed against anything like design appearing in creation. How does he form the eye? I need not now go into that matter; it takes a very prominent part in the Darwinian theory. No one can read his description of the formation of the eye, without seeing that it is an attempt, as unphilosophical as contrary to common sense, to account for such a perfect instrument without any design on the part of the Creator. I think any theory which attempts to get rid of that which is the most striking feature in God's work, namely design, is the most irreligious theory that the mind of man has ever yet devised. Darwin completely fails to account for the marvellous structure of the eye from any principle of natural selection. In my opinion, if Thomas Carlyle were to give his version of Darwinism, he would call it "the devil-take-the-hindmost theory." This monstrous theory that the stronger will always destroy the weaker, and that perfection comes through the destruction of the weaker, utterly ignores the operation of any intelligent design. Another great crux of Darwin's was the formation of the cell of the common hive bee. He could not discover how to account for this upon the theory of "natural selection." He could not tell how the bee discovered that marvellous angle of 109 deg. 28 min., by which it secured the greatest possible amount of space with the least amount of work, except that, after much trial and error, it discovered the square root of two to six places of decimals! You may think I am travelling out of the question under discussion, but I do not think I am. I want to draw a very important distinction, which has not been drawn to-night in this discussion. I have not heard one real objection to the arguments of Mr. Reddie, with the exception of that taken by Mr. Warrington with reference to the tradition about fire, which has been so ably answered by Dr. Irons. Therefore I think the paper is a very triumphant one. But there is one thing which was not argued in the paper. It is this, we have heard of men improving, and of men making inventions. Men can make out the square root of two to twenty or thirty, or even fifty places of decimals; but

we find that there is this distinction between man's intellect and the intellect, if you will so call it, or the intelligence or the instinct of other animals, that they were created with their instincts perfect, and required no instruction, no bringing out, no improvement of any kind. As they were created, so they are now. We find amongst the simplest and the humblest of God's creatures that their instincts have anticipated some of the greatest inventions and discoveries of man. Before Archimedes was a mathematician, before logarithms were invented, the bee was the great geometrician. When we were in want of materials for paper, we went to the wasp to be instructed, and found it making paper out of dry wood. We thought we had made a discovery in aeronautics, but we found that we had been anticipated by the little spider. Another spider anticipated the invention of the diving bell. All this proves that it is possible for beings to be created with perfect instincts, and that therefore it is possible for such a thing as a perfect man to have been created. If we have perfect insects created, with all their faculties at once appearing bright, clear, and beautiful, I say man might have been—I don't say he was—created perfect; and that he might have degenerated, for he has the power to lose knowledge as well as to acquire it. I do not think that men ought to shrink from expressing their opinion upon a matter, as to whether it is religious or whether it is not, when they do not do it in the spirit of calling names, and they ought to be allowed to protest against theories which they do not believe to be true, without being charged with being unchristian and uncharitable in the interpretation which they put upon them. There is another thing which I think has a remarkable bearing on the question. That is, when a man is raised to a high point of civilization he forgets a vast amount of the instinctive faculties he possesses. As science advances, he is better able to interpret great facts in nature; and it is by these facts that he begins to learn what instincts he unknowingly possesses. How is it that one class of men in one part of the world have discovered that the leaf of a certain tree dried and formed into tea makes a very valuable article of food? How is it that in another quarter of the globe men have discovered that the fruit of another tree (coffee) roasted and ground produces an article of food which has the very same effect on their constitution? How is it that another set of men have discovered the value of cocoa? How is it that these things have been ascertained? What could have guided men in their selection of these things? They are substances without taste or any other sensible property in common. Everything was so naturally adverse to the gamut of which Professor Byrne has spoken; and yet, if we come to a chemical analysis, we find that they all contain the same kind of substance, and that is a certain vegetable alkaloid, of an isomeric character. All of them contain the same elements, combined together in the same proportion. How is it that men instinctively arrived at that knowledge? And if man has such subtle instincts as these, has he not other higher instincts? Is not poetry a subtle instinct? Is not the power of reasoning a subtle instinct? Is not geometry founded upon the most subtle instincts of the human mind? Are we to deny all that? Again to recur to the instructive use of coffee and

tea. If we go to Wiltshire, we find the ill-paid labourer knowing that by the use of tea he is enabled to do the greatest amount of labour with the least amount of waste. We also find that the poor, hardworking sempstress has discovered the same fact. She knows that it is the best food she can take. How is it that these people find out these things? I was told once by an inspector of prisons that he had made an experiment in which he put 400 men on oatmeal and milk, and 400 others on tea; and he found that those to whom the oatmeal had been given had lost in weight, while those who received tea had lost nothing at all: the alkaloid in tea, coffee, and cocoa prevents waste of muscle. These marvellous human instincts lead us to the conclusion that man comes not from the lower animals by any educational process or any education of instincts, and prove that while man possesses instincts in common with the brute species, he has something which the brute species do not possess; for the latter cannot be educated—they never can improve their instincts, nor, on the other hand, do they ever lose them or become in any way degenerated.

