**RECORD**: Anon. 1871. Artistic Feeling of the Lower Animals, pp. 280-1 and [Review of] Descent of Man, pp. 288-9. *The Spectator* (11 March).

**REVISION HISTORY:** Transcribed by Christine Chua and edited by John van Wyhe 12.2019. RN1

**NOTE:** See 1871. The descent of man, and selection in relation to sex. 1st ed., vol. 1. F937.1 and vol. 2. F937.2.

[page] 280

ARTISTIC FEELING OF THE LOWER ANIMALS.

MR. DARWIN, in the remarkable book which we notice elsewhere, has explained, or at least partly explained, to his own satisfaction, the striking beauty of the plumage of birds and the rich colours of certain other creatures even lower in the scale of intelligence than birds, on the principle that there has been among all these orders of creatures so great a preference for beauty of exterior, that the more beautiful have always found it easier to secure mates, and more eligible mates, than the less beautiful; in other words, that it has always been likely that the more beautiful birds, &c., would pair more easily, and rear a greater number of offspring than the less beautiful, and probably also not only a greater number, but a greater number of more healthy offspring,—the result being, of course, after the lapse of a vast number of generations, to accumulate beauties on the species.

Mr. Darwin gives a most curious illustration, by analyzing the mode in which rudimentary and less finished probably grow into more elaborate and perfect beauties, in the case of the Argus pheasant, which is spotted with what is called a perfect "ball-and-socket ocellus," an "intensely black circular ring surrounding a space shaded so as exactly to resemble a ball." "The ring is always much thickened, with the edges ill-defined, towards the left-hand upper comer. . . . beneath this thickened part there is on the surface of the ball an oblique almost pure white mark, which slides off downward into a pale leaden hue, and this into yellowish and brownish tints which invariably become darker and darker towards the lower part of the ball. It is this shading which gives so admirably the effect of light shining on a convex surface." Mr. Darwin shows how this marvellous artistic effect is obtained from the confluence and prolongations of (relatively) very common spots - such as occur in the feathers next the body-by insensible gradations.

"Almost every minute detail in the shape and coloring of the ball-and-socket ocelli can be shown to follow from gradual changes of the elliptic ornaments, and the development of the latter can be traced by equally small steps from the union of two almost simple spots, the lower one having some dull fulvous shading on the upper side."

But to what cause are we to trace the development of these "almost simple spots, the lower one having some dark fulvous shading on the upper side" into "elliptic ornaments," and the development of the elliptic ornaments into perfect "ball-and-socket ocelli"? Mr. Darwin traces it without hesitation to the strong preference of the hen-pheasants for beauty of plumage. In other words, he supposes there was a time when all the cock-pheasants were feathered with common-spotted feathers; - and that then birds in which two adjoining spots had flowed together into something like one of the elliptic ornaments, would have been so much preferred by the hens to birds in which no such confluence of spots had taken place, that they would have the choice of all the belles of the pheasant society, and the effect would be that their descendants, who would inherit the tendency to a confluence of spots, would become a sort of aristocracy among the pheasants, and would command the best mates; and that this process would go on till the complete development of the common spots into elliptic ornaments, and of the elliptic ornaments into ball-and-socket ocelli on those feathers chiefly displayed by the Argus pheasant, had taken place.

This is a very ingenious and possibly true account of the method of the development, a precisely analogous one is given, by the way, of the development of the vocal powers of singing birds, for most convincing evidence seems to be attainable of the pride

## [page] 281

felt by birds in their rich plumage and their fine voices, and of the admiration these are apt to excite in the breasts of their mates.

Mr. Darwin tell a curious story of the intense jealousy felt by a robin for all birds with any red in their plumage (but no others), and by a quiet, well-behaved bullfinch (which has a black head) for a reed-bunting which had also a black head, though to all his other comrades, except the one with a similar distinction to his own, he was perfectly good humored. The vexation evidently was primarily of the same nature which a young lady would feel at a ball, on seeing a splendid ball-dress, precisely the duplicate of her own, on another young lady, when she had persuaded herself that she was unique. There certainly seems no reason to doubt that birds are extremely susceptible to the effect of beauty of plumage and voice, and are jealous of the same attractions in their rivals. But admitting Mr. Darwin's hypothesis, only conceive what refined and finely-developed taste it implies in these birds, at once to prefer those variations of plumage and voice tending to perfect harmony of effect, to what we call high art, to variations of a different kind, which would, according to our standard of taste, tend to vulgarity of effect.

