

## PHILOSOPHY AND MR. DARWIN.

MR. DARWIN'S name is worthy of all respect. His investigations of nature have long received the applause of the scientific world, and have conferred honour upon England. He has riveted the attention not only of naturalists, but of all thinking people, by his doctrine that the different species of animals were not created originally distinct from each other, but have grown into separateness by divergent modification in different directions out of a common origin. Such a theory, of course, tends to substitute a different conception of the history of the world from that generally entertained. And it has now become the great question of the day how far the Darwinian doctrine is sound, and whether there be any limits to its application.

In his present work, Mr. Darwin boldly applies his doctrine of evolution to the human species, and maintains that man, so far from having been created in the image of his Maker, "bears in his bodily frame the indelible stamp of his lowly origin." He adduces many arguments for the belief that "man is descended from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits, and an inhabitant of the Old World." He concludes that "man is the co-descendant with other mammals of a common progenitor." And this genealogy he traces back by saying that "in the dim obscurity of the past we can see that the early progenitor of all the vertebrata must have been an aquatic animal provided with branchiæ, with the two sexes united in the same individual, and with the most important organs of the body (such as the brain and heart) imperfectly developed." Mr. Darwin is

conscious that this theory will be distasteful to many, but after offering some consolations, he very properly adds that it is not a question of liking or disliking, of hopes or fears, but of the truth as far as we can discover it. The question simply must be, are the arguments sound and the conclusion drawn from them inevitable? And this is the spirit in which Philosophy should look at the Darwinian hypothesis of the descent of man.

There is no occasion for any flutter of nervousness on the subject. Mr. Darwin, even if he establishes his theory, will not quite turn the The history of mankind, from Moses and world upside-down. Homer and Buddha to the present moment, will remain exactly as it was. Within that period at all events man remains "a creature of large discourse looking before and after." The great thoughts of poets and philosophers remain for us. The works of art and beauty remain. Man's godlike dominion over nature goes on expanding. Music and our feelings of delight in the fair natural creation remain. The actual sense of our own capacities is unaltered. The mysterious law of duty is still in our hearts, and the feeling of relationship between the individual soul and God need not be abolished. There is nothing atheistical in Mr. Darwin's work; on the contrary, it might be described as a system of Natural Theology founded on a new basis. And I find that we have the authority of Professor Fraser for saying that the pious philosophy of Bishop Berkeley is not incompatible with the belief that "human and other animal life may have been developed from inorganic conditions—if physical evidence can be found to prove this law of development."

Now, the sufficiency of the physical evidence adduced by Mr. Darwin is a question with which Philosophy proper can hardly deal. We must leave it to the scientific naturalists to determine what is the force of the argument from embryological phases; whether from the fact that the human embryo exhibits successively an appearance similar to that of the embryo of the insect, the fish, and of certain lower mammalia,—that the human species must have been actually developed out of those lower species; whether from the fact that the human fœtus is at one period covered with a lanugo or fine down, it follows necessarily that man is descended from a hairy progenitor; what is the validity of the argument from anatomical homologies; whether the appearance of rudimentary branchiæ proves that man was once a fish; whether the faint appearance of a point in the fold of his ear indicates that he was once a pointed-eared animal; whether other evidence is so strong as to enable us to pass over the remarkable break between the skeleton of man and all other animals, and to make us wait in faith, as Mr. Darwin suggests, till the exploration of Africa has supplied a paleontological missing link.

All this we must leave to the naturalists. And I feel inclined to say

to Mr. Darwin what Socrates said to his disciples, "You may do with my body what you please, provided you do not imagine it to be me."

But Mr. Darwin's book contains also a theory of the origin of the human mind. And that is a part of the subject which certainly fulls within the province of Philosophy to consider.

Mr. Darwin's theory is, that the human mind, with all its capacities and characteristics, is the result of the development, without a break, of the dim sensations of a mollusc. In this there is a psychological hypothesis implied-namely, that all intelligence is absolutely homogeneous, and that there is no difference in kind, but only in degree, between the functions of the reason in contemplating necessary truth and those of the most elementary sense-perception. Such a hypothesis cannot be safely maintained by natural science, unless Philosophy proper, to whose department it belongs, will give her sanction to it. It is true that the different schools of philosophy are not agreed upon the point. The extreme sensationalist school would probably make no objection to this part of the Darwinian But all those who maintain that there is a difference in kind between the higher mental faculties and the lower, will be justified in recording a protest against a theory which, by reducing them to a common origin, makes them homogeneous.