Rev. Dr. THORNTON.*—The *Periplus* of Hanno, and Herodotus's account of the *Troglodytæ*, seem to contain instances of savagery known to the Greeks. But the *Gorillæ* of Hanno were most probably apes,—the name perhaps derived from *gur* and *jalal*, meaning “howling monsters” in Punic. The *Troglodytæ* were apparently a very early Hamitic colony, degenerated, through want of communication with their fellow-men, both in physical character and in language; and this is, therefore, an argument in favour of Mr. Reddie's view.

* Dr. Thornton was unable to remain sufficiently long at the meeting to make these remarks, which he has since been good enough to forward for insertion in the *Journal of Transactions*. In addition to what he has stated as regards the *Troglodytæ*, I would beg leave to observe, that the allusion Herodotus makes to them does not seem to indicate any actual knowledge of their existence or real character, but only hearsay, and so little of that—mixed up, too, with so much besides that is incredible—as to amount to nothing. He tells us in the same place of the *Lotophagi*, whose kine feed backwards, because they have horns so bent forward and downwards that they would stick in the ground if the animals endeavoured to advance. Then he says—“The Garamantes hunt the Ethiopian Troglodytes in *four-horse chariots*; for the Ethiopian Troglodytes are the swiftest of foot of all men of whom we have heard any account given. They feed upon serpents and lizards, and such-like reptiles; and they speak a language like no other, but screech like bats.” (*Melpom.* IV. 183.) Very little of this, I think, can be accepted as *history*, or as facts within the writer's actual knowledge. That one race of men might in his day chase another in four-horse chariots might be true enough; but to speak of employing “four-horse chariots” for the purpose of *hunting* men who were “the swiftest of foot,” destroys the whole story. Take away the horses and chariots, and the foundation of fact for this exaggerated “hearsay” may well be imagined to relate to a monkey-hunt! In referring to Herodotus, I only meant to rely upon what he narrates as within his personal knowledge, and to exclude the more fabulous stories he repeats, such as the above, and also what he recounts of a one-eyed people, the Arimaspians, in whose existence, Herodotus tells us, he did not believe himself. (*That.* III. 116.)

Mr. REDDIE.—I have but very little to say in reply to the remarks which have been made upon my paper. I regret extremely that it has not been criticised more thoroughly. With the exception of the observations of Mr. Warington, as to the traditions relating to the discovery of fire, no attempt has been made to controvert any one of my arguments. I should wish, however, to give a few explanations. In the first place, I am most anxious to remove the impression which my friend Dr. Gladstone appears to entertain with respect to my use of the term “religious theory.” I can only say that I used it most innocently, and without the slightest idea that my doing so could have given offence to those who hold other theories. I certainly had no intention of implying that either the Darwinian or the polygenous theories are necessarily irreligious—

Rev. Dr. IRONS.—But they are so. (Hear, hear.)

Mr. REDDIE.—Well ; perhaps I may think so too ; but I wish to explain, as a matter of fact, that, whatever I may think, I did not wish to convey any such impression, by applying the term “religious theory” to that which I adopted. I think I might further appeal to the way in which I have spoken in detail of the other theories, as a proof that I could have had no such intention. I may observe, besides, that I am quite aware that Mr. Darwin himself unquestionably recognizes the Creator in his book ; and in one of the discussions which took place in the Anthropological Society, to which I have referred in my paper, I actually appealed to that fact against the arguments of several gentlemen who had adopted his theory and advocated it upon what would generally be called Atheistic grounds. I had to remind them that Mr. Darwin was obliged, in order to get a beginning for his system, to speak of “the breathing of life by the Creator into one or into a few forms,” from which his theory derives all the others.* And, in truth, they did not like it. And I believe that most Darwinians would themselves repudiate the notion that their theory has the religious character which Dr. Gladstone claims for it. There is great difficulty in the present day in speaking of questions that touch religion. If you go to one Society, for instance, to advocate what I have now called “the religious theory,” merely as a monogenous theory, and say nothing about religion, religion and miraculous creation are thrown in your teeth. This I have experienced. While here, I am now called to account, when I call the theory which derives mankind from Adam and Eve, as the Scriptures teach, plainly by its name, which I thought every one would understand. I certainly did so most innocently, as I have said, and merely as the best descriptive term I could think of. But since the question has been raised, I would ask Dr. Gladstone, as one of the managers of the Royal Institution of Great Britain, whether he is not aware of the fact, that one at least of the best-known and most zealous advocates of Darwinism, Professor Huxley, who has lectured upon it in that Institution, distinctly adopts it, *because* it gets rid of the interposition of the Creator to account for man’s origin ; or (as noticed in our Chairman’s Inaugural Address) gets rid of