If we notice the preferences of the least cultivated classes of civilized human beings in relation to color, say the ordinary preferences of English sailors or English maidservants, we might safely assume that they would not be directed towards perfect harmony of color and perfect grace of form, but rather to startling and blotchy effects in both color and form. But the splendidly colored snakes and birds of tropical forests, however grand their colors, are never what our taste would call vulgarly colored, never coarsely patched with frightful patterns, such as you constantly see on gaudy gowns, showy wall-papers, and glaring carpets. Yet if the tastes of snakes and birds be not of a wonderfully delicate and cultivated character, how are we to accept Mr. Darwin's theory? Why were not the dark fulvous spots developed, through the agency of pheasant popular opinion, into hideous but showy whirligigs of yellow, such as a British cook would select for the pattern of her Sunday dress, instead of into the exquisite ball-and-socket pattern of the Argus pheasant? Why is the order

of development always from less beautiful to more, instead of in the reverse direction towards gaudy vulgarity and detestable splendor?

"The elongated and golden-orange plumes which spring from beneath the wings of the Paradisea apoda," says Mr. Darwin, "when vertically erected and made to vibrate, are described as forming a sort of halo, in the centre of which the head looks like a little emerald sun, with its rays formed by the two plumes. In another most beautiful species the head is bald and of a rich cobalt hue, crossed by several lines of black velvety feathers." Well, why did not development of the plumage most pleasing to these little creatures bring out instead something as ugly as the British matron's orange turban, surmounting a rich salmoncolored silk dress?

Mr. Darwin accounts most ingeniously for the wonderful development of rich plumage if be only gave us any equally adequate account of the wonderful development of animal taste. How did the preferences of the various tribes of creatures happen to select harmonies so perfect, when the rudimentary tastes of partially civilized human beings seem to select ornament &c hideous? Surely the problem remains as difficult as ever, namely, to account for the sure selection of exquisite harmonies of form and color, instead of the most atrocious discords. Put the mind of the average English barmaid into the hen-pheasants, and instead of distinguishing by their preference the variations tending towards such ball-and-socket ocelli, they would have distinguished by their preference variations of the "fulvous" tinge tending in the direction of coarse capstring streaks of yellow, while the appearance of a few red bows in the neighbourhood would have caused a perfect enthusiasm.

And instead of the elegant "ear-tufts" of certain humming-birds, such as Mr. Darwin describes, they would have influenced the development in the direction of heavy ear-drops adapted expressly to distort the shape of the ear. The exquisite harmony and graduation of the various bird plumage would certainly never have been produced by the selective preferences of the lowest order of human beings. How, then, if Mr. Darwin's account of the cause of the development of beauty be admitted, are we to account for the sure artistic animal taste which determined its progress and direction?

We will offer a suggestion. Granting that Mr. Darwin is right in his explanation of the gradual growth and accumulation of beautiful colors and forms in the plumage of birds through the preference for those birds which are the more beautiful and the relative neglect of those which are less so, it must be plainly conceded, we think, that some of the lowest animal orders possess a far finer artistic sense than does uncultivated man even in an advanced stage of civilization. When we consider the frightful as well as barbaric ornamentation which Sir John Lubbock tells us that savage women are compelled to undergo, - as, for instance, great seams oi scars all around their middle, and compare it with the preference of hen-pheasants for the "elliptic ornaments" and the "ball-and-socket" plumage, we must admit at once that the hen-pheasants have a far finer sense of beauty than the Australian males. Now, we also know that in reference to quite other cases, the animal instincts are superseded in man by a general development of reason, which, for the special purposes of instinct, is, at first at all events, a vastly inferior instrument.

