

MAN AND THE ANIMALS.

A COUNTER THEORY TO MR. DARWIN'S, AS TO THE ORIGIN OF SPECIES.

Read before the British Association, by the Ven. Archdeacon Freeman.

The question raised by Mr. Darwin is one of wide range and most profound interest, and has engaged, and engages increasingly, year by year, the attention of scientific men in various countries. It is already a battle of nations, and not merely of individual combatants. In England great names, especially among geologists, range themselves on either side of the question, and Mr. Darwin counts a recent illustrious convert in the person of Sir Charles Lyell. Mr. Ruskin, in his most recent work, professes a qualified, and, indeed, as I shall show presently, a not very consistent acquiescence. Abroad, France and Germany take on the whole opposite sides. French acumen (well represented by M. de Quatrefages, M. Langel, and other writers in the *Revue des Deux Mondes*) is quick to perceive the weak points of Mr. Darwin's position, and, while accepting his facts, is unconvinced by his arguments. But Germany, not altogether ill-pleased to have a knotty problem to solve, or a difficult, not to say a paradoxical position to maintain, troops to the rescue; whether, like Fritz Müller, with light projectiles of "Facts and Arguments for Darwin," or with heavier artillery, such as Haeckel's "Naturlich Schöpfungsgeschichte." Meanwhile there is one form of antagonism, which, as far as I am aware, has not yet been essayed, either at home or abroad. I mean the enunciation of a "counter theory," co-extensive in its range with Mr. Darwin's, and capable of accounting for all the phenomena which his theory is devised to meet, and not open to such formidable objections. This is, as it should seem, the only way to give a complete and satisfying reply to a theory based on so wide an induction, and presenting so extended, though confessedly broken and imperfect a front as that of Mr. Darwin. It is not enough to point out in detail any number of objections, however serious. Mr. Darwin frankly admits the existence and the enormous weight of such objections; but he is confident that increased observation of phenomena and further discovery of fossil remains may be expected to remove these difficulties. And even should this not be so, he might still maintain, with much plausibility, so long as no other positive theory is in the field, that it is only our ignorance which prevents our seeing our way clearly to the conclusions which he advocates. The question which he asks is—What other account can you give of the positive and undisputed phenomena? If these do not point to a universal descent of all living creatures from one parent, and even from a single monad—what do they point to? What then if we can allege a widely different reading of the phenomena, not presenting the same difficulties; one which is, at the same time, far more noble and satisfying, and comes commended to us, apparently, by the highest authority? Two of the most ancient authorities on Natural History and the Science of the Universe, are the philosopher Plato, and that most ancient Record, which, interpret its utterances how you will, certainly lays down, however incidentally and in subordination to its main purpose, an extensive creed on physical subjects: I mean the Bible. And I affirm that when we are endeavouring to solve a great problem, like that which Mr. Darwin has placed before the world, viz., the true origin and the real plan or system of organic creation and organic structure, it would be simply suicidal on the part of science,—meaning thereby a real and serious endeavour to ascertain the facts, and penetrate the rationale of the universe—to ignore the only professedly authentic source of information as to the *præordis* and purpose of that universe. Now the question before us is this—How did the similarly constituted and constructed animals come by their similarity to each other? To this Mr. Darwin's answer is as follows:—"On my theory," he says, "unity of type, or that fundamental agreement which we see in organic beings of the same class, is explained by unity of descent." (*Origin of Species*, p. 253, ed. 1859). He supposes that all creatures, however different now, have slowly "graduated into each other." (*Variations under Domestic Culture*, p. 13). "As the members of distinct classes have something in common in structure, analogy and simplicity would lead us to infer as probable" (and observe that he says no more) "that all living creatures have descended from a single prototype." (*Ibid.*) And this, it should be well understood, is the more important and concerning part of Darwin's position. "Natural Selection," the doctrine which has chiefly made his name famous, is only a particular mode of explaining in part (for he admits other agencies) how the species can have glided, as he supposes, into each other. Before I proceed to suggest a different account of the matter, I would observe that in the confessed affinities of the higher animals, and indeed of all creatures, we discern a plan, and a very extensive one, on the part of the Author of Nature. And it is natural to ask,—whatever its origin or mode of production—Why this plan? What purpose does it answer? and why does it exist? why would not any other plan, or the absence of all plan, have answered equally well? To this question Science can give no answer. Yet nothing is more observable than the jealousy with which "Nature," as we call it, adheres to this plan: "So careful," as Tennyson says,—

"so careful of the type she seems,

So careless of the single life."