* *Anthrop. Rev.*, vol. II. p. cxxxiv.

the special creation of Adam and Eve? Now, I would ask, how can we possibly tell what a theory is, unless we take its advocates as its exponents? And since the theory I advocate is not merely a monogenous theory, but is founded upon what Professor Huxley so completely despises—the Scriptural account which begins mankind with the special creation of Adam and Eve—what can I call it, if I do not call it the religious theory? I should be glad to change it, if Dr. Gladstone or Mr. Warington will supply me with some other term by which I could better or more intelligibly designate it. With regard to the polygenous theory, I not only do not think it is necessarily irreligious, but I know that some persons found their views upon the expressions they find in Genesis as to “the sons of God” and “the daughters of men,” in support of a polygenous theory, which they may therefore regard as religious. But still, while admitting this, I think everybody will understand that what I have called the religious theory is what the Scriptures most obviously teach. And what is the main feature of that theory? Why, that man was created perfect, and in the same way that God created all things. Animals, for instance, do not acquire their instincts gradually: they have them, and, so far as we know, always had them complete, and each its own distinctive characteristics. The dog has its *bark*, the cow its *low*, the nightingale its *song*, and every inferior creature its distinctive instincts, by nature, and all in perfection. But we do not suppose that the bee, in forming its hexagonal cells, knows anything of geometry or understands the nature of angles. And when the Chairman was speaking of those wonderful powers exhibited by the insect creation, he was, in fact, really speaking of the greatness and power of the Deity who formed them, and gave them all those wonderful instincts which they possess, but which they exercise without understanding:—the skill which they exhibit being rather—like an instrument that is played upon by a skilful hand—an exhibition of the skill of the Great Invisible performer who gave them all their instincts. (Hear, hear.) When Dr. Gladstone reproved me (with a mild censure, I admit,) for calling names, as he termed it, he himself did the very thing for which he was blaming me; for, while he thought proper to defend the Darwinian theory as possibly religious, he distinctly charged the polygenous theory with being irreligious. (Hear, hear.) Now my argument against that theory was chiefly this, that it involves an inconsistency in its theory of creation, if it assumes that some men were originally inferior to others, as if God would contradict himself by making a being which was not perfect. And surely there is nothing more shocking, nothing more revolting to one’s ideas of what a human being ought to be, than a low, degraded savage; there is nothing so utterly abject even among the brute creation. But then, although I frankly acknowledged the source whence we derive the theory I have advocated, and gave a statement in a general way of the facts relating to man’s origin contained in the Bible; still I have not supported it by a single argument to be derived from Scripture: I have taken the Bible merely as a historical book; I have referred to it, as it were, merely as containing a part of our knowledge of the history of our race; and my arguments have been rational appeals to nature through-

out, and have been supported by such facts as those which have been so recently told us by Mr. Baker and Dr. Beke in the Ethnological Society, based upon their actual knowledge of the degeneration of the savage tribes of Africa. Taking such facts, and taking the traditions of all civilization, I must say I do not understand how the conclusions I have arrived at can be disputed. As to the tradition among some savages as to the origin of fire, to which Mr. Warington has alluded, my friend Dr. Irons has satisfactorily shown that that rather would tell in favour of my view ; but I think it will be found upon investigation, that among those low races this is one of the vaguest of traditions, and not even worthy of the name of "poetry."* And when Mr. Warington argues that if we were derived from savages we would not tell it, I suppose he means that he would not do so : he has, in fact, said that he would not (hear, hear) ; but I can only tell him that this argument has been already repudiated in anticipation by the Darwinians. Professor Huxley almost glories in his ape-ancestry, and argues that to have risen from a monkey "is the best proof of the splendour of man's capacities." Perhaps his monkey progenitor ought rather to have this credit ; but I have never yet heard of a Darwinian who had such faith in his theory as to put his children under the tutorship of monkeys. (Laughter.) It is all very well for men to speculate about these things ; but when we come gravely to discuss a subject of this kind, we must deal with facts. I never meant in my paper to deny that there are different phases of civilization, or that there may be an advance from one degree of civilization to another. I carefully guarded against that, though I could not dwell upon that branch of the subject at any length. I was, of course, obliged to leave out a great deal, and I have, indeed, felt as if I had only dealt with one ninety-ninth part of the whole question. But I have discussed this subject before ; and

