

GREGARIOUSNESS IN CATTLE AND IN MEN.

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I PROPOSE, in these pages, to discuss a curious and apparently anomalous group of base moral instincts and intellectual deficiencies, to trace their analogies in the world of brutes, and to examine the conditions through which they have been evolved. I speak of the slavish aptitudes, from which the leaders of men, and the heroes and the prophets, are exempt, but which are irrepressible elements in the disposition of average men. I refer to the natural tendency of the vast majority of our race to shrink from the responsibility of standing and acting alone, to their exaltation of the *vox populi*, even when they know it to be the utterance of a mob of nobodies, into the *vox Dei*, to their willing servitude to tradition, authority, and custom. Also, I refer to the intellectual deficiencies corresponding to these moral flaws, shown by the rareness with which men are endowed with the power of free and original thought, as compared with the abundance of their receptive faculties and their aptitude for culture. I shall endeavour to prove that the slavish aptitudes, whose expression in man I have faintly but sufficiently traced, are the direct consequence of his gregarious nature, which, itself, is a result both of his primæval barbarism and of his subsequent forms of civilization. My argument will be, that gregarious animals possess a want of self-reliance in a marked degree; that the conditions of the lives of those animals have made gregarious instincts a necessity to them, and therefore, by the law of natural selection, those instincts and their accompanying slavish aptitudes have gradually become evolved. Then, I shall argue, that our remote ancestors have lived under parallel circumstances, and that we have inherited the gregarious in-

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instincts and slavish aptitudes which were developed under those circumstances, although, in our more advanced civilization, they are of more harm than good to our race.

It was my fortune, in earlier life, to gain an intimate knowledge of certain classes of gregarious animals. The urgent need of the camel for the close companionship of his fellows was a never-exhausted topic of curious admiration to me, during tedious days of travel across many North African deserts. I also happened to read and hear a great deal about the still more marked gregarious instinct of the llama, but the social animal into whose psychology I am conscious of having penetrated most thoroughly is the ox of the wild parts of western South Africa. It is necessary to insist upon the epithet "wild," because an ox of tamed parentage has different natural instincts: for instance, an English ox is far less gregarious than those I am about to describe, and affords a proportionately less valuable illustration to my argument.

The oxen of which I speak had belonged to the Damaras, and none of the ancestry of these cattle had ever been broken to harness. They were watched from a distance during the day, as they roamed about the open country, and at night they were driven with cries to enclosures, into which they rushed, much like a body of terrified wild animals driven by huntsmen into a trap. Their scared temper was such as to make it impossible to lay hold of them, by other means than by driving the whole herd into a clump and lassoing the leg of the animal it was desired to seize, and throwing him to the ground with dexterous force. With beasts of this description, and it must be recollected that the cows and bulls have

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the same nature, I spent more than a year in the closest companionship. I had nearly a hundred of them broken in for the wagon, for packs, and for the saddle. I travelled an entire journey of exploration on the back of one of them, with others by my side, either labouring at their tasks or walking at leisure, and with others again, who were wholly unbroken and who served the purpose of an itinerant larder. At night, when there had been no time to erect an enclosure to hold them, I lay down in their midst, and it was interesting to observe how readily they availed themselves, at that time, of the neighbourhood of the camp-fire and of man, conscious of their protection from prowling carnivora, whose cries and roars, now distant, now near, continually broke upon the stillness. These opportunities of studying the disposition of such peculiar cattle were not wasted upon me. I had only too much leisure to think about them, and the habits of the animals strongly attracted my curiosity. The better I understood them, the more complex and worthy of study did their minds appear to me. But I am now concerned only with their blind gregarious instincts, which are conspicuously distinct from the ordinary social desires. In the latter they are deficient; thus, they are not amiable to one another, but show, on the whole, more expressions of spite and disgust than of forbearance or fondness. They do not suffer from an *ennui* which society can remove, because their coarse feeding and their ruminant habits make them somewhat stolid. Neither do they love society as monkeys do, for the opportunities it affords of a fuller and more varied life, because they remain self-absorbed in the middle of their herd, while the monkeys revel together in frolics, scrambles, fights, loves, and chatterings. Yet, although the ox has so little affection for, or individual interest in, his fellows, he cannot endure even a momentary severance from his herd. If he be separated from it by stratagem or force, he exhibits every sign of mental agony; he strives with all his might to get back

again, and when he succeeds, he plunges into its middle, to bathe his whole body with the comfort of closest companionship. This passionate terror at segregation is a convenience to the herdsman, who may rest assured, in the darkness or in the mist, that the whole herd is safe at hand whenever he can catch a glimpse of a single ox. It is also the cause of great inconvenience to the traveller, who constantly feels himself in a position like that of a host to a company of bashful gentlemen, at the time when he is trying to get them to move from the drawing-room to the dinner-table, and no one will go first, but every one backs and gives place to his neighbour. So the traveller finds great difficulty in procuring "fore-oxen" for his team; ordinary cattle being totally unfitted by nature to move in so prominent and isolated a position, even though, as is the custom, a boy is always in front to persuade or pull them onwards. Therefore a good "fore-ox" is an animal of an exceptional disposition; he is, in reality, a born leader of oxen. Men who break in wild cattle for harness watch assiduously for those who show a self-reliant nature, by grazing apart or ahead of the rest; and these they break in for fore-oxen. The other cattle may be indifferently devoted to ordinary harness purposes, or to slaughter; but the born leaders are far too rare to be used for any less distinguished service than that which they alone are capable of fulfilling.