(*In Memoriam.*)

Has then a plan "so intelligently devised and so systematically pursued," no aim or cause? Is it a mere love of harmony that prompts this mighty and curious chain of correspondence, running through all the creatures, especially those most nearly allied, by their structure, to man? And why, if this be the whole account of the matter, viz.: that all this arises from a love of harmony, does not the affinity extend equally through all nature, down to the lower departments? To some extent, no doubt, it does; but in its main instances it is confined to the higher animals. There the affinities are more numerous and more pronounced. Now, why should they, more than the rest, be thus closely as well as persistently allied in their forms? Why should they all have four limbs? Why the same number, really or rudimentally, of digits? Why precisely the same number of cervical vertebrae? Why the same form of bone? or why should the correspondence be kept up even where the purpose of the limb is not answered? The rationale of all this is surely to be found in the great purpose, which Scripture declares to have provided over the whole creation, especially the creation of living beings, and supremely over that of the highest ones. That aim was, in general, the *Glory of God*. This is as plainly declared, at the end of the great Record, as is the production and formation of the creatures at the beginning of it. "Every creature" we read "which was in Heaven, and in the earth, and such as are in the sea, and all that is in them, heard I saying, Blessing and glory and honour be unto Him that sitteth upon the Throne." Four typical creatures, more especially, as a kind of leaders of the choir of the Universe, rest not day nor night, giving "glory and honour and thanks to Him that sitteth on the Throne," and the substance of their worship is, "Thou hast created all things, and for Thy pleasure they are and were created." The account given of these typical creatures tends to throw further light on the nature of this united worship of creation. It is worthy of remark, that their names of "cherubim," the plural of cherub, signifies, according to the latest investigation of Egyptologists, the "forms of figures," as if their purpose was in some way wrapt up in their possessing a particular form. Accordingly, appearing first subsequently to man's fall, they are, with much particularity described elsewhere in the Bible as multiform beings, uniting, yet without confusion, the appearances of four of the highest animals—man, the lion, the ox and the eagle. Yet all alike, it is particularly specified, "had the likeness of a man; and they had the hands of a man under their wings." Now whether we view these mysterious creatures as mere emblems, or as having a real existence, is of little consequence for our present purpose. The most natural presumption however is, that they being already in existence, the animals were made in imitation of them. That the lower creatures may have been thus formed after some already existing type, is rendered probable by the fact that man was certainly formed after an image—that of God himself. And the belief that all were created after pre-existing "ideas" was, as has been above intimated, entertained by Plato, writing four centuries before Christ. We note then that, through the medium of these ideals, the higher animals and man are shadowed forth as having, physically, a close relation and intertwining of natures, yet without confusion. All are declared to have, in some respects, the likeness of man; and the purpose of their united and assimilated being is, that they may, with conjoint intelligence, glorify God. And how true to nature the ideal representation is! What physiologist or morphologist, reading of these mysterious types, can fail to be reminded of what his own walk of science discloses to him, viz., the wondrous affinities and intertwining, embryological or other, between all the higher vertebrates? What palaeontologist does not bethink him immediately of parallel cases of evolution from a type; of the various characters combined, for example, yet without confusion, in the *amphitherium*, and subsequently disengaged, and separately presented in the rhinoceros, the camel, the horse and the ox? Or what physiognomist, worthy of the name, nay, what commonly observant person, has not loved to recognize, and learned to marvel at, the wondrously human expression of the nobler animals and birds; the wistful look, so full of mystery, of ox or sheep; the flashing intelligence in the eye of horse or dog; the lordly bearing of lion or eagle; the tenderness and fidelity expressed in the limpid eyes of the dove? And especially curious from a scientific point of view, is the specification "They had the hands of a man under their wings," shadowing forth the gradual and often cryptical resemblance of the vertebrates to man in point of digitation, and of a non-realized and rudimental hand. Truly they all have, in these respects, "the likeness of a man." And, looking at these forms, we are helped to a fuller apprehension, why an affinity, morphological, physiological, anthropological all above, should have been stamped on all these creatures. The worship of creation was to be one and undivided; and it was obviously fitting that some kind of outward affinity should bind together creatures so allied in purpose, so honoured by a common employment, so inwardly alike in their intelligence and emotions. Such, as it should seem, is the account to be given of that marvellous uniformity of structure and constitution, which prevails through the upper classes of animal life more especially. We have now an answer to give to Mr. Darwin's great question. "What other account," he asks, as one really seeking for an answer, and ready to welcome it, "can be given of the similarity of structure and limb, between man, reptiles, fishes, and birds, than that all proceeded from one common germ?" Another answer can be given, namely, that the affinity involved herein is a noble badge of distinction, borne by these superior creatures, adorning them, for a high purpose, to man. It can no longer be said (*Variation* p. 9, vol. I.) that, "on the ordinary view, of each species having been independently created, we can give no account of explanation of the facts." But now let us briefly note wherein this account agrees with, or differs from, Mr. Darwin's. It agrees with it, then, in this, that it refers to the resemblance between species and species in some sense to a universal parentage; only it is an ideal, not a natural one. The one view refers all (with a woeful deficiency of connecting links of descent) to a universal parent; the other to a universal pattern. The rationale assigned on the one view is natural descent; on the other, creating affinity. And this view is perfectly patient of, and indeed thoroughly welcomes, all the phenomena noted by Mr. Darwin. "Natural selection" may still, within its proved area, maintain its place; and so may variability under domestication, and under varying climatic and other conditions. The creatures having a congenital conformity, in their degree, to a common type, what more natural or consequent than that, if they develop at all, they should stretch out in the direction of their ideal congeners, yet without any possibility, by the law of their being, of their ever being really transmuted into the full likeness of a species naturally separated from them? The species, in a word, are the asymptotes of creation. They may possibly—though there is no proof of it as yet—come very near to blending, but they can never pass into each other. And this is the position contended for by the most intelligent anti-Darwinian writers, viz., that selection, climate, domestication, all have limits to their powers. So Mr. R. Lowe, in his paper read before the British Association at Norwich last year: "There is but one real theory, i. e., that animals and plants vary, and are limited by selection, within certain limits." So Mr.