* Mr. Warington has quoted Mr. E. B. Tylor on this point ; and, in endeavouring to find the passages he may have had in mind, I have come upon the following remarks of Mr. Tylor, bearing upon my general argument. Speaking of "the native Australian and the Andaman Islander, as fairly representing the lowest state of human society of which we have any certain knowledge," Mr. Tylor says :—"These savages have articulate language ; they know the use of fire ; they have tools, though but simple and clumsy ones. *There is no authentic account,*" he adds, "*of any people having been discovered who did not possess language, tools, and fire.*" He concludes the interesting paper from which this is quoted in the following words :—"The 'original men,' as the poet describes them, roaming, 'a dumb and miserable herd,' about the woods, *do not exist on the earth.* The inquirer who seeks to find out the beginnings of man's civilization must deduce general principles by reasoning downwards, from the civilized European to the savage, and then descend to still lower possible levels of human existence." These citations are taken from an article in the *Anthropological Review* (vol. I. p. 21, et seq.), on "Wild Men and Beast-Children," well worthy of consideration with reference to this whole question. For (as I once remarked in previously discussing this subject), "the few questionable instances of 'beast-children,' as they are called, if they prove anything, only prove that if not rescued from association with beasts, the offspring even of men might soon sink into something scarcely better than brutes." (*Anthrop. Rev.*, vol. II. p. cxxi.)

in doing so, I especially noticed what I believe is the nearest approach to a rise, — I cannot quite say from savagery, — but from a lower to a higher state of civilization, of which we have any knowledge. I am glad that Mr. Warrington's objection has given me an opportunity of referring to this case now, which I was reluctantly forced to exclude from my paper. I allude to the Sikhs, who have risen to a state of civilization, and attained an elevation of character, far superior to the rest of the Hindoos from whom they were originally derived. Now the Sikhs might be described as originally a sect of Indian iconoclasts, who through the influence of Nanaka threw off the superstitious worship of idols, to which they were accustomed, for the worship of the invisible and only God. And, it is remarkable, the consequence has been precisely similar to what Mr. Baker found among the African Christians; namely, that we have a race very superior even in their physical appearance, and with features corresponding with, or at least closely approximating to, the European type. Then again we have the natives of Cashmere, with a striking resemblance to Europeans in their features. And to what, let me ask, is their superiority over the tribes which surround them to be traced? Well, they are Mahometans; and Mahometanism, with all its faults, has this grand feature, in common with Judaism and Christianity, — it teaches men to look up to heaven for Deity, and away from idols as gods. And I would venture to argue, that the essential or fundamental principle of all civilization is not fire, as Mr. Warrington seemed to think, but a true notion of Deity — of the invisible God. Wherever a people possess that, they have that in them which is the seed of progress and elevation; and when they reject it and make their own gods, they are on the downward path of degradation. To turn to another point, — the perfection of the animal creation is the foundation of one of my arguments, and it is a perfectly natural and rational one, and not merely derived from Scripture. I could not, however, afford time to do more than allude to this, and I am glad the Chairman dwelt somewhat upon it in his remarks. All other animals being made perfect, there seems to be no reason why there should have been a difference between them and man. I do not think there was anything else advanced which remains unanswered, and at this late hour, I will not trouble the meeting with any further observations.

The CHAIRMAN then announced the adjournment of the meetings of the Society until November next, and expressed a hope that they would all meet again at the opening of the next session, which he trusted would be as successful as that just closed.

NOTE. (See p. 181.)

DISCUSSION IN THE BRITISH ASSOCIATION.

It will be observed that portions of the forgoing paper, *On the various Theories of Man's Past and Present Condition*, are inclosed within brackets. I beg leave to explain that the other portions of the paper were read by me before Section E of the British Association for the Advancement of Science, at Nottingham, on the 25th of August, 1866 ; on which occasion the passages bracketed were omitted.