No human reason would suffice to effect what the beaver, and the ant, and the bee effect by instinct alone. The bee's power of building perfectly hexagonal cells may, as Mr. Darwin bas shown, be a developed instinct, since certain wild bees build cells of a much ruder kind ; but no one supposes that even the hexagonal cells are built on strictly geometrical principles, by true bee engineers who have studied the trigonometry of the subject. And yet men who have, would be puzzled to build cells one-hundredth part as perfect as the hoes. Does not this seem to show that as reason begins to supersede instinct; we gain a far higher and wider power,-the power of laying the intellectual basis of our own rules, at the expense of a great specific loss of practical skill ? And may not something of the same kind be true of the sense of beauty? If Mr. Darwin is right as to the principle which stimulates the elaboration of beauty by the lower animals, does not the Creator give the lower order of animals an instinct of beauty ready-made, which we lose as we become competent to apprehend its laws, and which we only recover by mastering consciously those laws of harmony which the bird and even the fish apprehend instinctively? Yet if this be a true account of the matter, this instinctive selection of the beautiful leads to a theological inference a good way beyond that warranted by the selection of the useful. Of course, with regard to the natural selection of modifications useful to the creature which undergoes those modifications, it may be said that they are merely the survivors of thousands of modifications which are lost out of sight merely because they were injurious or indifferent. But with regard to the selection of the beautiful, this cannot be said. If there were any race of birds which really preferred pure ugliness, there might. and must be a natural selection of ugliness of which we suppose there is no trace. Hence, the instinctive taste for beauty in the bird which is so much greater than that of half-educated human beings, and which is only painfully recovered through the laborious study of Nature by educated intelligences, must come from a fountain of infinite love of beauty, and cannot by any possibility be the mere result of a competitive struggle for existence among animals quite unconscious whither the issue of that struggle tends.

[page] 288

MR. DARWIN'S DESCENT OF MAN.\* (FIRST NOTICE.)

EVEN to readers who are not naturalists, Mr. Darwin's works are full of fascination and instruction. No writer of the day arranges his facts so lucidly, with so unquestionable a sincerity, and so undisguised a candour when he has difficulties to confess. Though Mr. Darwin has shocked the deepest prejudices and prepossessions, he seems to live in a region far above the temper of controversy, and to aim at nothing but the nearest approach to scientific hypothesis that it is in his power to make. There is not a word of harsh criticism in his volumes, and, as far as a reader can judge, not a trace of disposition to disguise the objections to the views which he is disposed to take. It is hard to conceive of a scientific style

at once so dispassionate and so full of intellectual vitality. There is nothing of the dreary prolixity of a mind too full to keep its materials subordinate to the question under discussion, and yet nothing of the dogmatic vehemence of one that cannot bear to doubt the truth of its own conclusions.

Every chapter advances the theory of the book, and yet every chapter deepens the confidence of the reader in his author's candour and grasp. We need hardly say that it is not the object of the present reviewer to criticize Mr. Darwin's scientific statements, which are, no doubt, quite beyond the criticism of any but the most accomplished naturalists and physiologists,—a kind of criticism which would not be very suitable to these columns. All we now propose to do is to give some idea of the kind of arguments on which Mr. Darwin relies for his conclusion that man is to be classed among the order of the Quadrumana, and that the most immediate ancestor from which we can trace his descent is one of the Catarhine or old-world anthropomorphous apes,—and then to criticize that part of his argument which alone we are competent to criticize, that which professes to account for the extraordinary development of his. moral faculties on the hypothesis of what is called evolution. Mr. Darwin points out that in the human embryo the difference from the ape does not show itself till quite the later stages of development —the convolutions of the brain, for instance, reaching about the same stage in the human foetus of seven months' growth as in the- adult ape; and the great toe, one of the most characteristic differences between man and the ape, being in the early stages of development projected from the side of the foot at an angle precisely similar to that which marks "the permanent condition of this part in the Quadrumana." Further, man even in his maturity has in his body rudimentary organs, —i.e., organs which are no longer fully developed or useful, and are therefore mere traces of a close physical connection with creatures in which these organs are not rudimentary, but fully developed. Thus man- has a rudimentary tail, sometimes, though rarely, somewhat morethan rudimentary,—has some vestige apparently of the pointed' ear which some of the lower animals erect when listening,—has rudiments of the hair with which they are covered,—and has those- rudimentary muscles (occasionally developed) that give the power of twitching the skin like a horse. (Mr. Darwin mentions a family in which the power of contracting the superficial muscles- on the scalp still exists to so great an extent that those who possess it can pitch heavy books from their heads by the twitching of the scalp alone.) Man has, again, the rudiment of the third eyelid, or "nictitating membrane," which is not developed in any but the lower mammals, not in any of the quadrumana; and he has various other rudiments of organs fully developed in the lower order of animals, but now useless to man, and mere signs and traces of his ancestry.

