

hidden paths, its love of truth and reality in religion as well as in everyday life, was bound to revolt against a system which kept men as children in leading-strings, which repressed thought and stifled discussion, and would, if it were possible, prevent the world from either acquiring knowledge or governing itself. The ideal of the Roman Church, an ideal which is commending itself to a numerous party in England to-day, is the lordship of a hierarchy culminating in a single individual, a representative of God on earth, governing autocratically, claiming a jurisdiction over the souls, minds, and bodies of men, entering into possession of every field of action, political, intellectual, and religious—in short, a world in chains. This may be an ideal that suits some of the races on the face of the globe, but that it will ever be realised in the case of the Anglo-Saxon race is an unthinkable proposition. Englishmen must and will be free. Neither kings nor popes could avail to curtail their liberties, and it is not conceivable that in the twentieth century they should suffer themselves to be again deprived of them by a system which, even if it disguise itself by a different name, is the old enemy still. Men cannot fail to see that while clericalism is an enemy to political and national freedom, formalism and a hollow meaningless ceremonial are also enemies of that true religion which, we are sure, our opponents equally with ourselves desire to see reigning in the hearts of men.

CORNELIA WIMBORNE.

THE MORALITY OF NATURE

I

THE work of Darwin was not limited to biology only. Already in 1837, when he had just written a rough outline of his theory of the origin of species, he entered in his note-book this significant remark: 'My theory will lead to a new philosophy.' And so it did in reality. The application which he made of the idea of evolution to the whole of organic life marked a new era in philosophy;¹ and it led him later on to write a sketch of the development of the moral sense, which opened a new page in ethics. In this sketch so much was done to throw a new light upon the true and efficient cause of the moral feelings, and place the whole of ethics on a scientific basis, that although Darwin's leading ideas may be considered as a further development of those of Shaftesbury and Hutcheson, his work represents, nevertheless, a new departure, on the lines faintly indicated by Bacon. It secured, therefore, for its author a place by the side of the other founders of ethical schools, such as Hume, Hobbes, or Kant.

The leading ideas of Darwin's ethics may easily be summed up. In the very first sentences of his essay he states his object in quite definite terms. He begins with a praise of the sense of duty, which he characterises in the well-known poetical words of Kant: 'Duty! Wondrous thought that workest neither by fond insinuation, flattery, nor by any threat . . . ' &c. And he undertakes to explain this sense of duty, or moral conscience, 'exclusively from the side of natural history'—an explanation, he adds, which no English writer had hitherto attempted to give.² That the moral sense should be acquired by each individual separately, during its lifetime, he naturally considers 'at least extremely improbable on the general theory of evolution'; and he derives this sense from the

¹ In his *History of Modern Philosophy* the Danish professor, Harald Høffding, gives an admirable sketch of the philosophical importance of Darwin's work. *Geschichte der neueren Philosophie*, German translation by F. Bendixen (Leipzig, 1896), vol. ii. pp. 487 sq.

² *The Descent of Man*, chap. iv. pp. 148 sq. All quotations after the last (cheap) edition of Mr. Murray, 1901.

social feelings which are instinctive or innate in the lower animals, and probably in man as well (pp. 150-151). The origin and the very foundation of all moral feelings Darwin sees 'in the social instincts which lead the animal to take pleasure in the society of its fellows, to feel a certain amount of sympathy with them, and to perform various services for them'; sympathy being understood here in its proper sense—not as a feeling of commiseration or love, but as a 'fellow-feeling' or 'mutual sensibility'; the fact of being influenced by another's feelings.

This being Darwin's first proposition, his second is that as soon as the mental faculties of a species become highly developed, as they are in man, the social instinct will necessarily lead, as every other unsatisfied instinct does, to a sense of dissatisfaction, or even misery, as often as the individual, reasoning about its past actions, sees that in some of them 'the enduring and always present social instinct had yielded to some other instinct, at the time stronger, but neither enduring nor leaving behind it a very vivid impression.' For Darwin the moral sense is thus not the mysterious gift of unknown origin which it was for Kant. 'Any animal whatever,' he says, 'endowed with well-marked social instincts, the parental and filial affections being here included, would inevitably acquire a moral sense, or conscience [Kant's "knowledge of duty"], as soon as its intellectual powers had become as well, or nearly as well, developed as in man' (ch. iv. pp. 149-150).

To these two fundamental propositions Darwin adds two secondary ones. After the power of language had been acquired, and the wishes of the community could be expressed, 'the common opinion how each member ought to act for the public good would naturally become, in a paramount degree, the guide of action.' However, the effect of public approbation and disapprobation depends entirely upon the development of mutual sympathy. It is because we feel in sympathy with others that we appreciate their opinions; and public opinion acts in a moral direction only where the social instinct is sufficiently strongly developed. This is evidently an important remark, because it refutes those theories of Mandeville and his more or less outspoken eighteenth-century followers, which represented morality as nothing but a set of *conventional* manners. Finally, Darwin mentions habit as a potent factor for framing our conduct. It strengthens the social instinct and mutual sympathy, as also obedience to the judgment of the community.

Having thus stated the substance of his views in four definite propositions, Darwin gives them some further developments. He examines, first, sociability in animals, their love of society, and the misery which every one of them feels if it is left alone; their continual intercourse; their mutual warnings, and the services they render each other in hunting and for self-defence. 'It is certain,

he says, 'that associated animals have a feeling of love for each other which is not felt by non-social adult animals.' They may not much sympathise with each other's pleasures, but cases of sympathy with each other's distress or danger are quite common, and Darwin quotes a few of the most striking instances. Some of them, such as Saintsbury's blind pelican or the blind rat, both of which were fed by their congeners, have become classical by this time, while several similar illustrations have been added since. 'Moreover, beside love and sympathy,' Darwin continues, 'animals exhibit other qualities connected with social instincts which in us would be called moral,' and he gives a few examples of moral self-restraint in dogs and elephants. Altogether, it is evident that every action in common—and with certain animals it is quite habitual—requires some restraint of the same sort. However, it must be said that Darwin did not treat the subject of sociability in animals and their incipient moral feelings with all the developments which it deserved, in view of the central position which it occupies in his theory of morality.