I may observe that it is not unusual to read papers before the British Association which have been previously read in scientific societies, provided they have not been published previously ; and, having taken with me to Nottingham a single copy of this paper, in proof, I showed it to Mr. Crawford, the president of the Ethnological Society, and one of the vice-presidents of the Section, stating briefly its purport, and said that I should be glad to read it if approved. He at once most frankly took charge of the paper, to lay it before the committee of the Section in the usual manner ; and he afterwards told me it would be read, but would require (as I quite expected) to be cut down considerably, in order to bring it within the limit of time that alone could be spared for a single paper among so many others. I therefore bracketed-off such passages as were least essential to my main thesis, and especially those, it will be seen, that relate to the cognate discussion which had taken place in the same Section, at Birmingham, in 1865, and was continued in the *Ethnological Journal* shortly afterwards. I was also, I regret, obliged to omit the concluding portion of my paper, relating to the advancement of mankind and the progress of civilization, through the influence of Christianity ; as, to have touched upon that, would have opened up quite another branch of the same large question. But I beg to say, that the decision as to what I should omit, as well as what I should read, was left entirely to myself—not even a hint of any kind whatever having been given to me on the subject. I say this in justice to the committee of Section E, which was most ably and courteously presided over by Sir Charles Nicholson ; and I do so more especially, in order to remove certain misapprehensions which appear to have been entertained in some portions of the press, as to the reading of this paper before the British Association—partly attributable, no doubt, to the remarks which Professor Huxley was pleased to make, on being invited to discuss it by the president.

I may observe, for the information of those who are unacquainted with the doings of what has been called “our great scientific congress,” that the meetings in Section E, combining *Geography and Ethnology*, are usually by far the most numerously attended, and that that Section has consequently always the largest room assigned to it for its meetings. This was the case at Nottingham ; and I confess that, for various reasons, I felt a desire to be

able to bring forward some of the arguments I had so recently urged in the Victoria Institute, against the notion that the primitive man could possibly have been a speechless savage, before the largest possible audience that could be hoped for in the Sections of the British Association. I may also add that, while no discussion follows the introductory *Address* delivered by the president of the Association or the evening *Lectures* that are given every year, all the papers read in the several Sections are open to discussion, and are usually discussed, although unfortunately there is no systematic or official report of the discussions that take place. The newspapers to a certain extent supply this defect; but it will be obvious that, when so much has to be recorded, their reports, as a rule, must be very imperfect.

I have much pleasure in stating that when my paper was read at Nottingham, it was as well received by the audience generally, as it had been previously when read in the Victoria Institute.

I shall now give some account of the discussion that followed, partly taken from the newspaper reports (in which case I shall employ quotation-marks), and otherwise upon my own responsibility as to accuracy. Professor Huxley's observations I am glad to be able to give, I think very nearly *verbatim*, from the *Nottingham Daily Guardian*, viz. :—

“Professor HUXLEY, who was invited by the president to offer some remarks on the paper which had just been read, said :—I should be delighted in my private capacity to obey any of your behests, but, on the present occasion, I am unfortunately not in my primitive or personal insignificance, but the representative of a department of the Association, and one of the officers of the Association charged with the administration of a Section. It has, in the wisdom of the council of the Association, been thought proper that a department should be instituted in Section D, of which I have the honour to be the head. It is called the Department of Anthropology; and if I have any comprehension of scientific method or arrangement, the paper we have just heard read is purely an anthropological paper, and can only be competently discussed by those persons who are familiar with all the sciences necessary for the student of anthropology. Under these circumstances, therefore, I should, by beginning to discuss this paper, admit the propriety of its being read here, and that in my official capacity I cannot do. I may, perhaps, be allowed to remark that in our department we have a wholesome practice called ‘referring a paper.’ When a paper is sent to us we ‘refer’ it, in order to ascertain whether it contains anything new, anything true, or anything worth discussing; in a word, whether the paper should be read or whether it should not. But though I think this is a paper for our section, I do not pledge myself that it would have passed the particular ordeal which I have described. (Laughter.)”

Mr. NASH, as secretary of the Ethnological Society, and one of the secretaries of Section E, “protested against the views of Professor Huxley, and defended the reading of the paper in this section, inasmuch as it is not only a Geographical, but an Ethnological Section;” and he added that the Ethnological Society had never admitted that their science precluded them from the consideration of all the facts that bear upon man's past and present condition, such as those which had been brought forward in this paper.

