## BAYLE ON ANIMAL MINDS Pierre Bayle

This is from the notes to "Rorarius", an article in Bayle's 1697 *Historical and Critical Dictionary*. Bayle argues that it is difficult to maintain the traditional common-sense view of Aristotelian philosophers—that animals have a kind of soul that is inferior to human souls—without inadvertently slipping into the disturbing and religion-subverting view that human souls and animal souls are basically the same. The only way to avoid this conclusion, Bayle suggests, is to embrace the outlandish and hard-to-swallow Cartesian view that animals are pure biological machines that experience nothing (not even pain or pleasure).

B. (The facts concerning the capacity of animals very much puzzle both the followers of Descartes and those of Aristotle.)

No proof is needed with regard to the Cartesians. Everyone knows how difficult it is to explain how pure machines can accomplish what animals do. Therefore let us only show that the Peripatetics [the followers of Aristotle find themselves in great difficulties when they have to justify their attitude. Every Peripatetic who hears that beasts are only automata, or machines, objects immediately that a dog who has been beaten for touching a dish of meat will not touch it again when he sees his master threatening him with a stick. But to show that this phenomenon cannot be explained by the one who introduces it, it is sufficient to say that if this dog's action is accompanied by knowledge, then the dog must necessarily reason: he must compare the present with the past and draw a conclusion from this. He must remember both the blows he has received and why he received them. He must know that if he leaped to the dish of meat that strikes his senses, he would commit the same action for which he had been beaten; and he concludes that in order to avoid being beaten again, he ought to abstain from this meat. Now is this not genuine reasoning? Can we explain this situation by simply supposing a soul that is capable of feeling, but not of reflecting on its actions, but not of recalling past events, but not of comparing two ideas, but not of drawing any conclusion? Look carefully at the examples that have been compiled and are raised against the Cartesians, you will find that they prove too much; for they prove that beasts compare ends with means, and that they prefer on some occasions what is just to what is useful; in a word, that they are guided by the rules of equity and gratitude. Rorarius says that there have been horses who have refused to mate with their mothers or, having done this unknowingly, deceived by the tricks of a groom, have thrown themselves over a cliff when they realized what had taken place: "It is recorded that a certain herdsman, though he employed his utmost endeavors, could not get a horse of his to mate with his dam [the horse's mother]; and as both were extremely beautiful, he was obliged to have recourse to fraud, he blindfolded its eyes so that the dam might not be seen; but when the bandage was taken off afterwards, by which the horse discovered what he had done, he flew to a precipice and plunged headlong, conscious of the guilt he had committed. Such was the virtue of a male; and now follows a similar example by a female. In the territory of Reate, a mare, after tearing to pieces a coachman who was the cause of its guilt, made a similar exit." What he says, and what others report about how ardently some dogs have worked to help their masters, to avenge their deaths, and so on, are matters absolutely inexplicable by the Aristotelian hypothesis. Thus, all their disputes against the disciples of Descartes is wasted effort. Only the skill employed by Pereira is needed. "You admit," he used to say to his opponents, "that animals do several things which resemble those done by rational souls and that, nevertheless, their souls are not rational. Then why do you forbid me to maintain that they do several things that resemble those done by sensitive souls without their souls being sensitive? I am not surprised that neither Descartes nor his followers have taken advantage of the passage in the Justinian Code in which it is said that beasts are incapable of committing a crime since they do not sense anything. It is obvious that the word *sensus* in this law ought to be taken as design and intelligence."

## C. (Descartes's view is ... of very great advantage to the true faith.)

What leads the Cartesians to say that beasts are machines is that according to them all matter is incapable of thinking. They are not content to say that only spiritual substances are capable of reflecting and constructing a long chain of reasoning; but they maintain that all thought, whether it be called reflection, meditation, inference, whether it be called sensation, imagination, instinct, is of such a nature that the most subtle and the most perfect matter is incapable of it and that it can only exist in incorporeal substances. According to this thesis every man can be convinced of the immortality of his soul. Every man knows that he thinks, and consequently, if he reasons in the Cartesian way, he cannot doubt that what thinks in him is distinct from the body; from which it follows that he is immortal in this respect; for the mortality of creatures consists only in that they are composed of several parts of matter that separate from one another. Here is a great advantage for religion; but it will be almost impossible to preserve this advantage by philosophical reasons if one admits that beasts have a material soul that perishes with the body, a soul, I say, whose sensations and desires are the cause of the actions that we see them do. See remark F. The theological advantages of Descartes's view that beasts are automata do not stop there. They extend to many important principles that cannot be maintained with any strength once it is admitted that beasts have sensitive souls. If St. Augustine maintained these principles though he admitted this kind of soul in beasts, and if he was not bothered about the of these two things, then he was more happy than wise. "From the principles that [Au-