Considering next human morality, Darwin remarks that although man, such as he now exists, has but few special instincts, he nevertheless is a sociable being who must have retained from an extremely remote period some degree of instinctive love and sympathy for his fellows. These feelings act as an impulsive instinct, which is assisted by reason, experience, and the desire of approbation. 'Thus the social instincts, which must have been acquired by man in a very rude state, and probably even by his ape-like progenitors, still give the impulse for some of his best actions.' The remainder is the result of a steadily growing intelligence and collective education.

It is evident that these views are correct only if we are ready to recognise that the intellectual faculties of animals differ from those of man in degree, but not in their essence. But this is admitted now by most students of comparative psychology; and the attempts which have been made lately to establish 'a gulf' between the instincts and the intellectual faculties of man and those of animals have not attained their end.³ However, it does not follow from this resemblance that the moral instincts developed in different

³ The incapacity of an ant, a dog, or a cat to make a *discovery*, or to hit upon the correct solution of a difficulty, are not proofs of an essential difference between the intelligence of man and that of these animals, because the same want of inventiveness is continually met with in men as well. Like the ant in one of Lubbock's experiments, thousands of men who had not been already familiar with bridges would spend their forces in the effort of crossing a brook, or a ravine, before they would try to bridge it. And, on the other hand, the collective intelligence of an ant's nest or a beehive—one individual in the thousand hitting upon the correct solution, and the others imitating it—solves difficulties much greater than those upon which the individual ant, or bee, or cat has so ludicrously failed. The bees at the Paris Exhibition, and their devices to prevent being disturbed in their work, or any one of the well-known facts of inventiveness among the bees, the ants, the wolves hunting together, are instances in point.

species, and the less so in species belonging to two different classes of animals, should be identical. If we compare insects with mammals, we must never forget that the lines of their development have diverged at a very early period of animal evolution. The consequence was that a deep physiological differentiation between separate portions of the same species took place with the ants, the bees, the wasps, &c., corresponding to a permanent physiological division of labour between their females, their males, and their workers—a division of which there is no trace among mammals. Therefore it seems almost impossible to ask men to judge of the morality of the worker-bees when they kill the males in their hive; and this is why the illustration of Darwin to this effect met with so much hostile criticism. And yet the moral conceptions of man and the actions of insects have so much in common that the greatest ethical teachers of mankind did not hesitate to recommend certain features of the ants and the bees for imitation by man. Their devotion to the group is certainly not surpassed by ours; and, on the other hand—to say nothing of our race wars, or of the occasional exterminations of religious dissidents and political adversaries—the human code of morality has undergone such variations in the course of time as to pass from the exposure of children by savages in years of scarcity, and the ‘wound-for-wound and life-for-life’ principle of the Decalogue, to the profound respect of everything that lives preached by Bodisatta and the pardon of offences practised by the early Christians. We are thus bound to conclude that while the differences between the morality of the bee and that of man are due to a deep physiological divergence, the striking similarities between the two point, nevertheless, to a community of origin.

The social instinct is thus, in Darwin’s opinion, the common stock, out of which all morality originates; and he further analyses this instinct. Unfortunately, scientific animal psychology is still in its infancy, and therefore it is extremely difficult to disentangle the complex relations which exist between the social instinct, properly so called, and the parental and filial instincts, as well as several other instincts and faculties, such as sympathy, reason, experience, and a tendency to imitation (p. 163). Darwin felt this difficulty very much, and therefore he expressed himself extremely cautiously. The parental and filial instincts, he suggested, ‘apparently lie at the base of the social instincts’; and in another place he wrote: ‘The feeling of pleasure from society is probably an extension of the parental or filial affections, since the social instinct seems to be developed by the young remaining for a long time with their parents’ (p. 161).

This caution was fully justified, because in other places he pointed out that the social instinct must be a *separate instinct in itself*, different from the others—an instinct which has been developed by natural

selection *for its own sake*, as it was useful for the well-being and the preservation of the species. It is so fundamental that when it runs against another instinct, even one so strong as the attachment of the parents to their offspring, it often takes the upper hand. Birds, when the time has come for their autumn migration, will leave behind their tender young, not yet old enough for a prolonged flight, and follow their comrades (pp. 164–165).

To this striking illustration I may also add that the social instinct is strongly developed with many lower animals, such as the land-crabs, or the Molucca crab⁴; as also with certain fishes, with whom it hardly could be considered as an extension of the filial or parental feelings. In these cases it appears rather as an extension of the *brotherly* or *sisterly* relations, or feelings of *comradeship*, which probably develop each time that a considerable number of young animals, having been hatched at a given place and at a given moment, continue to live together—whether they are with their parents or not. It would seem, therefore, more correct to consider the social and the parental instincts as *two* closely connected instincts, of which the former is perhaps the earlier, and therefore the stronger, and which both go hand in hand in the evolution of the animal world. Both are favoured by natural selection, which, as soon as they come into conflict, keeps the balance between the two, for the ultimate good of the species.⁵

The most important point in the ethical theory of Darwin is, of course, his explanation of the moral conscience of man and his sense of remorse and duty. This point has always been the stumbling-block of all ethical theories. Kant, as is known, utterly failed, in his otherwise so beautifully written work on morality, to establish why his ‘categorical imperative’ should be obeyed at all, unless such be the will of a supreme power. We may admit that Kant’s ‘moral law,’ if we slightly alter its formula, while we maintain its spirit, is a *necessary* conclusion of the human reason. We certainly object to the metaphysical form which Kant gave it; but, after all, its substance is equity, justice. And, if we translate the metaphysical language of Kant into the concrete language of inductive science, we may find points of contact between his conception of the origin of the moral law and the naturalist’s view concerning the development of the moral sense. But this is only one-half of the problem. Supposing, for the sake of argument, that ‘pure reason,’ free from all

⁴ *Mutual Aid*, 1903, pp. 11 and 12.