Sir JOHN LUBBOCK said, he must also differ from his friend Professor Huxley ; but with reference to the ingenious paper which had been read, "he objected to the term 'religious theory,' because it implied that all other theories must be anti-religious. Now, for his part (without professing to be more orthodox than he was), he believed that religion and science were not opposed one to the other. He did not think Mr. Reddie really comprehended the Darwinian theory. He was an humble disciple of Mr. Darwin's, and he ventured to claim for that gentleman's theory, that it was the only one which accounted in any way for the origin of man ; for all the other theories were, in his judgment, no theories at all, but simply confessions of ignorance, and did not convey those definite ideas to the mind which were conveyed by the theory of Mr. Darwin."

"Mr. CRAWFURD was of opinion that the terms 'anthropology' and 'ethnology' were synonymous, or nearly so. For his own part he could not believe one word of Darwin's theory. He was sorry for that, because it was believed in by so many men of eminence. It was a surprising thing to him that men of talent should nail themselves to such a belief. (Hear, hear.) Man, it was said, was derived from a monkey. From what monkey? (Laughter.) There were two hundred or three hundred kinds of monkeys, and the biggest monkey, viz., the gorilla, was the biggest brute. (Laughter.) Then there were monkeys with tails and monkeys without tails, but curiously enough those which had no tails, and were consequently the most like man, were the stupidest of all. (Laughter.) People were at a loss to know how the universe was created, and that, no doubt, was a difficult subject. Mr. Reddie, however, seemed to invert the order of nature, for all the history of man showed that he was progressive. Our ancestors were barbarians, and it was the same with every other race."

Mr. CARTER BLAKE said he should wish to be informed what traditions among savages Mr. Reddie referred to, as relating to their previous higher condition ; and where such traditions are to be found recorded.

Mr. FELLOWS also briefly addressed the meeting, but his observations were of a general kind (not, however, adverse to the paper), and I regret they have not been reported, so far as I am aware.

In reply to Professor Huxley's remarks, so far as they related to the propriety of my paper being read in Section E, I contented myself—as Professor Huxley had then left the room—with referring to the complete answer he had received from Mr. Nash. His observations were, besides, rather a reflection upon the Committee of the Section, and it is not for me to say whether they were in the best taste or not. They were received with "laughter," no doubt, but also with adverse murmurs in the Section. For myself, I was not placed on the committee till after my paper had been accepted, but I am not aware that Professor Huxley had any grounds whatever for affecting to suppose that my paper had not been "referred" (as I do know that other papers were), in Section E, before being read. Anyhow, the paper, upon being read, was extremely well received, and was also more fully reported in the newspapers, with one or two exceptions, than perhaps any other ordinary paper read at the meetings. As it is now printed and published along with Professor Huxley's remarks as to its character, the public generally will be able to form their own judgment of it, and will further know (if I gather the Professor's

meaning aright), that had it gone before his Section he would have endeavoured to suppress it. I am glad that in Section E, a more liberal spirit was exhibited and my paper allowed to be read. I do not deny that it might quite properly be called an "Anthropological Paper," though now (knowing what its probable fate would have been), I am very glad I had *declined* to offer it to the Anthropological Department of Section D. There are, however, special reasons for saying that the paper was *most properly* read in Section E. In the first place, it will be observed, that the physiologists and naturalists being at issue about Darwinism, the arguments advanced in the paper are chiefly based upon historical and ethnological evidences. At the very next meeting of the same Section a most interesting account was given by Mr. Thomson of the recent discoveries in Cambodia (in Siam), of the ruins of magnificent and gigantic temples, so far beyond the capabilities of the present inhabitants or their immediate forefathers for many generations to accomplish, that their tradition is that these ancient buildings must have been constructed by a superior race of beings altogether,—or "the gods." Of their great antiquity there can be no doubt; the style of architecture is intermediate between that of Egypt and Greece; and there is now a dense forest interposed between the buildings and the rocks whence the stone used in their construction is supposed to have been procured. Dr. Mann, also, on the same day and in the same Section, narrated his experiences relating to the attempts which have been made to educate and civilize the Kaffirs and Zulus; and on the following day Sir Samuel Baker recounted some of his recent most interesting adventures among the negroes of the White Nile Basin, and especially discussed their savage condition, and their tendency to continue savage and degenerate. The only instance which he mentioned of anything somewhat better to be found among them, he attributed to the influence of the Arabs with whom they had had communications. Professor Huxley was present, too, when that paper was read, and he even spoke upon it; though I cannot say he discussed it, for he only referred to one or two of the facts mentioned by Sir Samuel Baker, which did *not* bear upon "the question of questions for mankind." Having referred in my paper (p. 195) to Sir Samuel Baker's statements made in the Ethnological Society, merely as I had seen them reported in the newspapers, it was a great gratification to me to hear them myself, repeated in the crowded meeting in Section E, where my own paper had been previously read, and to hear not a word from him that was not entirely confirmatory of the views which I had expressed. The account of the ruins of Cambodia was also a fresh illustration in support of one branch of my arguments; and I think, now, it will be seen that it was most fitting that arguments based upon our knowledge of such archæological and ethnological facts should have been advanced in the same section of the British Association, where fresh evidence and additional facts of the very same kind are constantly brought forward.