Mr. Darwin, in support of his views, lays great stress on the wonderful intelligence exhibited by the ant tribes, and on the acts of reasoning performed by dogs and other animals. But in all this there is nothing new. In Coleridge's "Aids to Reflection," precisely similar instances are given of the intelligence of ants and dogs, and Coleridge does not hesitate to ascribe to these creatures a certain discursive faculty, which he identifies with the practical understanding in man. But Coleridge does not admit that discursive functions, such as those indicated, are the same in kind with the highest operations of the human mind. The chief object of his book is to show that the discursive understanding, whether practical or cognitive, is essentially different in kind from the reason, and that the reason is a faculty shared in by man alone of all the creatures on this earth.

I am not now wishing to appeal to the authority of Coleridge, nor of Kant, or Plato, or any of the other great philosophers who have taken the same view of man's reason being distinct in kind from his other faculties, as decisive against Mr. Darwin. I only wish to point out that the identity, or difference, in kind between the higher and the lower mental faculties is a question which meets us in limine, and that the solution of it, one way or the other, is an antecedent condition to accepting or rejecting the Darwinian hypothesis.

It may be thought that minds like those of Plato and Coleridge had a theological predisposition to take what is certainly the more elevated view of man's nature. But I see no reason for attributing any bias of the kind to Aristotle. Had the facts of the case seemed to him to admit of it, I should have expected Aristotle, from the general turn of his mind, to have welcomed the conception that all organic nature is one continuous chain. But he does not do so; he makes two distinct breaks in the chain of life: first, where sensation comes in and differentiates the animal from the plant; and, secondly, where reason comes in and differentiates man from all other creatures. In a very interesting passage of his work "On the Generation of Animals," he says that the question of the origin of reason, and how those who share in it come to do so, is very difficult and important, and that there is no resource except to believe that the reason has no affinity with the material elements out of which the human embryo is formed, but that it comes in from without, and that it alone, of all the component parts of man, is divine (Λείπεται δὲ τὸν νοῦν μόνον θύραθεν επεισιέναι καὶ θεῖον εἶναι μόνον οὐθεν γὰρ αὐτοῦ τῃ ἐνεργεία κοινωνεί σωματική ενέργεια.—De Gen. An., Π. iii. 10.)

Mr. Darwin acknowledges the vast superiority of the mental faculties in man over those of any other creature, but he bids us consider what differences exist in this respect between species or families of the lower animals; for instance, what a wonderful difference of intelligence there is between the grain-insect and the ant. though these creatures are, in many respects, closely related to one another. The question, however, remains, whether the differences between the mental powers and characteristics of different animals are not differences of degree, while those between man and the inferior creatures are differences of kind. All other animals but man seem to be under a strict limit, which they cannot pass; their faculties, however acute and wonderful, are restricted in their direction to the finding means of bodily preservation and bodily enjoyment. There is in some animals a sort of "false dawn" or glimmering precursor of the light of human reason. For instance, in the industrious soliloguy of the caged parrot, there is an appearance of what the Greeks called δωγωγή, or pastime, the faculties being exercised for their own sake. So, too, in the curiosity of monkeys, of which Mr. Darwin gives many instances, there is the commencement of that love of knowledge for its own sake, which is one of the noblest of attributes. But all these tendencies in the lower animals are stopped dead, as it were, by the want of the faculty of apprehending universals. Aristotle allows that many lower animals have memory, and attain to an empirical experience sufficient for the exigencies of their daily life (Met. I. i. 2), but he denies that this ever amounts in them to general conceptions, such as would be expressed in language as laws, or rules, and such as constitute Art and Science among men. This want, then, of the faculty of universals, which we may call, in a word, Reason, constitutes a great gulf between man and the lower animals, a gulf which in the present day no lower animal seems to have any possibility of overpassing.

