

René Descartes Animals are Machines

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René Descartes (1596-1650) often called "the father of modern philosophy." shaped the view that humans are distinctly different from other animals and the rest of the natural world. In Descartes' view, language and reason are the features that set humans apart from all other species. Using the principle of parsimony, in which one always must begin with the simplest explanation of observed phenomena, Descartes argues that the observed behaviors of all nonhuman creatures can be explained without ascribing minds and consciousness to them. He concludes that nonhuman animals can be viewed as no more than machines with parts assembled in intricate ways. Based on Descartes' rationale, humans have little responsibility to other animals or the natural world, unless the treatment of them affects other humans.

I

I had explained all these matters in some detail in the Treatise which I formerly intended to publish. And afterwards I had shown there, what must be the fabric of the nerves and muscles of the human body in order that the animal spirits therein contained should have the power to move the members, just as the heads of animals, a little while after decapitation, are still observed to move and bite the earth, notwithstanding that they are no longer animate; what changes are necessary in the brain to cause wakefulness, sleep and dreams; how light, sounds, smells, tastes, heat and all other qualities pertaining to external objects are able to imprint on it various ideas by the intervention of the senses; how hunger, thirst and other internal affections can also convey their impressions upon it; what should be regarded as the "common sense" by which these ideas are received, and what is meant by the memory which retains them, by the fancy which can change them in diverse ways and out of them constitute new ideas, and which, by the same means; distributing the animal

spirits through the muscles, can cause the members of such a body to move in as many diverse ways, and in a manner as suitable to the objects which present themselves to its senses and to its internal passions, as can happen in our own case apart from the direction of our free will. And this will not seem strange to those, who, knowing how many different automata or moving machines can be made by the industry of man, without employing in so doing more than a very few pans in comparison with the great multitude of bones, muscles, nerves, arteries, veins, or other pans that are found in the body of each animal. From this aspect the body is regarded as a machine which, having been made by the hands of God, is incomparably better arranged, and possessing in itself movements which are much more admirable, than any of those which can be invented by man. Here I specially stopped to show that if there had been such machines, possessing the organs and outward form of a monkey or some other animal without reason, we should not have had any means of ascertaining that they were not of the same nature as those animals. On the other hand, if there were machines which bore a resemblance to our body and imitated our actions as far as it was morally possible to do so, we should always have two very certain tests by which to recognise that, for all that, they were not real men. The first is, that they could never use speech or other signs as we do when placing our thoughts on record for the benefit of others. For we can easily understand a machine's being constituted so that it can utter words, and even emit some responses to action on it of a corporeal kind, which brings about a change in its organs; for instance, if it is touched in a particular part it may ask what we wish to say to it: if in another part it may exclaim that it is being hurt, and so on. But it never happens that it arranges its speech in various ways, in order to reply appropriately to everything; that may be said in its presence, as even the lowest type of man can do. And the second difference is, that although machines can perform certain things as well as or perhaps better than any of us can do, they infallibly fall short in others, by the which means we may discover that they did not act from knowledge, but only from the disposition of their organs. For while reason is a universal instrument which can serve for all contingencies, these organs have need of some special adaptation for every particular action. From this it follows that it is morally impossible that there

should be sufficient diversity in any machine to allow it to act in all the events of life in the same way as our reason causes us to act.

By these two methods we may also recognise the difference that exists between men and brutes. For it is a very remarkable fact that there are none so depraved and stupid, without even excepting idiots, that they cannot arrange different words together, forming of them a statement by which they make known their thoughts, while, on the other hand, there is no other animal, however perfect and fortunately circumstanced it may be, which can do the same. It is not the want of organs that brings this to pass, for it is evident that magpies and parrots are able to utter words just like ourselves, and yet they cannot speak as we do, that is, so as to give evidence that they think of what they say. On the other hand, men who, being born deaf and dumb, are in the same degree, or even more than the brutes, destitute of the organs which serve the others for talking, are in the habit of themselves inventing certain signs by which they make themselves understood by those who, being usually in their company, have leisure to learn their language. And this does not merely show that the brutes have less reason than men, but that they have none at all, since it is clear that very little is required in order to be able to talk. And when we notice the inequality that exists between animals of the same species, as well as between men, and observe that some are more capable of receiving instruction than others, it is not credible that a monkey or a parrot, selected as the most perfect of its species, should not in these matters equal the stupidest child to be found, or at least a child whose mind is clouded, unless in the case of the brute the soul were of an entirely different nature from ours. And we ought not to confound speech with natural movements which betray passions and may be imitated by machines as well as be manifested by animals, nor must we think, as did some of the ancients, that brutes talk, although we do not understand their language. For if this were true, since they have many organs which are allied to our own, they could communicate their thoughts to us just as easily as to those of their own race. It is also a very remarkable fact that although there are many animals which exhibit more dexterity than we do in some of their actions, we at the same time observe that they do not manifest any dexterity at all in many others. Hence the fact that they do better than we do, does not prove that they are endowed with mind, for in this