To revert to the discussion upon my paper. I scarcely required to answer Sir John Lubbock's objection to the term "religious theory," as it had met

with a pretty general expression of dissent in the meeting. If people would only consider, that for thousands of years no one ever thought that anything like "development," or Darwinism, was taught in *Genesis*, they would surely refrain from the vain endeavour to import that meaning now into the old Mosaic narrative,—into the language of a book (to quote Mr. Warington's words*) "written in plain and simple style, which has been in the hands of theologians complete for nigh 1,800 years, and on which they have bestowed unremitting study ; where no new facts can ever be rising up to disconcert past conclusions ; and where, therefore, if anywhere, unanimity would seem to be inevitable, and diversity of opinion most inexplicable and criminal."

As regards the charge of not understanding Darwinism, I replied by citing Professor Carl Vogt, who, as a physiologist, is just as eminent on the Continent as Professor Huxley is in England, and who, as a Darwinian, differs totally from the latter. I was somewhat surprised that a debater so clear-headed and courteous as Sir John Lubbock, should have cared to repeat what is now a mere hackneyed charge against all who oppose Darwinism. When the Darwinians are themselves agreed about the theory it might be time enough to expect objectors to "understand it." But Sir John Lubbock surely overlooks the drift of my argument altogether, when he makes that reply, even were he right in his assertion. My main argument in the present paper, he might see, does not require me to understand Darwinism. It is a *reductio ad absurdum*, assuming the possibility of the theory, and not questioning in detail its processes. Of course, I do not believe that even a monkey, and still less a man, could be developed in the Darwinian way. But *granting* that we have got the imaginary "speechless man," or the real "low-caste savage," to begin with, then, I say, you cannot even then, with such a beginning, get the world as it is, or arrive at the civilized man. All our experience is against this. All the facts we know are contrary to it ; and, if so, it is not possibly true, and it is irrational to believe it. It is not only not "science," but it is *contrary* to all we really *do know*. I have no doubt that Darwinism can be and will be (if it has not already been) refuted at other stages. I do not think it has established even a single step of its almost infinite assumptions. But be that as it may,—and raising no primary objections,—I have maintained that it must stop at man ; because, as I have proved, civilization has not, and cannot be, developed out of savagery. Everybody knows that it is only when Darwinism comes to be applied to man, that its conclusions ostensibly clash with "time-honoured traditions," and what Professor Huxley calls "strongly-rooted prejudices." I have therefore met it at that point.

With respect to Mr. Crawford's observations, I am bound to notice, that besides what he is above reported to have said, he also disclaimed being a polygenist (very much to my surprise), though it will be seen he still thinks mankind have advanced from an originally savage condition. But his reference to our ancestors having been barbarians, is nothing against my argument. I have not denied the possibility of a rise from a "barbarous" to a "civilized" condition, using the words strictly, but a rise from utter "savagery." But

* *Journal of Transactions of the Victoria Institute*, vol. i., p. 101.

so far as I know, even barbarians have not, as a rule, civilized themselves, but they have either had civilization brought to them, or they have gone to it. Our barbarian ancestors had civilization brought to them by the Romans, while Rome itself was invaded by barbarians. But there are various degrees of "barbarism" running upwards and into civilization, as well as various phases of the latter running downwards into barbarism. But the utterly "savage" condition is perfectly distinct from both. No one knows that better than Mr. Crawfurd. There were two passages in my paper among those bracketed-off as unread at Nottingham, which, however, I did read; namely, the quotation on page 192 (from line 12 to the end of the paragraph), the author of which (as I suspected) was discovered upon reading it to be Mr. Crawfurd himself. The other was the quotation from Professor Rawlinson at the top of page 193; and taking it in connection with what I say in the latter part of my paper (p. 197), I think we have the real key to all Mr. Crawfurd's difficulties about human progress and the spread of civilization.