Mr. Darwin argues that the fact that the embryo of a man and of an ape are only distinguishable at the latest stages, and that at still earlier stages of development the embryos of a man, and of a dog, a seal, a bat, a reptile, are indistinguishable, taken with the fact that even in fully developed men- there are still rudiments of organs found fully developed only lower down in the order of nature,—in the ape, or the bird, or even the fish,—would be mere "snares laid to entrap our judgment," if they are not to be interpreted as

implying community of descent. Nor do we see what answer can be made to this argument. If man has no hereditary connection whatever with the- lower order of animals, the stages in which the human embryo seems to anticipate not man as he is, but one of the lower animals, and the rudimentary traces left in his body of organs like theirs which are undeveloped, would seem to be a sort of false modesty or mock-humility of nature, a set of intellectual sign-posts advisedly put to lead our understanding astray.

From the traces of physical origin Mr. Darwin passes to the class of qualities in which the lower orders of animals have least in common with man, the mental; and has no difficulty in showing what all who have attended to the subject have long admitted, that the germs of all our intellectual characteristics and of some at least of our moral characteristics are to be found among the- lower animals. Mr. Darwin holds that the more complex instincts are often found, as in the case of ants and beavers, along with a very high amount of general intelligence; but he does not deny that very often intelligence supplants instinct, and suggests, as his explanation, that "as the intellectual powers become highly developed, the various parts of the brain must be connected by the most intricate channels of intercommunication; and as a con- sequence, each separate part would perhaps tend to become less: well fitted to answer in a definite and uniform, that is, instinctive, manner to particular sensations and associations."

That explanation, we think, is hardly compatible with the well-known power of human beings to perform, almost as reflex and involuntary acts, operations at first requiring the most concentrated intellectual effort, such as the higher feats of music and drawing. As far as we can see, the development of the brain in man gives us a far higher power of executing complex operations once studied and mastered without any effort of attention, and yet with perfect accuracy, than any of the lower animals possesses; so that it is not easy to sup- pose that we lose instincts from any inadequacy of the brain to answer "in a definite and uniform, that is, instinctive manner to particular sensations and associations."

Rather, we should say, that beings with the power to lay an intellectual basis- for their own instincts, which intellectual basis they can re-

\* The Descent of Man and Selection in Relation to Sex. By Charles Darwin, M.A. F.R.F., &c. 2 vols. Murray.

## [page] 289

cover at pleasure, are so far superior to beings which have only instincts to which they do not possess the key, that the latter are withdrawn in proportion as the power to construct the former is given. For the rest, we have no criticism to pass on Mr. Darwin's interesting evidence for the existence of almost all our intellectual powers in germ among the higher orders of the animals beneath us in general intelligence. Only what Mr. Darwin means by "in germ" and what we mean by "in germ" is, we suspect, somewhat different. The hypothesis of 'evolution' is to our minds a mere hypothesis of gradual accession and rise; but the addition of new power is not the less real because it is gradual; and it seems to us to be no causal explanation of the high intelligence of man to show that a much lower form of intelligence is found in the animals from which his stock originally diverged, any more than it is a causal explanation of the hand of a man to show that it is in some sense the equivalent of what in a very distant ancestry was used as a foot.

Mr. Darwin's hypothesis as to the evolution of a conscience is, however, to us the most interesting and original speculation of his first part, on the Descent of Man. It seems to us a remarkable proof of the depth and width of his genius that the greatest of our naturalists should come what seems to us so much nearer the kernel of the psychological problem, than many of his eminent predecessors who have given their chief attention to the relation between psychology and physiology.

Mr. Darwin finds, and we believe quite rightly, the germ of conscience wherever and whenever two distinct motives compete for the practical guidance of any creature's mind which has the power to compare them together, and discriminate the worth of the two. He tells us that maternal swallows sometimes desert their brood when the migrating instinct comes upon them while they are out of sight of their young, and suggests that if after that instinct is gratified they have the power to recall the nestlings they have left to perish, they must be torn by a genuine remorse. He tells us of a heroic baboon which came down to rescue a young and timid one left behind by the troop, and which was insulated on a block of rock, surrounded by dogs and calling to its companions for aid. The old hero descended alone (like a Hector or Achilles) from the band, went slowly up to the isolated infant baboon, coaxed him to come down, and led him away in triumph, the dogs being too much astonished to make an attack. This conquest of the disinterested feeling for the deserted infant baboon over all personal fear, clearly may have been, for anything we have any right to object to the contrary, as distinct a moral act as that of Grace Darling in rescuing the shipwrecked crew in the life-boat. So far we entirely agree with Mr. Darwin, and hold that if any of the lower orders of animals deliberately prefer the worthier of two motives, because it is the worthier, such an animal is distinctly a moral being.