case they would have more reason than any of us, and would surpass us in all other things. It rather shows that they have no reason at all, and that it is nature which acts in them according to the disposition of their organs, just as a clock, which is only composed of wheels and weights is able to tell the hours and measure the time more correctly than we can do with all our wisdom.

I had described after this the rational soul and shown that it could not be in any way derived from the power of matter, like the other things of which I had spoken, but that it must be expressly created. I showed, too, that it is not sufficient that it should be lodged in the human body like a pilot in his ship, unless perhaps for the moving of its members, but that it is necessary that it should also be joined and united more closely to the body in order to have sensations and appetites similar to our own, and thus to form a true man. In conclusion, I have here enlarged a little on the subject of the soul, because it is one of the greatest importances. For next to the error of those who deny God, which I think I have already sufficiently refuted, there is none which is more effectual in leading feeble spirits from the straight path of virtue, than to imagine that the soul of the brute is of the same nature as our own, and that in consequence, after this life we have nothing to fear or to hope for, any more than the flies and ants. As a matter of fact, when one comes to know how greatly they differ, we understand much better the reasons which go to prove that our soul is in its nature entirely independent of body, and in consequence that it is not liable to die with it. And then, inasmuch as we observe no other causes capable of destroying it, we are naturally inclined to judge that it is immortal.

II

I cannot share the opinion of Montaigne and others who attribute understanding or thought to animals. I am not worried that people say that men have an absolute empire over all the other animals: because I agree that some of them are stronger than us, and believe that there may also be some who have an instinctive cunning capable of deceiving the shrewdest human beings. But I observe that they only imitate or surpass us in those of our actions which are not guided by our thoughts. It often happens that we walk or eat without thinking at all about what we are doing, and similarly, without using our reason,

we reject things which are harmful for us, and parry the blows aimed at us. Indeed, even if we expressly willed not to put our hands in front of our head when we fall, we could not prevent ourselves. I think also that if we had no thought we would eat, as the animals do, without having to learn to: and it is said that those who walk in their sleep sometimes swim across streams in which they would drown if they were awake. As for the movements of our passions, even though in us they are accompanied with thought because we have the faculty of thinking, it is none the less very clear that they do not depend on thought, because they often occur in spite of us. Consequently they can also occur in animals, even more violently than they do in human beings, without our being able to conclude from that that they have thoughts.

In fact, none of our external actions can show anyone who examines them that our body is not just a self-moving machine but contains a soul with thoughts, with the exception of words, or other signs that are relevant to particular topics without expressing any passion. I say words or other signs, because deaf-mutes use signs as we use spoken words: and I say that these signs must be relevant, to exclude the speech of parrots, without excluding the speech of madmen, which is relevant to particular topics even though it does not follow reason. I add also that these words or signs must not express any passion, to rule out not only cries of joy or sadness and the like, but also whatever can be taught by training to animals. If you teach a magpie to say goodday to its mistress, when it sees her approach, this can only be by making the utterance of this word the expression of one of its passions. For instance it will be an expression of the hope of eating, if it has always been given a titbit when it says it. Similarly, all the things which dogs, horses, and monkeys are taught to perform are only expressions of their fear, their hope, or their joy: and consequently they can be performed without any thought. Now it seems to me very sinking that the use of words, so defined, is something peculiar to human beings. Montaigne and Charron may have said that there is more difference between one human being and another than between a human being and an animal; but there has never been known an animal so perfect as to use a sign to make other animals understand something which expressed no passion; and there is no human being so imperfect as not to do so, since even deaf-mules

invent special signs to express their thoughts. This seems to me a very strong argument (to prove that the reason why animals do not speak as we do is not that they lack the organs but that they have no thoughts. It cannot be said that they speak to each other and that we cannot understand them; because since dogs and some other animals express their passions to us, they would express their thoughts also if they had any.