I am glad that Mr. Carter Blake asked the question he did, relating to savage traditions, as it gave me an opportunity of removing an evident misconception on this point, for which I am probably to blame. I by no means meant to say that the savages had definite traditions of their own descent from a superior ancestry. To say truth, I should not have regarded such traditions as of much value, coming from such a quarter. What I rely upon is better evidence, as being unintentional and quite incidental. I appeal to their traditional stories and songs, extravagant though they be, as proofs that their authors were superior to those who can only now repeat them, without even professing to understand them. In doing this, I had chiefly in mind what I had heard stated in the Anthropological Society, or read in the Journal of that Society, which is edited by Mr. Carter Blake himself,—and especially an interesting memoir by Mr. Pritchard, relating to the Viti Islanders; while I may add that I have heard Dr. Seemann, a vice-president of the Anthropological Society, say, on more than one occasion, that among all savage tribes their oldest traditions are almost always mixed up with some references "to trees and serpents and to woman," as I have stated on p. 193. To give further authorities as to the character of savage traditions,—their frequent resemblance to one another, and their superiority to anything the savages who now repeat them could themselves originate,—would require a reference to almost every work on ethnology.

Mr. PRITCHARD'S interesting Paper (*On Viti and its Inhabitants*) will be found in the *Memoirs of the Anthropological Society* (p. 195, *et seq.*). When it was read the following remarks were made upon it, which I reproduce, as bearing upon the present discussion :—

"DR. SEEMANN said he considered the paper they had heard was one of the most important that had been communicated to the Society, and he was able, from personal acquaintance with the island, to corroborate many of Mr. Pritchard's statements. A great many things connected with the inhabitants of the Fiji islands had only appeared to him in their true light since he arrived in England. For instance, the Andaman islanders showed that in

many particulars they are similar to the Fijians. The first account of the Andaman islanders was that given in 'Sinbad the Sailor,' which narrative, though generally regarded only as a fiction, contained many correct statements. The Andaman canoes were similar to those used by the Fijians, especially in the outrigger. Dr. Seemann remarked on the curious legends of the islanders, of which Mr. Pritchard had given an account, especially those relating to their own origin. It was interesting to notice that, in so many legends, the original progenitors of man were placed under or near sacred trees. It was a curious circumstance that, in these legendary cosmogonies, there was always a serpent, in which symbol he considered there was a deep meaning. The supreme god of Fiji (Degei) had the shape of a serpent.

"Mr. REDDIE observed that the traditions of these islanders were very remarkable, and he considered it extraordinary that the people should be able to preserve them and repeat them to travellers. Such a preservation of our Christian legends could not be expected even in London among the common people. As to the frequent occurrence of the serpent in those legends, it was a very curious fact. . . . In the constellations of the heavens, which had been traced to the most ancient peoples on the face of the earth, the serpent was one of the most common emblems, and was to be found in several parts of both hemispheres of the celestial globe. It was interesting to find also the same symbols conspicuous among the legends of the inhabitants of the Fiji islands, and it appeared they had a common ancient origin. Such beautiful traditions could not be inventions of the present Fijians. Even in civilized London, not one out of ten would be capable of inventing such beautiful stories. The question was, whether they were not traditions of a people superior to those who now inhabited those islands, thus showing that the present inhabitants had deteriorated. The invention of such legends, in more ancient times, at all events tended to prove that their inventors must have been greatly superior to improved baboons. It would be interesting to know something of the present literary qualifications of the people, and how far such traditions are retained among the inhabitants generally.

"Mr. PRITCHARD in reply said:—As to the date of the traditions, there can be no doubt of their antiquity. Different natives, without the possibility of collusion, narrate the same traditions in almost the same words. The missionaries discountenance the old traditions, and also any new stories. It is not easy to collect these traditions from the inhabitants, for it is necessary to be master of the language to do so, and those who are not thoroughly acquainted with it sometimes are imposed on, especially by runaway sailors, who know the language very imperfectly, and invent strange stories, which they represent to have heard from the natives. To learn their legends and traditions correctly, it is necessary to live amongst the natives, as he had done; and, to gain an influence over the native mind, it is necessary to learn their mode of reasoning when certain data are placed before them."^{*}

* *Anthropological Review*, vol. III. pp. xii—xiv.