

THE ORIGIN OF MAN.

NATURE OF THE DISCUSSION—CREATION OR EVOLUTION.

QUESTIONS SUGGESTED—DISTINCTIONS BETWEEN MAN AND THE LOWER ANIMALS—LANGUAGE—RELIGION—ABSTRACTION—THE MORAL SENSE—PROGRESS—COMMUNITY OF NATURE—OPINIONS OF PROF. TYNDALL—THE DOCTRINE OF EVOLUTION NOT INCOMPATIBLE WITH RELIGION—IMPORTANCE OF MR. TYNDALL'S ADDRESS—ITS RECEPTION IN ENGLAND, AND COMMENTS OF THE ENGLISH PRESS.

The interest that has been felt in this subject, especially since the publication, in 1859, of the first edition of Mr. Darwin's *Origin of Species*, has suddenly received a new impulse from the remarkable address delivered at Belfast by Prof. Tyndall, in his position as President of the British Association for the Advancement of Science. In noting the salient features of that address we propose to outline some of the most important questions which have to be dealt with in connection with the leading topic, and also to set forth in some measure the present state of opinion as it is to be found among men who have devoted themselves to the consideration. With regard to the general nature of the discussion, it must be remarked that there is no apparent possibility of its ever being finally closed. When Aristotle announced his theory of the universe, and boldly declared all others to be impossible, philosophers could not have been without the hope that the truth or falsity of his opinions must, sooner or later, be absolutely proved. Similarly, there are views entertained at the present day which, complex as they may seem to us now, we may certainly regard as capable of verification in the perhaps not very distant future. But theories concerning the origin of man are not of these. Evidence may be gathered in favor of one or other of them, or even of all, but we cannot hope that the final great question shall be ever solved. We can only deal with hypotheses as they rise before us in the growing light of science, and estimate their probable approach to veracity by accumulated knowledge and inductive reasoning. Beyond this we cannot go. Yet the limitation thus presented should be in no sense a reason for refusing to grapple with any great subject of deep scientific interest. On the contrary, such questions open out so many others collaterally, which often can be answered, and which in their turn develop still other revelations, that in the progress of the human intellect we dare not pass them by. This suggests the expediency of offering at this, the outset of our remarks, another proposition, to which, in our judgment, much weight should be attached, but which is too often not entertained even by many who have given some attention to the tendencies of modern thought. There is nothing in the consideration of the origin of man which in any way militates against the fundamental principles of revealed religion. Further than this, and as we hope to be able to explain as we proceed, the extreme views entertained and so ably defined by Prof. Tyndall ought not to be confounded with the teaching of those who deny the existence of a Divine Creator. Mr. Darwin's *Origin of Species* startled everybody, although the theories there propounded were new only in their elaboration. Few took the trouble to give the book that close and calm and careful examination which it demanded. It was enough that theories were put forth which clashed with preconceived notions and habitual belief, to bring down bitter denunciation. Theologians, especially, attacked the new hypotheses, and denounced the man who had ventured to offer them to the public. But they invariably failed to give an intelligent analysis of Darwin's argument, and were content to brand it as atheistical. Now it need not be accepted in that light. We can comprehend that the fullest belief in Mr. Darwin's theories is quite compatible with the fullest belief also in the Scriptures. It has never been proved to be otherwise, for assertions go for nothing, whereas the truth of our proposition is capable of being distinctly shown. We shall advert, however, to this again.