⁵ In an excellent analysis of the social feeling (*Animal Behaviour*, 1900, pp. 231–232) Professor Lloyd Morgan says: ‘And this question Prince Kropotkin, in common with Darwin and Espinas, would probably answer without hesitation that the primeval germ of the social community lay in the prolonged coherence of the group of parents and offspring.’ I should only add the words: ‘*or of the offspring without the parents*,’ because this addition would better agree with the above facts, while it also more correctly renders the idea of Darwin.

observation, all feeling, and all instinct, in virtue of its inherent properties, should necessarily come to formulate a law of justice similar to Kant's imperative, and granting that no reasoning being could ever come to any other conclusion, because such are the inherent properties of *reason*—granting all this, and fully recognising at the same time the elevating character of Kant's moral philosophy, the great question of all ethics remains, nevertheless, in full: 'Why should man obey the moral law, or principle, formulated by his reason?' Or, at least, 'Whence that feeling of obligation which men are experiencing?'

Several critics of Kant's ethical philosophy have already pointed out that it left this great fundamental question unsolved. But they might have added also that Kant himself had recognised his incapacity of solving it. After having thought intensely upon this subject, and written about it for four years, he acknowledged in his *Philosophical Theory of Religion* (Part I., 'Of the Radical Evil of Human Nature,' published in 1792) that he was unable to find the origin of the moral law. In fact, he gave up the whole problem by recognising 'the incomprehensibility of this capacity, a capacity which proclaims a divine origin'—this very incomprehensibility having to rouse man's spirit to enthusiasm and to strengthen it for any sacrifices which respect to his duty may impose upon him.⁶

Intuitive philosophy having thus acknowledged its incapacity to solve the problem, let us see how Darwin solved it from the point of view of the naturalist. Here is, he said, a man who has yielded to a strong sense of self-preservation, and has not risked his life to save that of a fellow-creature; or, he has stolen food from hunger. In both cases he has obeyed a quite natural instinct, and the question is—Why should he feel miserable at all? Why should he think that he ought to have obeyed some other instinct, and acted differently? Because, Darwin replies, in human nature 'the more enduring social instincts conquer the less persistent instincts.' Moral conscience has always a retrospective character; it speaks in us when we think of our past actions; and it is the result of a struggle, during which the less persistent, the less permanent *individual* instinct yields before the more permanently present and the more enduring *social* instinct. With those animals which always live in society 'the social instincts are ever present and persistent' (p. 171). Such animals are always ready to join in the defence of the group and to aid each other in different ways. They feel miserable if they are separated from the others. And it is the same with man. 'A man who possessed no trace of such instincts would be a monster' (p. 162). On the other hand, the desire which leads a man to satisfy his hunger or

⁶ Hartleben's edition of Kant's works, vol. vi. pp. 143-144. English translation by Th. K. Abbott: *Kant's Critique of Practical Reason, and other Works*. London, 1879, pp. 425-427.

his anger, or to escape danger, or to appropriate somebody's possessions, is in its nature temporary. Its satisfaction is always weaker than the desire itself. And when we think of it in the past, we cannot recall it as vividly as it was before its satisfaction. Consequently, if a man, with a view of satisfying such a desire, has acted so as to traverse his social instinct, and afterwards reflects upon his action—which we continually do—he will be driven 'to make a comparison between the impressions of past hunger, vengeance satisfied, or danger shunned at other men's cost, with the almost ever-present instinct of sympathy, and with his early knowledge of what others consider as praiseworthy or blameable.' And once he has made this comparison he will feel 'as if he had been baulked in following a present instinct or habit, and this with all animals causes *dissatisfaction*, or even *misery*' (p. 173).

And then Darwin shows how the primary promptings of such a conscience, which always 'looks backwards, and serves as a guide for the future,' may take the aspect of shame, regret, repentance, or even violent remorse, if the feeling be supported by reflection about the judgment of those with whom man feels in sympathy. Later on, habit will necessarily increase the power of this conscience upon man's actions, while at the same time it will tend to harmonise more and more the desires and passions of the individual with his social sympathies and instincts (p. 177).⁷ Altogether, the great difficulty for ethical philosophy is to explain the first germs of the 'ought'—the appearance of the first whisper of the voice which pronounces that word. If that much has been explained, the accumulated experience of the community and its collective teachings will explain the rest.

We have thus, for the first time, an explanation of the sense of duty on a natural basis. True, that it runs counter to the ideas that are current now about animal and human nature; but it is correct. Nearly all ethical writers have hitherto started with the unproved postulate that the strongest of all the instincts of man, and the more so of animals, is the *self-preservation instinct*, which, owing to a certain looseness of their terminology, they have identified, in man, with self-assertion, or egoism properly speaking. This instinct, which they conceived as including, on the one side, such primary impulses as self-defence, self-preservation, and the very act of satisfying hunger,

⁷ In a footnote Darwin, with his usual deep insight, makes, however, one exception. 'Enmity, or hatred,' he remarks, 'seems also to be a highly persistent feeling, perhaps more so than any other that can be named. . . . This feeling would thus seem to be innate, and is certainly a most persistent one. It seems to be the complement and converse of the true social instinct' (Footnote 27). This feeling, so deeply seated in animal nature, evidently explains the bitter wars that are fought between different tribes, or groups, in several animal species and among men. It explains also the existence of two different codes of morality retained till now among civilised nations. But this important and yet neglected subject can better be treated in connection with the development of the idea of justice.

and, on the other side, such derivative feelings as the longing for domination, greed, hatred, the desire of revenge, and so on—this compound and heterogeneous aggregate of instincts and feelings they represented as an all-pervading and all-powerful force, which finds no contradiction in animal and human nature, excepting in a certain feeling of benevolence or mercy. The consequence of such a view was that, *once human nature was recognised as such*, there obviously remained nothing but to lay a special stress upon the softening influence of those moral teachers who appealed to mercy, borrowing the spirit of their teachings and the impressiveness of their words from a world that lies outside nature—outside and above the world which is accessible to our senses. And if one refused to accept this view, the only alternate issue was to attribute, as Hobbes and his followers did, a special importance to the coercive action of the State, inspired by genial lawgivers—which meant, of course, merely to shift the extra-natural inspiration from the religious preacher to the law-maker.