I know that animals do many things better than we do, but this does not surprise me. It can even be used to prove they act naturally and mechanically, like a clock which tells the time better than our judgement does. Doubtless when the swallows come in spring, they operate like clocks. The actions of honey bees are of the same nature, and the discipline of cranes in flight, and of apes in fighting, if it is true that they keep discipline. Their instinct to bury their dead is no stranger than that of dogs and cats who scratch the earth for the purpose of burying their excrement; they hardly ever actually bury it, which shows that they act only by instinct and without thinking. The most that one can say is that though the animals do not perform any action which shows us that they think, still, since the organs of their body are not very different from ours, it may be conjectured that there is attached to those organs some thoughts such as we experience in ourselves, but of a very much less perfect kind. To which I have nothing to reply except that if they thought as we do, they would have an immortal soul like us. This is unlikely, because there is no reason to believe it of some animals without believing it of all, and many of them such as oysters and sponges are too imperfect for this to be credible. But I am afraid of boring you with this discussion, and my only desire is to show you that I am, etc.

III

But there is no prejudice to which we are all more accustomed from our earliest years than the belief that dumb animals think. Our only reason for this belief is the fact that we see that many of the organs of animals are not very different from ours in shape and movement. Since we believe that there is a single principle within us which causes these motions—namely the soul, which both moves the body and thinks—we do not doubt that some such soul is to be found in animals also. I came to realize, however, that there are two different

principles causing our motions: one is purely mechanical and corporeal and depends solely on the force of the spirits and the construction of our organs, and can be called the corporeal soul: the other is the incorporeal mind, the soul which I have defined as a thinking substance. Thereupon I investigated more carefully whether the motions of animals originated from both these principles or from one only. I soon saw clearly that they could all originate from the corporeal and mechanical principle, and I thenceforward regarded it as certain and established that we cannot at all prove the presence of a thinking soul in animals. I am not disturbed by the astuteness and cunning of dogs and foxes, or all the things which animals do for the sake of food, sex, and tear: I claim that I can easily explain the origin of all of them from the constitution of their organs.

But though I regard it as established that we cannot prove there is any thought in animals. I do not think it is thereby proved that there is not, since the human mind does not reach into their hearts. But when I investigate what is most probable in this matter, I see no argument for animals having thoughts except the fact that since they have eyes, ears, tongues, and other sense-organs like ours, it seems likely that they have sensation like us: and since thought is included in our mode of sensation, similar thought seems to be attributable to them. This argument, which is very obvious, has taken possession of the minds of all men from their earliest age. But there are other arguments, stronger and more numerous, but not so obvious to everyone, which strongly urge the opposite. One is that it is more probable that worms and flies and caterpillars move mechanically than that they all have immortal souls.

It is certain that in the bodies of animals, as in ours, there are bones, nerves, muscles, animal spirits, and other organs so disposed that they can by themselves, without any thought, give rise to all animals the motions we observe. This is very clear in convulsive movements when the machine of the body moves despite the soul, and sometimes more violently and in a more varied manner than when it is moved by the will.

Second, it seems reasonable, since art copies nature, and men can make various automata which move without thought, that nature should produce its own automata, much more splendid than artificial

ones. These natural automata are the animals. This is especially likely since we have no reason to believe that thought always accompanies the disposition of organs which we find in animals. It is much more wonderful that a mind should be found in every human body than that one should be lacking in every animal. But in my opinion the main reason, which suggests that the beasts lack thought is the following. Within a single species some of them are more perfect than others, as men are too. This can be seen in horses and dogs, some of whom learn what they are taught much better than others. Yet, although all animals easily communicate to us, by voice or bodily movement, their natural impulses of anger, fear, hunger and so on, it has never yet been observed that any brute animal reached the stage of using real speech, that is to say, of indicating by word or sign something pertaining to pure thought and not to natural impulse. Such speech is the only certain sign of thought hidden in a body. All men use it, however stupid and insane they may be, and though they may lack tongue and organs of voice: but no animals do. Consequently it can be taken as a real specific difference between men and dumb animals.

For brevity's sake I here omit the other reasons for denying thought to animals. Please note that I am speaking of thought, and not of life or sensation. I do not deny life to animals, since I regard it as consisting simply in the heat of the heart; and I do not deny sensation, in so far as it depends on a bodily organ. Thus my opinion is not so much cruel to animals as indulgent to men—at least to those who are not given to the superstitions of Pythagoras—since it absolves them from the suspicion of crime when they eat or kill animals.

Perhaps I have written at too great length for the sharpness of your intelligence; but I wished to show you that very few people have yet sent me objections which were as agreeable as yours. Your kindness and candour has made you a friend of that most respectful admirer of all who seek true wisdom, etc.