But a still more exceptional degree of merit may sometimes be met with among the many thousands of Damara cattle. It is possible to find an ox who may be ridden, not, indeed, as freely as a horse, for I have never heard of a feat like this, but, at all events, wholly apart from the companionship of others, and an accomplished rider will even succeed in urging him out, at a trot, from the very middle of his fellows. With respect to the negative side of the scale, though I do not recollect definite instances, I can recall general impressions, of oxen showing a deficiency from the average ox-standard of self-reliance, about equal to

the excess of that quality found in ordinary fore-oxen. Thus, I recollect there were some cattle of a peculiarly centripetal instinct, who ran more madly than the rest into the middle of the herd, when they were frightened, and I have no reason to doubt that the law of "deviation from an average," about which I have written a good deal in a recent work ("Hereditary Genius") would be applicable to independence of character among cattle.

The conclusion to which we are driven is, that few of the Damara cattle have enough originality and independence of character to pass, unaided, through their daily risks, in a tolerably comfortable manner. They are essentially slavish, and seek no better lot than to be led by any one of their number who has enough self-reliance to accept that position. No ox ever dares to act contrary to the rest of the herd, but he accepts their common determination as an authority binding on his conscience.

I will now put a question on the why and wherefore of all this, of the same form as might be put in respect to any strictly measurable character, such as human stature: for instance, we might say, why has such and such a race an average height of 5 feet 7 inches? and why, again, is the deviation from that average of such a magnitude that one-twentieth part of the population exceeds 5 feet 10 inches? The inquiry I will now put in respect to the gregariousness of cattle falls into precisely the same shape. How is it that their self-reliance is, on the average, so low? and, again, how is it that the deviation from that average is such as to allow of the appearance of about one animal in fifty having the capabilities of a good fore-ox?

First as regards the low average. An incapacity of relying upon oneself and a faith in others are precisely the conditions that compel brutes to congregate and live in herds; and, again, it is essential to their safety, in a country infested by large carnivora, that they should keep closely together, in herds. No ox, grazing alone, could live for many days

unless he were watched, far more assiduously and closely than is possible to barbarians. The Damara owners confide perhaps two hundred cattle to a couple of half-starved youths, who pass their time in dozing or in grubbing up roots to eat. The owners know that it is hopeless to protect the herd from lions, so they leave it to take its chance; and as regards human marauders, they equally know that the largest number of cattle-watchers they could spare could make no adequate resistance to an attack; they therefore do not send more than two, who are enough to run home and give the alarm to the whole male population of the tribe, to run in arms, on the tracks of their plundered property. Consequently, as I began by saying, the cattle have to take care of themselves against the wild beasts, and they would be infallibly destroyed by them, if they had not safeguards of their own, which are not easily to be appreciated, at first sight, at their full value. We shall understand them better by considering the precise nature of the danger that an ox runs, when he is alone: it is, not simply that he is too defenceless, but that he is easily surprised. A crouching lion fears cattle who turn boldly upon him, and he does so with reason. The horns of an ox or antelope are calculated to make an ugly wound in the paw or chest of a springing beast, when he receives its thrust in the same way that an over-eager pugilist meets his adversary's "counter" hit. Hence it is, that a cow who has calved by the wayside, and has been temporarily abandoned by the caravan, is never seized by lions. The incident frequently occurs, and, as frequently, are the cow and calf eventually brought safe to the camp; and yet there is usually evidence in footprints, of her having sustained a regular siege from the wild beasts; but she is so restless and eager for the safety of her young, that no beast of prey can ever approach her unawares. This state of exaltation is of course exceptional; cattle are obliged in their ordinary course of life to spend a considerable part of the day with their heads buried in the grass, where they

can neither see nor smell what is about them. A still larger part of their time must be spent in placid rumination, during which they cannot possibly be on the alert. But a herd of such animals, when considered as a whole, is always on the alert; at almost every moment some eyes, ears, and noses will command all approaches, and the start or cry of alarm of a single beast is a signal to all his companions. To live gregariously is to become a fibre in a vast sentient web overspreading many acres; it is to become the possessor of faculties always awake, of eyes that see in all directions, of ears and nostrils that explore a broad belt of air; it is also to become the occupier of every bit of vantage-ground whence the approach of a lurking enemy might be overlooked. The protective senses of each individual who chooses to live in companionship are multiplied by a large factor, and he thereby receives a maximum of security at the cost of a minimum of restlessness. When we isolate an animal who has been accustomed to a gregarious life, we take away his sense of protection, for he feels himself exposed to danger from every part of the circle around him, except the one point on which his attention is momentarily fixed, and he knows that disaster may easily creep up to him from behind. Consequently his glance is restless and anxious, and is turned in succession to different quarters; his movements are hurried and agitated, and he becomes a prey to the extremest terror. There can be no room for doubt that it is suitable to the well-being of cattle, in a country infested with beasts of prey, to live in close companionship, and being suitable, it follows from the law of natural selection, that the development of gregarious, and therefore of slavish, instincts must be favoured in such cattle. It also follows from the same law, that the degree in which those instincts are developed is, on the whole, the most conducive to their safety. If they were more gregarious, they would crowd so closely as to interfere with each other, when grazing the scattered pasture of Damara land; if less grega-

rious, they would be too widely scattered to keep a sufficient watch against the wild beasts.