In order to divest our observations, as far as possible, of any complications which may have a tendency to render them less perspicuous, it will be convenient to enunciate in the first place the two principal theories that have led to so much discussion concerning the origin of man, and thence to notice some, at least, of the most difficult problems that are attached to them. First, then, we have the suggestion which apparently most accords with the literal interpretation of the Mosaic record, that man was a separate creation, subsequent to and distinct from the creation of all other animals, and that he thereby became endowed with faculties which were in no degree accorded to the brutes. On the other hand stands the theory that man is a development from a lower order of being, not a separate and distinct creation, but the result of a constantly rising excellence in the progress of nature's works, and necessarily the highest of them. It will readily be seen that these two theories involve one grand difference, simple enough when viewed in its integrity, but vastly complex, when examined in all its relations. It is this: If man be a separate creation, he will, in all certainty, have endowments which cannot in any degree be detected in any other animal. If he be a development, from a lower sphere, his faculties, too, will be developments of similar faculties existing, though it may be in an infinitesimal degree, in the lower animals. The question then resolves itself into this: What are the distinctions between man and other animals? But it is not easily answered, and the further we advance in its contemplation the greater our difficulties become. It is worthy of remark that philosophers long ago thought they answered it to their own satisfaction, and it is only as they come to realize its intricacies that the great obstacles to a complete solution of it become apparent. Aristotle defined man to be an animal capable of social organization. Voltaire said that plants possessed organization; animals organization, sentiment, and instinct; and man organization, sentiment, and intelligence. Geoffroy St. Hilaire expresses almost a similar idea thus: Plants live; animals live and feel; man lives, feels, and thinks. Buffon held that man is distinguished from the brutes by possessing the faculties of thought and speech. Quintilian says: "*Deus ille princeps, parens rerum fabricatorque mundi nullo magis hominem separavit a ceteris quæ quidem mortalia sunt animalibus, quam dicendi facultate.*" And Max Müller and some other modern writers hold the same views. In De Quincey's essay on Plato's *Republic* we read: "By two tests is man raised above the brutes. First, as a man capable of religion, (which presupposes him a being endowed with reason;) secondly, as a being capable of marriage." Locke attributed to man exclusively the power of abstraction, and this opinion, too, has had more recent adherents. Some have hoped to make the capability of education a distinction; others have found it in a knowledge of the use of fire or of tools, but it is not necessary to refer to these more especially. It must be remembered, however, that in dealing with any of these points of alleged difference two things have to be proved—first, that all human beings possess the particular faculty, and, secondly, that no animals possess it in any degree whatever.

A writer in a late number of the *Quarterly Review* puts the whole proposition in another shape; and as we shall have occasion to make some quotations from the conclusion to which he arrives, in illustration of the condition of one side, at least, of opinion on the subject, we cannot do better than add his form of the problem to our own. He defines the questions to which attention ought to be directed as these:

"1. Can any direct evidence be found of races of men, past or present, existing in a brutal or irrational condition? 2. Does available evidence clearly point to the past existence of such a condition? 3. Are races anywhere to be found in a condition which is less remote from mere animal existence than from the highest human development of which we have as yet experience?"

There is some degree of vagueness about these, but in connection with what we have already said, they will serve a useful purpose. The third question

any way that could be strong as that consciousness of existence which it is impossible to reason; or the independent influence of will, whether free or not, on the self; or, above all, the existence of conflicting thoughts, going on in the mind at the same invariable point of time. If a consciousness which is universal and permanent is not to be accepted as such, why should the evidence of the senses, the decision of reason, or the conclusions of science be accepted either? If the fact, as we should call it, were illusion, why is not the evidence for the conservation of energy mere illusion too? Belief in it can only be the result of experience, and the evidence as to the one is at least as great as the experience as to the other. Yet as the outcome of matter, as to the other. Yet as the outcome of matter, as to the other. Yet as the outcome of matter, as to the other.

From these extracts, which must be taken as the first expressions of public opinion, not only on the spot where the address was delivered, but in a country where the popular mind is already ripe for entering with vigor into a thorough discussion of the metaphysical problems which have been again brought prominently before them, it may be safe to infer that a warm controversy is at hand. It may or it may not possess the character of publicity, but it will certainly take place. The mere fact that Mr. Tyndall has avowed himself a convert to materialism will probably carry some along with him. But the subject is one of those in which the disputants do not readily yield their opinions. Every point on both sides will, in all probability, be warmly contested, and if so they cannot fail also to be very much elucidated. The only fear for which there is any real foundation is that some will rush hotly into the contest under the impulse of prejudice or ignorance. Such persons only do mischief. What is wanted is a calm and careful investigation of the whole subject in all its minutest details, and with accumulated knowledge of facts, by men of science and powerful mental capacity. If such an inquiry should in reality follow as one of the consequences of Mr. Tyndall's address, and we have much hope that it will, no Presidential oration that has yet been delivered before the British Association will have surpassed it in the value and deeply interesting