Ruskin, in his latest work, "The Queen of the Air" (1869), while professing that "his facts are in no wise antagonistic to the theories of Mr. Darwin," naively adds: "it has always seemed to me, in what little work I have done upon organic forms, as if the species mocked us by their deliberate imitation of each other, when they met, yet did not pass into each other." These are surely weighty words from one of the profoundest thinkers of the day. On one other aspect of the subject I must, in conclusion, say a few words. I mean, the relation of the animal world to that Divine Author of Nature, whom Mr. Darwin, equally with myself, recognises. The main characteristic of his view on this point is, that he believes in a potentiality, implanted from the first in the primary substance of all creatures, to produce all the variations which we behold. Such a view is in no wise, of course, irreligious; but I believe it to be utterly mistaken, and to be rendered more and more untenable every day, by the very facts which Mr. Darwin is establishing. The singular and erratic variations from type—the marvellously complex correlations and co-ordinations—which are being established, not least by himself, point more and more continually to the existence of a special and exceptional Divine superintendence, exercised over the whole Region of Life, both vegetable and animal. So best, surely, can we account for the preservation of the balance of existence; for the mysterious checks to over-multiplication; for the curious phenomena of atavism, reversion, and many others. Indeed I may claim Mr. Darwin himself as the unconscious advocate of some such intelligent power, direct or delegated, when he speaks of natural selection as "working for the good of each being, and taking advantage of analogous variations." He often manifestly feels the want of such an intelligent power, to eke out his system. "It is, I confess," says he, "more than enough to stagger any one, that such causes should produce such results." "To suppose that the eye, with all its inevitable contrivances, could have been formed by natural selection, seems, I freely confess, absurd in the highest degree." We must not, indeed, take advantage of these candid and honourable admissions, to cast contempt upon his theory altogether; but we may see in them an indication that it does not quite satisfy him. I trust that I shall be acquitted of any desire to impugn, in what I have said, the well-earned and European fame of Mr. Darwin as an observer. But I submit that, by the view above given—viz., that the higher animals, and the whole creation in its degree, being associated with man in the work of praise, naturally have strong affinities with each other and with him,—Mr. Darwin's question is answered.