If this be granted, the question for philosophy is, whether Reason is the effect, or the cause, of the difference in the past history of man and the other creatures. Mr. Darwin would say that it is the And this point philosophy may very fairly discuss with him. Philosophy may well demur to Mr. Darwin's account of what he considers the decisive step towards the formation of reason in man. He says, "a great stride in the development of the intellect will have followed, as soon as, through a previous considerable advance, the half-art and half-instinct of language came into use; for the continued use of language will have re-acted on the brain, and produced an inherited effect, and this again will have re-acted on the improvement of language." In other parts of his work Darwin admits, or rather claims, as an argument in favour of his own theory, that many of the lower animals have a language by which they communicate to each other such ideas as they care to express. And we may ask, then, why, in their case, language, constantly used through life, has not reacted on their brains, and produced an inherited effect, which again would have re-acted on the improvement of their language? The answer to this is obvious. The animal had an impulse to express only certain ideas. The expression for these ideas was attained by its species long ago, and there is no impulse to go beyond. The beast or bird has signs or sounds to express warning, encouragement, call, wooing, love, joy, anger, defiance, fear, and perhaps a few more simple emotions or ideas. Its brain is large enough or refined enough for the entertainment of these ideas in association with certain signs or sounds, but has no development further, because language is not the cause, but the expression and effect of the mental powers. In the power of varied articulated utterances, the parrot, the starling, the magpie, and other birds, might almost vie with man; but with them this instrument remains dead. It has no tendency to re-act on their minds; and, for want of a living mind impelling it, it is as idle as the echoes of the mountains. The difference between man and such creatures is, that man, while sharing with them the faculties of articulation, was also endowed with reason, always tending to view things under the form of universals. Reason, in short, from all we can see or conceive of the history of the world, has been the cause, and not the effect, of human Language, in itself, evidently gives no start for the development of the reason, as distinguished from the lower understanding which is concerned with self-preservation and the attainment of bodily satisfaction; else the brutes, which, according to Mr. Darwin's own showing, have the means of communicating with each

other, would have shown some indication of having received such a start.

Mr. Darwin passes lightly over the philosophical difficulties which arise in his way; and he somewhat loosely accounts for the development of the higher reason, by saying that "the higher intellectual powers of man, such as those of ratiocination, abstraction, self-consciousness, &c., will have followed from the continued improvement of other mental faculties; but without considerable culture of the mind, both in the race and in the individual, it is doubtful whether these higher powers would be exercised and thus fully attained."

Rather, we might say that it is doubtful whether such high powers could ever have been acquired by the mere exercise of lower faculties. It is very difficult to see how, by the "struggle for existence," which is the only motive power that Mr. Darwin seems to allow us, the higher intellectual powers of ratiocination, abstraction, and self-consciousness can ever have been called into action. We can conceive how, according to the Darwinian hypothesis, man might have become more crafty than the fox, more constructive than the beaver, more organized in society than the ant or the bee; but how he can have got the impulse, when he had once made his position on the earth secure among the other animals, to follow out abstract ideas and to go working on and on, while all other creatures rested content with the sphere which they had made for themselves—this is, indeed, hard to understand.

Aristotle (to whom I must again refer) has an opinion on this subject directly contrary to that of Mr. Darwin. Aristotle admits, to a certain extent, a theory of evolution with regard to man. thinks that mankind gradually invented and developed the necessary arts of life; and that, when the necessities and the pleasures were sufficiently provided, men proceeded, especially in places where there was a leisure-class, to betake themselves to those intellectual, scientific, and philosophical pursuits which are most dignified, and which are sought for their own sake. He mentions, as an instance of this, the development of mathematics in Egypt, as being due to the priests, who were a leisure-class (Metaph. I. i. 16). Aristotle, then, considers the reason of man, so far from having been developed out of his struggle for existence, to have been retarded at first by the claims of the lower necessities, and only when set free on the satisfaction of these to have begun its own spontaneous development. He draws a distinction between those faculties which we attain by exercise, and those which we possess by nature, and have only to call out and use; and he evidently places reason under the latter head. It is a question whether this view is not more in accordance than that of Mr. Darwin with the facts of the world.