I now proceed to consider the second question that was put: Why is the range of deviation from the average such that we find about one ox out of fifty to possess sufficient independence of character to serve as a pretty good fore-ox? Why is it not one in five, or one in five hundred? The reason undoubtedly is, that natural selection tends to give but one leader to each herd, and to repress superabundant leaders. There is a certain size of herd most suitable to the geographical and other conditions of the country; it must not be too large, or the scattered puddles which form their only watering-places for a great part of the year would not suffice, and there are similar drawbacks in respect to pasture. It must not be too small, or it would be comparatively inefficient; thus a troop of five animals is far more easily to be approached by a stalking huntsman than one of twenty, and the latter than one of a hundred. Now we have seen that it is the cattle who graze apart, as well as those who lead the herd, who are recognized by the trainers of cattle as gifted with enough independence of character to become fore-oxen. They are even preferred to the actual leaders of the herd, because, as they dare to move alone, their independence is the more conspicuous. Now, the leaders are safe enough from lions, because their flanks and rear are guarded by their followers; but each of those who graze apart, and who represent the superabundant supply of self-reliant animals, have one flank and the rear exposed, and it is precisely these whom the lions take. Looking at the matter in a broad way, we may justly assert that wild beasts trim and prune every herd into compactness, and tend to reduce it into a closely united body with a single, well-protected leader. The development of independence of character in cattle is thus suppressed far below its healthy natural standard by the influence of wild beasts, as is shown by the greater display of self-reliance among cattle

whose ancestry, for some generations, have not been exposed to such danger.

What has been said about cattle, in relation to wild beasts, applies with more or less obvious modifications to barbarians, in relation to their neighbours; but I insist on a close resemblance in the particular circumstance, that most savages are so unamiable and morose as to have hardly any object in associating together, besides that of mutual support. If we look at the inhabitants of the very same country as the oxen I have described, we shall find them congregated into multitudes of tribes, all more or less at war with one another. We shall find that few of these tribes are very small, and few very large, and that it is precisely those which are exceptionally large or small whose condition is the least stable. A very small tribe is sure to be overrun, slaughtered, or driven into slavery by its more powerful neighbour; a very large tribe falls to pieces through its own unwieldiness, because, by the nature of things, it must be either deficient in centralization or straitened in food, or both. A well-fed barbarian population is obliged to be scattered, because a square mile of land will support few hunters or shepherds; on the other hand, a barbarian government cannot be long maintained, unless the chief is brought into frequent contact with his dependants, and this is geographically impossible when his tribe is so scattered as to cover a great extent of territory. There are many influences which may cause a tribe to vary beyond the limits of safety, but the law of selection would, of course, only affect those which have their rise in the natural disposition of the race. It must discourage every race of barbarians which supplies self-reliant individuals in such large numbers as to cause their tribe to lose its blind desire of aggregation. It must equally discourage a breed that is incompetent to supply such men, in a sufficiently abundant ratio to the rest of the population, to ensure the existence of tribes of not too large a size.

It must not be supposed that gregarious instincts are equally important to all forms of savage life, but I hold, from what we know of our own early historic and pre-historic times, of the clannish, fighting habits of our forefathers, that they were every whit as applicable to the earlier ancestors of our European stock as they are still to a large part of the black population of Africa. I have spoken elsewhere, in the book already referred to, of the fatal effects of religious and political persecution, in comparatively recent years, on the value of races, and shall not say more about it here; but they must not be forgotten in my argument, for what I wish to prove in the present essay is the steady influence of social conditions, all through primæval periods, down, in some degree, to the present day, in destroying the self-reliant, and therefore the nobler, races of men. I hold that the blind instincts evolved under those long-continued conditions have been deeply ingrained into our breed, and that they are a bar to our enjoying the freedom which the forms of modern civilization could otherwise give us. A really intelligent nation might be held together by far stronger forces than are derived from the purely gregarious instincts. It would not be a mob of slaves, clinging together, incapable of self-government, and begging to be led; but it would consist of vigorous, self-reliant men, knit to one another by innumerable attractions, into a strong, tense, and elastic organization. Our present natural dispositions make it simply impossible for us to attain this ideal standard, and therefore the slavishness of the mass of men, in morals and intellect, must be an admitted fact in all schemes of regenerative policy. The hereditary taint due to the primæval barbarism of our race, and maintained by later influences, will have to be bred out of it before our descendants can rise to the position of free members of a free and intelligent society; and I may add, that the most likely nest, at the present time, for self-reliant natures, is to be found in States founded and maintained by emigrants.