Beginning with the Middle Ages, the founders of ethical schools, for the most part ignorant of nature, to the study of which they preferred metaphysics, had represented the self-assertive instincts of the individual as the very condition of its physical existence. To obey their promptings was considered as *the law of nature*, the neglect of which would lead to a sure defeat and to the ultimate disappearance of the species. Therefore, to combat these egotistic promptings was possible only if man called to his aid the supernatural forces. The triumph of moral principles was thus represented as *a triumph of man over nature*, which he may hope to achieve only with an aid from without, coming as a reward for his humility. They told us, for instance, that there is no greater *virtue*, no greater triumph of the spiritual over the natural, than self-sacrifice for the welfare of our fellow-men. But the fact is that self-sacrifice in the interest of an ants' nest, for the safety of a group of birds, or the security of a drove of cattle, a herd of antelopes, or a band of monkeys, is *a zoological fact of everyday occurrence in Nature*—a fact for which hundreds upon hundreds of animal species require nothing else but natural sympathy with their fellow-creatures, the sensation of full vital energy, and a constant habit of mutual aid. Darwin, who *knew* nature, had the courage boldly to assert that of the two instincts—the social and the individual—it is the former which is the stronger, the more persistent, and the more permanently present. And he was right. The instinct of mutual aid pervades the animal world, because natural selection works for maintaining and further developing it, and pitilessly destroys those species which lose it: In the great struggle for life which every animal species carries on against the hostile agencies of climate, surroundings, and natural enemies, big and small, those species which most consistently carry

out the principle of mutual support have the best chance to survive, while the others die out. And the same great principle is confirmed by the history of mankind.

It is most remarkable that in representing the social instinct under this aspect we return, in fact, to what Bacon, the great founder of inductive science, had perceived. In his programme of the work to be done by the next generations with the aid of the inductive method, in *The Great Instauration*, he wrote :

All things are endued with an appetite for two kinds of good—the one as a thing is a whole in itself, the other as it is a part of some greater whole; and *this latter is more worthy and more powerful than the other, as it tends to the conservation of a more ample form*. The first may be called individual, or self-good, and the latter, good of communion. . . . And thus it generally happens that the conservation of the more general form regulates the appetites.*

It may be asked, of course, whether such a conception agrees with the theory of natural selection, according to which struggle for life, within the species, was considered a necessary condition for the appearance of new species, and for evolution altogether? Having already touched elsewhere upon this question, I will not enter here into its discussion, and will only add the following remark. Immediately after the appearance of Darwin's work on the origin of species we were all inclined to believe that an acute struggle for the means of existence between the members of the same species was necessary for accentuating the variations, and for the development of new species. But the deeper we go into the study of the facts of nature, and realise the *direct* influence of the surroundings for producing *variation in a definite direction*, as also the influence of isolation upon portions of the species separated from the main body in consequence of their migrations, we are prepared to understand 'struggle for life' in a much wider and deeper sense. We see more and more *the group of animals*, acting as a whole, carrying on the struggle against adverse conditions, or against some such an enemy as a kindred species, by means of mutual support within the group, and thus acquiring habits which reduce the struggle, while they lead at the same time to a higher development of intelligence amongst those who took to mutual support. The above objection falls through in proportion as we advance in our knowledge of the struggle for life.

Nature has thus to be recognised as *the first ethical teacher of man*.

* *On the Dignity and Advancement of Learning*, Book VII. chap. i. (p. 270 of J. Devey's edition in Bohn's Library). We certainly find Bacon's *arguments* in favour of this idea insufficient; but he was only establishing the outlines of a science, which had to be worked out by his followers. In another place he returns to the same idea. He speaks of 'two appetites [instincts] of the creatures,' (1) that of self-preservation and defence, and (2) that of multiplying and propagating, and he adds: 'The latter, which is active, seems *stronger* and more worthy than the former, which is passive.'

The social instinct, innate in men as well as it is in all the sociable animals, is the origin of all ethical conceptions and all the subsequent ethical development.

II

The starting-point for a work on ethics, from the evolution point of view, was thus given by Darwin. Taking the social instinct as a basis for the further development of moral feelings, we had, first, to consolidate that basis, and then to build upon it the whole structure of ethics. Such a work, however, has not yet been carried out; those evolutionists who dealt with the question of morality having mostly followed, for one reason or another, the lines of pre-Darwinian ethical thought, but not those which were indicated—perhaps too briefly—in *The Descent of Man*.

This applies, as is known, to Herbert Spencer. It would certainly be out of place here to discuss his ethics as a whole, the more so as it contains portions of great value, which could not be dealt with incidentally. But it is only the more necessary to mention that the ethical philosophy of Spencer was constructed on a different plan. The ethical and sociological portions of his *Synthetic Philosophy* were worked out, in the main, long before the appearance of Darwin's essay on the moral sense, under the influence, partly of Auguste Comte, and partly of Bentham's utilitarianism and the eighteenth-century sensualists.⁹ It is only in the first chapters of *Justice* (published in this Review in March and April 1890) that we find in Spencer's work a reference to 'animal ethics' and 'sub-human justice,' to which Darwin had attributed such an importance for the development of the moral sense in man. However, this reference stands in no organic connection with the rest of Spencer's ethics, because he does not consider primitive men as sociable beings whose societies would have been a continuation of the animal clans and tribes. Remaining true to Hobbes, he considers them as loose aggregations of individuals, continually fighting each other, and emerging from this chaotic state only after some superior men had imposed social bonds upon

⁹ Spencer's *Data of Ethics* appeared in 1879, and his *Justice* in 1891; that is, long after Darwin's *Descent of Man*, which was published in 1871. But his *Social Statics* had already appeared in 1850. Spencer was, of course, quite right to insist upon the differences between his philosophical conceptions and those of Auguste Comte; but the influence upon him of the founder of Positivism is undeniable, notwithstanding the deep contrast between the minds of the two philosophers. To realise the influence of Comte it would be sufficient to compare Spencer's views on biology with those of the French philosopher, especially as they are expressed in chap. iii. of *Discours préliminaire*, in vol. i. of *Politique positive*. In ethics, the influence of Comte is especially apparent in the importance attributed by Spencer to the distinction between the 'militant' and the 'industrial' stages of mankind, and the opposition between 'egoism' and 'altruism.' This last word is used in the too wide, and therefore indefinite, sense in which it was used by Comte when he had first coined it.

them. The chapters on animal ethics are thus a superstructure in Spencer's ethical system. The moral sense of man is not a further development of the social feelings which existed amongst his remotest prehuman ancestors. It made its appearance at a much later epoch, originating from those restraints which were imposed upon men by their political, social, and religious authorities (*Data*, § 45). The sense of duty, as Bain had suggested after Hobbes, is a product, or rather 'a reminiscence,' of the coercion which was exercised at the early stages of mankind by its temporary leaders.