gustine] carefully examined and solidly established it follows manifestly that beasts do not have souls, as Ambrosius Victor shows in the sixth volume of the Christian Philosophy." The author from whom I take these words [Nicolas Malebranche] supposes that "this holy teacher [i.e., Augustine]," knowing "too well how to distinguish the soul from the body to think that there were corporeal souls," admitted a spiritual soul in beasts. Now here is a sample that he gives us of the principles which St. Augustine maintained and which are incompatible with that soul of beasts: "Some of St. Augustine's principles are that a creature that has never sinned can never suffer evil. Now, according to him, pain is the greatest evil, and beasts suffer pain. That the more noble thing cannot have for its goal the less noble. Now, according to him the soul of beasts is spiritual and more noble than the body, and nevertheless they have no other goal than the body. What is spiritual is immortal; and the soul of beasts, though spiritual, is subject to death. There are many other such principles in St. Augustine's works from which it can be concluded that beasts do not have such a spiritual soul as he claims for them." I am not too convinced that St. Augustine believed that the soul of beasts is an incorporeal substance; but, be this as it may, the second principle given here as an example is incompatible with the view of this great teacher; for that which knows is more noble than that which does not. Now St. Augustine attributes at least sensation to the soul of beasts. He therefore believed it much more noble than the body. He therefore maintained on the one hand that the more noble cannot have for its goal the less noble, and on the other hand that the soul of beasts, more noble than their body, has no other goal than their body. This, you will say, is of little importance for religion. You are mistaken, it will be answered, for all the proofs of original sin drawn from illness and death to which little children are subject collapse as soon as you suppose that animals have sensations. They are subject both to pain and death. They, however, have never sinned. Thus your reasoning is faulty when you say, "Young children suffer evil and die; they are therefore guilty"; for you suppose a false principle that is contradicted by the condition of beasts, namely, "that which has never sinned cannot suffer evil." This is nevertheless a most evident principle. It follows necessarily from the ideas we have of the justice and goodness of God. It agrees with the immutable order, with that order from which we clearly conceive God never departs. The soul of beasts conflicts with this order and overthrows these very distinct ideas. It must then be granted that the automata of Descartes favor greatly the principles by which we judge about the infinite being and by which we maintain orthodoxy. Read the following:

"Religion was immediately drawn into this cause, the anti-Cartesians hoping thereby to destroy the machines of Descartes; but it would be impossible to express the advantage that thus accrued to the followers of this philosopher [i.e., to the Cartesians]. For [the Cartesians] believe they have shown that, by ascribing to beasts a soul that is capable of knowledge, all the natural proofs of our soul's immortality are destroyed. They have shown that the most obstinate enemies of their view [the anti-Cartesians]

are impious thinkers and Epicureans; and that no greater damage can be done to these wicked philosophers than by disarming them of all the false arguments that they borrow from the soul of beasts in order to conclude that there is only a difference of degree between them and us. It is certain that there are no people who do more than impious thinkers to make beasts come near to the perfection of man. This is how the followers of Descartes have interested religion in their cause. But they have not been satisfied with this. They have raised themselves up to the nature of God to find invincible arguments against the knowledge of beasts, and it can be said that they have found some pretty good ones. The author of the *Recher*che de la vérité [Malebranche, author of the Search after Truth] has given us them in outline in some parts of his works. Father Poisson of the Oratory has treated fully the one based on St. Augustine's principle that, 'since God is just, misery is a necessary proof of sin; from which it follows that beasts, not having sinned, are not subject to misery. Now they would be subject to it if they had sensations. Therefore, they do not have sensations." You will find after this passage the summary of a book [Darmanson's La bête transformée en machine] in which it is shown that if beasts had a knowing soul, "it follows (1) that God does not love himself, (2) that he is not constant, (3) that he is cruel and unjust." He would not love himself, for he would have created "souls capable of knowledge and love without obliging them to love and to know him." He would have created them to be in a state of sin; and consequently he would have released them from the law of order, which is however the supreme and indispensable law.... According to common opinion, the souls of beasts are annihilated the instant the beasts cease to live. Where then is God's constancy? He creates souls and soon he destroys them. He does not do the same thing with regard to matter, for he never destroys it. He therefore conserves the less perfect substances and destroys the more perfect. Is this acting like a wise agent? The soul of beasts has not sinned, and yet it is subject to pain and misery. It is subject to all the irregular desires of creatures who have sinned. How do we treat beasts? We make them tear each other apart for our pleasure. We kill them to nourish ourselves. We dissect their entrails while they are living to satisfy our curiosity, and we do all this as a result of the dominion God has given us over the beasts. How disordered this is that the innocent creature should be subject to the capricious temper of the criminal creature! No casuist believes that one sins by making bulls fight against mastiffs, and so on, and by employing thousands of ruses and violent means to destroy animals in hunting, fishing, and the like, or by diverting oneself by killing flies as Domitian did. Now is it not cruel and unjust to submit an innocent soul to so many evils? But all these difficulties are removed by Descartes's view....