When we look closely into Mr. Darwin's theory of the origin and

development of the human mind, it seems evident that he holds the opinion that, when man had once begun to outvie other creatures and cope with the difficulties of life by means of craft, cleverness, and intelligence, his brain grew, and new mental powers, above his immediate needs, were unconsciously developed in him, and that these new powers became the cause of all that is most distinctive in man. if Mr. Darwin so thinks, he comes round very nearly to the orthodox view, by conceding the existence of high mental powers in man antecedent to their exercise. He only gives a physical account of such powers by attributing them to the quasi-spontaneous growth of the grey matter of the brain. He does not enter upon the philosophical question whether the brain is the cause, or only the condition, of the highest mental functions; nor does he give any reason to account for the fact that a similar brain-growth does not appear to have taken place in any other of the numerous animal species of the earth. though so many of them have, for countless ages, exercised intelligence and cleverness in their respective struggle for existence.

One point that emerges from the various observations of Mr. Darwin is worthy of notice—namely, that he finds all the essentially human faculties to be existent, though latent, in savages, independently of long hereditary exercise, -which, in other parts of his theory, he considers necessary for the creation and development of the human Thus he says, "The Fuegians rank amongst the lowest barbarians; but I was continually struck with surprise how closely the three natives on board H.M.S. "Beagle," who had lived some years in England and could talk a little English, resembled us in disposition and in most of our mental faculties." This candid admission surely furnishes a strong argument to the opponents of the evolution theory, as applied to the intellect of man, for it points to the conclusion that man, however degraded in habits, is always man, and that he has the higher faculties, at all events latent, in his soul. It points to the conclusion that the human species is essentially one, and that it is strongly differentiated by the prime quality, Reason, from all other species which we know.

The characteristics of savages are made great use of by the evolutionist philosophers in support of their theories, and Mr. Darwin assumes it as absolutely certain that we are, at all events, descended from savages, and offers it as a sort of consolation to those who may not like his ultimate conclusions—that it surely would not be more degrading to trace one's descent to a race of monkeys, than to some disgusting savage tribe. But the argument from the characteristics of savages may be turned the other way. On the one hand, we have seen that the savage is not a link between the brutes and man, but is definitely man. The savage does not afford any ground for believing that the human species is gradually shaded off

into other species, and he does not in this respect give any support to the Darwinian hypothesis. On the other hand, the extremely unprogressive character of savage society is an obstacle to believing that the best civilization of the world, that of the Aryan and Semitic races, can have ever taken its start from such a society in the primeval ages. In the savage races of the present day we seem to find the human faculties, not in their fresh virgin state, tending to develop into something better, but arrested and benumbed by long acquiescence in grovelling habits. Therefore I think that we are justified in regarding these races as the swamps and backwaters of the stream of noble humanity, and not as the representatives of the fountainhead from which it has been derived. Discarding all analogies drawn from savage races as at present existing, I think that philosophy would be justified in conceiving of our ancestors as possessing the human faculties which savages now exhibit, and in addition to them an inward impulse which led to the evolution of civilization. No mere exigencies of life or struggle for existence can have given rise to the high thoughts which led to poetry and science. Had our ancestors once been savages, savages they would have remained. But in the fairest regions of the earth, in the most favourable circumstances for leisure and consequent refinement, having rich untried faculties, and an inward impulse to exercise those faculties, they took the start which has brought us into the complex, ever-changing historical scheme of civilization, outside which the savage now dwells unconscious of its existence or meaning. The difficulty of believing that this scheme, with all the varied products of its successive phases, such as the Bible, Homer, Sophocles, Greek art and philosophy, Roman law, Christian morality, Shakspeare, and modern physical science, can have been started and carried on even in its beginnings by savages, such as we now know them, forms a great obstacle to accepting the Darwinian hypothesis. The thought seems forced upon us that there have been elements in the history of the world of which this theory takes no account. We feel inclined to say to Mr. Darwin-

> "There are more things in heaven and earth Than are dreamt of in your philosophy."

And with some such remark I would take leave of these speculations, which are highly interesting and valuable for the facts by which their author endeavours to support them, and which, whether ultimately accepted or not, are certain to be thoroughly sifted, and so to give an impulse to metaphysical as well as physical inquiry. I will only add that in them there is very little that is absolutely new. The facts are the facts of Mr. Darwin, but the theory is the theory of Epicurus, with the atheism removed.

A. Grant.