This admission—which, by the way, it would be difficult to support by modern investigation—puts its stamp upon all the further developments of Spencer's ethics. The history of mankind is divided into two stages: the 'militant,' which has prevailed till now, and the 'industrial,' which is slowly coming in at the present time, and both of which require their own special morality. Under the militant stage coercion was more than necessary: it was the very condition of progress. It was also necessary during that stage that the individual should be sacrificed to the community, and that a corresponding moral code should be elaborated. And this double necessity of coercion and sacrifice of the individual must continue to exist so long as the industrial state has not entirely taken the place of the militant state. Two different kinds of ethics, appropriated to these two different states, are thus admitted (*Data*, §§ 48-50), and such an admission leads to many conclusions which stand or fall with it. Moral science appears, therefore, as the search for a compromise between a code of enmity and a code of amity—between equality and inequality (§ 25). And as there is no issue out of that conflict—because the coming of the industrial state will only be possible after the cessation of the conflict—there remains nothing to be done but to add a certain benevolence (some, but not too much) to the strictly individualistic principles which Spencer considers the embodiment of retributive justice. Therefore all his attempts to establish a standard of morality necessarily fail, and he finally comes to the unexpected conclusion that all the moral systems, philosophical and religious, complete each other; while Darwin's idea was, on the contrary, that sociability and the power of the social instinct are the common stock, out of which all systems and teachings of morality, including the ethical portions of the different religions, have originated.

It may be added, in conclusion, that although Spencer's conception of the struggle between egoism and altruism bears a great resemblance to Comte's treatment of this subject, the views of the Positivist philosopher concerning the social instinct—notwithstanding all his opposition to the transmutation of species—were nearer to the above-mentioned views of Darwin than to those of Spencer. Discussing the relative value of the two sets of instincts, social and

individual, Comte did not hesitate to recognise the preponderance of the former. He even saw in the recognition of this preponderance of the social instinct the distinctive feature of a moral philosophy which had broken with theology and metaphysics.¹⁰

As already said, none of the immediate followers of Darwin ventured to further develop his ethical philosophy. George Romanes probably would have made an exception, because he proposed, after he had studied animal intelligence, to discuss animal ethics and the probable genesis of the moral sense; for which purpose he was already collecting the materials.¹¹ Unfortunately, we lost him before he had sufficiently advanced in his work. As to the other evolutionists, they either adopted views in ethics very different from those of Darwin—such was the case of Huxley in his lecture, 'Evolution and Ethics'—or they worked on quite independent lines, after having taken the central idea of evolution as a basis. Such is the moral philosophy of Marc Guyau,¹² which deals mainly with the higher aspects of morality without discussing the ethics of animals.¹³ This is why I thought necessary to discuss the subject anew in a work, *Mutual Aid: a Factor of Evolution*, in which the effect of the mutual aid instincts and habits was analysed as a factor of progressive evolution, both in the animal world and in human history. The same social habits of animals have to be analysed now from the double point of view of the ethical inclinations which our primitive ancestors have inherited from the prehuman stage, and the ethical lessons which they gained later on from the observation of nature; and I must, therefore, ask the reader's indulgence if I briefly allude here to facts already mentioned in my mutual aid studies. Sociability in animals has a double significance, and therefore has to be considered under a double aspect. It is the weapon to which the group resorts in its struggle for existence, and as such it interests the naturalist. And it is the stock from which the ethical feelings of man have sprung, and as such it offers the deepest interest for the ethical philosopher. From this last point of view we have to analyse it now.

¹⁰ 'Positive morality thus differs, not only from metaphysical, but also from theological morality, in taking for a universal principle the direct preponderance of the social feelings' (*Politique positive, Discours préliminaire*, 2nd part, p. 93, and in several other places). Unfortunately, the flashes of genius which one finds scattered throughout the *Discours préliminaire* are often obscured by Comte's ideas of his later period, which hardly could be described as a development of the positive method.

¹¹ He mentions it in his *Mental Evolution in Animals* (London, 1883, p. 352).

¹² *A Sketch of Morality*; English translation by Mrs. G. Kapteyn, London, 1898 (Watts).

¹³ The work of Professor Lloyd Morgan, who has lately rewritten his earlier book on animal intelligence under the new title of *Animal Behaviour* (London, 1900), is not yet terminated, and can only be mentioned as promising to give us a new and full treatment of the subject, especially from the point of view of comparative psychology. Other works dealing with the same subject, or having a bearing upon it, and of which *Les Sociétés animales*, by Espinas, deserves special mention, are enumerated in the preface of my work on mutual aid.

III

Primitive man lived in close intimacy with animals. With some of them he probably shared the shelters under the rocks; occasionally the caverns, and very often food. Not more than a hundred years ago the natives of Siberia and America astonished our naturalists by their thorough knowledge of the habits of the most retiring beasts and birds; but primitive man stood in still closer relations to the animals, and knew them still better. The wholesale extermination of life by means of forest and prairie fires; poisoned arrows, and the like, had not yet begun; and from the bewildering abundance of animal life which was found by the white settlers when they first took possession of the American continent we may judge of the density of the animal population during the early Post-glacial period. Palæolithic and neolithic man lived closely surrounded by his dumb brothers—just as the shipwrecked crew of Behring lived amidst the multitudes of polar foxes, which were prowling in the midst of their encampments and gnawing at night at the very furs upon which the men were sleeping. Our primitive ancestors lived *with* the animals, in the midst of them. And as soon as they began to bring some order into their observations of nature, and to transmit them to posterity, the animals and their life supplied them with the chief materials for their unwritten encyclopædia of knowledge, as well as for their wisdom, which they expressed in proverbs and sayings. Animal psychology was the first psychology which man was aware of—it is still a favourite subject of talk at the camp fires; and animal life, closely interwoven with that of man, was the subject of the very first rudiments of art, inspiring the first engravers and sculptors, and entering into the composition of the most ancient epical traditions and cosmogonic myths.