But Mr. Darwin seems to us to spoil his analysis by trying to find an explanation of the superiority of one motive to another. We do not find any fault with his view that animal sympathy has been the result of 'natural selection,' on the ground that the gregarious animals bound together by it would be so much safer than those in which each cared only for itself. That is true,— though how the primeval love of parents for their offspring, which is, we suppose, the first source of the sympathy and united action of a herd,—can be ascribed to an accidental variation, we can- not even conceive,—nor do we suppose that Mr. Darwin would use the word 'accidental' in such connection in any but a very relative sense. But we do find fault with his rationale of the method in which 'weaker' but worthier motives are converted into triumphant ones, by virtue of their greater permanence:—"At the moment of action, man will no doubt be apt to follow the stronger impulse; and though this may occasionally prompt him to the noblest deeds, it will far more commonly lead him to gratify his own desires at the expense of other men. But after their gratification, when past and weaker impressions are contrasted with the ever-enduring social instincts, retribution will surely

come. Man will then feel dissatisfied with himself, and will resolve with more or less force to act differently for the future. This is conscience; for conscience looks back- wards and judges past actions, inducing that kind of dissatisfaction, which if weak we call regret, and if severe remorse The imperious word ought seems merely to imply the consciousness of the existence of a persistent instinct, either innate or partly acquired, serving him as a guide, though liable to be disobeyed If any desire or instinct, leading to an action opposed to the good of others still appears to a man, when recalled to mind, as strong as, or stronger than, his social instinct, he will feel no keen regret at having followed it; but he will be conscious that if his conduct were known to his fellows, it would meet with their disapprobation; and few are so destitute of sympathy as not to feel dis- comfort when this is realized."

The whole drift of this explanation is to get rid of the new element in conscience,—the sense of authority,—by referring it to the greater ideal permanence of the motive which comes into collision with an animal impulse. Hunger is short-lived; social feeling permanent,—therefore there will be a dissatisfaction and sense of remorse' when the keener temporary pain is over and the milder but permanent pain returns; and the memory of this persistence of the- latter pain will, in some future struggle, turn the scale against the more violent onset of the former pain. Now that analysis is, we venture to say, erroneous, and the error is mainly due,. we believe, to the assumed necessity of finding nothing new in the conscience which cannot in some sense or other be traced back to its parentage in the lower animal life.

Mr. Darwin's rationale would only account for the preference of the more persistent over the less persistent motive; it would give no account at all of the reason why we should prefer one of two equally persistent motives, one (say) purely intellectual, one of sympathy,—one, the desire to know, the other, the desire to serve, of which we might regard the former as, if anything, the more independent of all temporary conditions, since it would apply to all conceivable states of individual life, while the beneficent motive applies only to states of social existence, and yet the con- science would generally sanction the latter, unless it could justify the purely intellectual motive by a subsequent store of beneficent results. Again, it does not in the least explain why the sympathetic motive is the more persistent. Suppose the conflict to have been between the satisfaction of a man's own hunger and the exactly equal hunger of a friend,—both equally temporary states and equally certain to pass away. Why should regret for having gratified my own appetite instead of his (now also gratified) be felt? The reason why I forgot my own want after it is satisfied, and do not forget his after it is also satisfied, can only be that there was some higher claim on me in the one rather than the other. There is nothing at all necessarily more 'enduring' in the claim of a friend's hunger (long ago satisfied) on me, than there is in the claim of my own hunger (long ago satisfied) on me, unless I had at the time some imperious intimation that a self-sacrifice was right. Mr. Darwin's assumption that the social instinct is permanent and the selfish one temporary, is the assumption of a real moral discrimination in another form. There is no conceivable reason why I should subsequently regret my own temporary suffering from past hunger less than that of my neighbour, unless there is a reason why at the moment I ought to prefer one to the other.

This is a minute criticism, but it touches, we think, the only real fault of Mr. Darwin's philosophy—that he conceives 'evolutions' less as the history of progressive additions to the lower forms of life, than as explaining what is really the equivalent of the past state, and could not have helped coining out of it. The conscience can never be got out of a mere conflict of motives, for it is a conflict, and something more,—a conflict with something to tell how the conflict 'ought' to end. The theory of evolution will, as far as we can see, be proved to be really true, in the sense that man is the lineal descendant of animals far his inferior in physical and intellectual nature, and with hardly more than the merest rudiments of his moral nature; but 'evolution' will never explain more than the method how, after little, came more, and then much. It cannot show that much came out of the less, the less out of little, and little out of nothing.