The first thing which our children learn in natural history is something about the beasts of prey—the lions and the tigers. But the first thing which primitive savages must have learned about nature was that it represents a vast agglomeration of animal clans and tribes: the ape tribe, so nearly related to man, the ever-prowling wolf tribe, the knowing, chattering bird tribe, the ever-busy insect tribe, and so on. For them the animals were an extension of their own kin—only so much wiser than themselves. And the first vague generalisation which men must have made about nature—so vague as to hardly differ from a mere impression—was that the living being and his clan or tribe are inseparable. *We* can separate them—they could not; and it seems even doubtful whether they could *think* of life otherwise than within a clan or a tribe.

Such an impression of nature was unavoidable. Among his nearest congeners—the monkeys and the apes—man saw hundreds of species living in large societies, united together within each group by

the closest bonds. He saw how they supported each other during their foraging expeditions, how they combined against their common enemies, and rendered each other all sorts of small services, such as the picking of thorns from each other's fur, the nestling together in cold weather, and so on. Of course they often quarrelled; but there was more noise in these quarrels than serious harm, and at times, in case of danger, they displayed the most striking mutual attachment; to say nothing of the strong devotion of the mothers to their young ones, which they have in common with all the animals. Sociability was thus the rule with the monkey tribe; and if there are now two species of big apes, the gorilla and the orang-utang, which are not sociable, and keep in small families only, the very limited sizes of the areas they inhabit are a proof of their being now decaying species—decaying, perhaps, on account of the merciless war which men have waged against them in consequence of the very resemblance between the two species.¹⁴

Primitive man saw, next, that even among the carnivorous beasts, which live by killing other animals, there is one general and invariable rule: *They never kill each other.* Some of them are very sociable—such are all the dog tribe: the jackals, the dholes or kholzun dogs, the hyænas. Some others prefer to live in small families; but even among these last the more intelligent ones—the lions and the leopards—occasionally join together for hunting, like the dog tribe. And as to those few which lead—nowadays, at least—a quite solitary life in small families, so that even the females with their cubs will often keep separate from the males, the same general rule of nature prevails among them: they do not kill each other. Even now, when the myriads of ruminants which formerly peopled the prairies have been exterminated, and the tigers live mainly on man's herds, and are compelled, therefore, to keep close to the villages, everyone to its own domain—even now the natives of India will tell us that somehow the tigers manage to keep to their separate domains without fighting bloody internecine wars for securing them. Besides, it appears extremely probable that even those few animals which now lead a solitary existence—such as the tigers, the smaller species of the cat tribe (nearly all nocturnal), the bears, the genets, most weasels, the marten tribe, the hedgehog, and a few others—were not always solitary creatures. For some of them we have positive evidence that they remained sociable so long as they escaped extermination by man, and we have reason to believe that nearly all of them were in the same conditions in times past.¹⁵ But even if there always existed a few unsociable species, the fact is that man has always considered them an exception.

The lesson of nature was, thus, that even the strongest beasts are

¹⁴ Several African travellers speak of that enmity and signal its causes.

¹⁵ See *Mutual Aid*, chaps. i. and ii., and Appendix.

bound to combine. And that man who had witnessed once in his life an attack of wild dogs, or dholes, upon the biggest beasts of prey, certainly realised, once and for ever, the irresistible force of the tribal unions, and the confidence and courage with which they inspire every individual. Man made divinities of these dogs, and worshipped them, trying by all sorts of magic to acquire their courage.

In the prairies and the woods our earliest ancestors saw myriads of animals, all living in clans and tribes. Countless herds of red-deer, fallow deer, reindeer, gazelles and antelopes, thousands of droves of buffaloes and legions of wild horses, wild donkeys, quaggas, zebras, and so on, were moving over the boundless plains, peacefully grazing side by side. Even the dreary plateaus had their herds of llamas and wild camels. And when man approached these animals, he soon realised how closely connected all these beings were in their respective droves or herds. Even when they seemed fully absorbed in grazing, and apparently took no notice of the others, they closely watched each other's movements, always ready to join in some common action. Man saw that all the deer tribe, whether they graze or merely gambol, always keep sentries, which never release their watchfulness and never are late to signal the approach of a beast of prey; he knew how, in case of a sudden attack, the males and the females would encircle their young ones and face the enemy, exposing their lives for the safety of the feeble ones; and how, even with such timid creatures as the antelopes, or the fallow deer, the old males would often sacrifice themselves in order to cover the retreat of the herd. Man knew all that, which we ignore or easily forget, and he repeated it in his tales, embellishing the acts of courage and self-sacrifice with his primitive poetry, or mimicking them in his religious tribal dances. Still less could he ignore the great migrations of animals, because he followed them—just as the Chukchi follows still the herds of the wild reindeer, when the clouds of mosquitoes drive them from one place of the Chukchi peninsula to another, or as the Lapp follows the herds of his half-domesticated reindeer in their wanderings, over which he has no control. And if we, with all our book-learning, feel unable to understand how animals scattered over a wide territory can warn each other so as to bring their thousands to a given spot before they begin their march north, south, or west, our ancestors, who considered the animals as beings so much wiser than themselves, saw no difficulty in explaining that intercourse. For them all animals—beasts, birds, and fishes alike—were in continual communication, warning each other by means of hardly perceptible signs or sounds, informing one another about all sorts of events, and thus constituting one vast community, which had its own habits and rules of propriety and good behaviour. Even to-day deep traces of that conception of nature survive in the folklore of all nations.

From the populous, animated, and gay villages of the marmots, the prairie dogs, the jerboas, the hamsters, and so on, and from the colonies of that silent sage, the beaver, with which the Post-glacial rivers were thickly studded, primitive man, who himself had begun as a nomad forest-dweller, could learn the advantages of settled life, permanent dwellings, and labour in common. Even now we can see how the nomad cattle-breeders of Mongolia, whose improvidence is phenomenal, learn from the striped marmot (*Tamias striatus*) the advantages of agriculture and foresight when they plunder quite regularly every autumn the underground galleries of this rodent, and seize its provisions of eatable bulbs. The granaries of many smaller rodents, full of all sorts of eatable seeds, must have given man the first suggestion as to the culture of cereals. In fact, the sacred books of the East contain many an allusion to the foresight and laboriousness of the animals, which are set up as an example to man.

The birds, in their turn—almost every one of their species—gave our ancestors a lesson of the most intimate sociability, of the joys of social life, and its enormous advantages. It certainly did not escape the attention of man that, even among the birds of prey, many species of falcons are extremely sociable, and that even some eagles combine for hunting; while the flocks of kites will sometimes chase the strongest eagle and get hold of its spoil. And they saw, of course, many a time, how the smallest birds, if they are numerous enough, overcome their first terror at the sight of a hawk, and chase it, immensely enjoying this kind of sport.

The nesting associations of aquatic birds, and their unanimity in defending their young broods and eggs, were well known to man. He knew that as soon as he approached the shore of a lake where thousands of birds belonging to different species were nesting, his appearance would be signalled at once; how, the moment he would set his foot upon their grounds, hundreds of birds would circle and fly round him, skim over his face, bewilder him by the flapping of their wings, deafen him by their cries, and often compel him to retreat. Man knew this only too well, for his very existence in the early summer depended upon his capacity to resist such a combined attack of the winged tribe. And then the joy of life in the autumn societies of the bird-youngsters was certainly familiar to people who themselves lived in the woods and by the side of the forest brooks. Who knows if the very idea of wide tribal unions, or, at least, of those great tribal hunts (*abà* with the Mongols, *kadà* with the Tunguses), which are real *fêtes*, lasting a couple of months every autumn, was not suggested by such autumn gatherings of the birds, in which so many widely different species join together, spending a few hours every day in providing their food, and then chattering and fluttering about the remainder of the time?

Man knew also, of course, the gay play of animals, the sports in which several species delight, the concerts and dances of some others; the flights which certain species perform in the evenings, sometimes with a wonderful art and elaboration; the noisy meetings which are held by the swallows and other migrating birds, for years in succession, on the same spot, before they start on their long journeys south. And how often man must have stood in bewilderment as he saw the immense migrating columns of birds passing over his head for many hours in succession. The 'brute savage' knew and meditated on all these beauties of nature, which we have forgotten in our towns, and which we do not even find in our 'natural history' books, compiled for teaching anything but life; while the narratives of the great explorers—the Humboldts, the Audubons, the Azaras, the Brehms, of which every page was a picture of the real life of nature, are mouldering in our libraries.

In those times the wide world of the running waters and lakes was not a sealed book for man. He was familiar with its inhabitants as well. Even now many semi-savage natives of Africa and Polynesia profess a deep reverence for the crocodile. They consider him a near relative to man—a sort of ancestor. They even avoid naming him in their conversations, and if they must mention him they will say 'the old grandfather,' or use some other word expressing kinship and veneration. The crocodile, they maintain, acts exactly as they themselves do. He will never finally swallow his prey without having invited his relatives and friends to share the food; and if one of his tribe has been killed by man, otherwise than in due and just blood revenge, he will take vengeance upon any one of the murderer's kin. Therefore, if a negro has been eaten by a crocodile, his tribe will take the greatest care to discover the real culprit, and when he has been discovered and killed, they will carefully examine his intestines, in order to make sure that there has been no mistake; but if no proof of the beast's guilt is forthcoming, they will make all sorts of expiatory amends to the crocodile tribe, in order to appease the relatives of the innocently slaughtered individual, and continue to search for the real culprit. Otherwise the kinsfolk of the former would take revenge. The same belief exists among the Red Indians concerning the rattlesnake and the wolf, and its bearing upon the subsequent development of the idea of justice is self-evident.

The fishes, their shoals, and the ways they play in the transparent waters, exploring them by their scouts before they move in a given direction, must have deeply impressed man from a remote antiquity. Traces of this impression are found in folklore in many parts of the globe. Thus, for instance, Dekanawideh, the legendary lawgiver of the Five Nations of the Red Indians, who is supposed to have given them the class organisation, is represented as having retired first to meditate in contact with nature. He 'reached the side of a smooth,

clear, running stream, transparent and full of fishes. He sat down, reclining on the sloping bank, gazing intent into the waters, watching the fishes playing about in complete harmony. . . . Thereupon he conceived the scheme of dividing his people into gentes and classes, or totems.¹⁶

Altogether, for the primitive savage, animals are mysterious, problematic beings, possessed of a wide knowledge of the things of nature. They know much more than they are ready to tell us. In some way or another, by the aid of senses much more refined than ours, and by telling to each other all that they notice in their rambles and flights, they know everything, for miles round. And if man has been 'just' towards them, they will warn him of a coming danger, as they warn each other; but they will take no heed of him if he has not been straightforward in his actions. Snakes and birds (the owl is a leader of the snakes), mammals and insects, lizards and fishes—all understand each other, and continually communicate their observations to one another. They all belong to one brotherhood, into which they may, in some cases, admit man.

Inside this vast brotherhood there are, of course, the still closer brotherhoods of beings 'of one blood.' The monkeys, the bears, the wolves, the elephants and the rhinoceroses, most ruminants, the hares and most of the rodents, the crocodiles, and so on, perfectly know their own kin, and they will not tolerate any one of their relatives to be slaughtered by man without taking, in one way or another, honest revenge. This conception must have had an extremely remote origin. It must have grown at a time when man had not yet become omnivorous (which, I am inclined to think, must have happened during the Glacial period), and had not yet begun to hunt animals for food. However, the same conception has been retained down to the present time. Even now, when a savage is hunting, he is bound to respect certain rules of propriety towards the animals, and he must perform certain expiatory ceremonies after his hunt. Most of these ceremonies are rigorously enacted, even nowadays in the savage clans, especially as regards those species which are considered the allies of man.

It is well known that two men belonging to two different clans or tribes can become brothers by mixing the blood of the two, obtained from small incisions made for that purpose. To enter into such a union was quite habitual in olden times, and we learn from the folklore of all nations, and especially the sagas, how religiously such a brotherhood was observed. But it was also quite habitual for man to enter into brotherhood with some animal. The tales continually mention it. An animal asks a hunter to spare it, and if the hunter accedes to the demand the two become brothers. And then the

¹⁶ J. Brant-Sero, 'Dekanawideh,' in *Man*, 1901, p. 166. In other legends the wise man of the tribe learns wisdom from the beaver, or the squirrel, or some bird.

monkey, the bear, the doe, the bird, the crocodile, or the bee—one of the sociable animals—will take all possible care of the man-brother in the critical circumstances of his life, sending his or her animal brothers of different tribes to warn him or help him out of a difficulty. And if the warning comes too late, or is misunderstood, and he loses his life, they all will try to bring him back to life, and if they fail they will take the due revenge, just as if the man had been one of their own kin.

When I journeyed in Siberia I was often struck, without understanding it, with the care which my Tungus or Mongol guide would take not to uselessly kill any animal. The fact is that *every life* is respected by a savage, or rather it was before he came in contact with Europeans. If he kills an animal, it is for food or for clothing; but he does not destroy life, as the whites do, for the mere excitement of the slaughter. True, the Red Indians have done that with the buffaloes; but it was only after they had been for a long time in contact with the whites, and had got from them the rifle and the quick-firing revolver. Of course, there are rascals among the animals—the hyæna, for instance, or the shrew-mouse, or the man-eating tiger; but these do not count: they are outlaws. As to the great animal world as a whole, savage children are taught to respect it and to see in it an extension of their own kin.

The idea of 'justice,' conceived at its origin as revenge, is thus connected with observations made on animals. But it appears extremely probable that the idea of reward for 'just' and 'unjust' treatment must also have originated, with primitive mankind, from the idea that animals take revenge if they have not been properly treated by man, and repay kindness by kindness. This idea is so deeply rooted in the minds of the savages all over the world that it may be considered as one of the most primitive conceptions of mankind. Extended from a few animals to all of them, it soon embodied the whole of nature—the trees and the forests, the rivers and the seas, the rocks and the mountains, which are all living. Gradually it grew to be a conception of the great whole, bound together by certain links of mutual support, which watches all the actions of the living beings, and, owing to that solidarity in the universe, undertakes the revenge of wrong deeds. It became the conception of the Eumenides and the Moirai of the Greeks, the Parcae of the Romans, and especially the Karma of the Hindoos. The Greek legend of the cranes of Ibikus, which links together man and birds, and countless Eastern legends are poetical embodiments of the same conception.

This is what primitive man saw in nature and learned from it. With our scholastic education, which has systematically ignored nature and has tried to explain its most common facts by metaphysical subtleties, we began to forget that lesson. But for our Stone Age ancestors sociability and mutual aid within the tribe must

have been a fact so general in nature, so habitual, and so common, that they certainly could not imagine life under another aspect. The conception of an isolated being is a later product of civilisation—an abstraction, which it took ages to develop in the human race. To a primitive man isolated life seems so strange, so much out of the usual course of nature, that when he sees a tiger, a badger, a shrew-mouse, or a kingfisher leading a solitary existence, or when he notices a tree that stands alone, far from the forest, he creates a legend to explain this strange occurrence. He makes no legends to explain life in societies, but he has one for every case of solitude. The hermit, if he is not a sage or a wizard, is in most cases an outcast of animal society. He has done something so contrary to the ordinary run of life that they have thrown him out. Very often he is a sorcerer, who has the command of all sorts of dangerous powers, and has something to do with the pestilential corpses which sow disease in the world. This is why he prowls at night, prosecuting his wicked designs under the cover of darkness. All other beings in nature are sociable, and human thought runs in this channel. Sociable life—that is, *we*, not *I*—is, in the eyes of primitive man, the normal form of life. *It is life itself.* Therefore 'We' must have been the normal form of thinking for primitive man: a 'category' of his understanding, as Kant might have said. And not even 'We,' which is still too personal, because it represents a multiplication of the 'I's,' but rather such expressions as 'the men of the beaver tribe,' 'the kangaroo men,' or 'the turtles.' This was the primitive form of thinking, which nature impressed upon the mind of man.

Here, in that identification, or, we might even say, in this absorption of the 'I' by the tribe, lies the root of all ethical thought. The self-asserting 'individual' came much later on. Even now, with the lower savages, the 'individual' hardly exists at all. It is the tribe, with its hard-and-fast rules, superstitions, taboos, habits, and interests, which is always present in the mind of the child of nature. And in that constant, ever-present identification of the unit with the whole, lies the substratum of all ethics, the germ out of which all the subsequent conceptions of justice, and the still higher conceptions of morality, grew up in the course of evolution.

But these further steps, as well as the various aspects of sociability itself, and their teachings, will have to be discussed separately on some other occasion.

P. KROPOTKIN.

GEORGE FREDERICK WATTS

'FROM THE UTMOST TO THE HIGHEST'

PASSING out of the turmoil and congestion of the highway of Piccadilly, visitors stream into the court of Burlington House, the quiet abode of votaries and representatives of Art, Science, and Antiquarian researches—the Royal Academy, the Royal Society, and the Society of Antiquaries. In the centre of this court there stands an impressive monument to 'Vital Energy'; this original creation serves as a prologue, as an epilogue also, to a considerable portion of the life-work of a great man, the *Æschylus* of English artists, George Frederick Watts. It is an embodiment in bronze of the symbolic thoughts, impressive and noble delineations of humanity, of a singularly original as well as restrained genius, interpreting many and various aspects of Design, which we shall presently see expressed in colour and shape.

As we examine this intense and rugged achievement, strong in its realisation of a far-reaching conception, a desire rises that it might remain for all time where it now stands as a protest against ephemeral and useless art, an incentive to elevated endeavours, a symbol of a strenuous life, and of the march of all that is most true and permanent to a final issue of perfection. It serves as a type of the creative mind, full of hope and endurance, of faith also that, however dark a veil may momentarily obscure it, the eternal light of intelligence beams, ready to break forth and illumine darkness with enduring streams of light. It is a fitting monument to a great artist whose 'vital energy' was phenomenal, whose progress was sure, whose courage was unflinching, and whose inspiration derived its source, as Phidias, Titian, and Tintoretto derived theirs, from the divine spirit of Intelligence.

Annual exhibitions have been held within the walls of the Academy containing masterpieces of ancient and modern art. Since 1868 some, if not all, of the productions of the best artists have been enjoyed or criticised. The life-work of two great painters, Leighton and Millais, has been shown herein, enjoyed, appreciated, or criticised. The intelligent public has been given the chance during every winter season of becoming conversant with the astounding wealth of 'Old Masters' contained in private collections, being masterpieces of the