E. (The distressing consequences of the opinion that endows beasts with a sensitive soul.)

Nothing can be more diverting than to see with what authority the Schoolmen [Aristotelian Scholastic philosophers] endeavor to set limits to the

knowledge of beasts. They insist that beasts know only particular and material objects, and that they love only what is useful and pleasant, that they cannot reflect on their sensations and desires, nor infer one thing from another. It would seem that they have searched more successfully into the faculties and the acts of the soul of beasts than the most expert anatomists into the entrails of dogs. Their temerity is so great that even if they should find the truth by chance, they would not deserve praise or even pardon. But let us spare them criticism on this point and grant them whatever they say. What do they hope to show? Do they think that they will prevail by this means with any person who knows how to argue, and get him to agree that man's soul is not of the same type as that of a beast? This claim is altogether illusory. It is evident to anyone who knows how to judge things that every substance that has any sensation knows that it senses, and it would not be more absurd to maintain that the soul of man actually knows an object without knowing that it knows it than it is absurd to say that the soul of a dog sees a bird without seeing that it sees it. This shows that all the acts of the sensitive faculties are by their nature and essence reflexive on themselves. Father Maignan, who, in spite of all his brilliance, has fallen into the errors and gross ignorance of the Schools with regard to the soul of beasts, admits, however, that to perceive anything one must know the perception we have of it: "That which we call sensation is not without the knowledge of that thing that is called sensible; but as nothing external is sensible in itself but only by its action, this action must consequently be chiefly sensible. And, moreover, as we cannot be said to feel the action of any agent if at the time that it is performed in us it is entirely unknown to us, consequently that thing we call sensation is not without the knowledge of the action performed in us at the time we feel. Nay, because sensation implies in those that feel nothing besides that knowledge, consequently, sensation itself, considered in the being that feels, consists in its perceiving what it feels; which is the same as to know that an action is received in itself or its passion." It must then be said that the memory of beasts is an act that makes them remember the past and makes them aware that they are remembering. How then can anyone dare say that they do not have the power to reflect on their own thoughts or to draw inferences? But, once again, let us not dispute on this matter. Let us permit these philosophers to build badly on their suppositions. Let us only make use of their teachings. They say that the soul of beasts perceives all the objects of the five external senses; that it judges among these objects that there are some that suit it and others that are harmful, and that as a result of this judgment it desires those that suit it and abhors the rest. And in order to enjoy the object it wishes, it carries its organs to the place where such an object is. To avoid the objects that it dislikes, it takes its organs away from where it is. I conclude from all this that if it [i.e., the animal's soul] does not produce other acts as noble as those of our soul, it is not its fault. It is not due to its having a nature less perfect than man's soul, but only that the organs that it animates are not like ours. I would like to ask these gentlemen if they would find it just to say that the soul of a man is of another species at the

age of thirty-five than at the age of one month, or that the soul of a madman, an idiot, or a senile old man is not substantially as perfect as that of a capable man. They would no doubt reject this view as a very great error, and rightly so. For it is certain that the same soul that only senses in children meditates and reasons in a solid way in a mature person, and that the same soul whose reason and wit are admired in a great man would only dote in an old man, only talk wildly in an idiot, and only have sensations in a child. Now it would be a gross error if it were claimed that the soul of man is only susceptible to such thoughts as are known to us. There is an infinitude of sensations, passions, and ideas of which this soul is capable, though it may never be affected by them during this lifetime. If it were to be united to organs different from ours, it would think otherwise than it does now; and its modifications might be far nobler than those we experience. If there were substances that, in organized bodies, had a series of sensations and other thoughts more sublime than ours, could one say that they are of a nature more perfect than that of our soul? Doubtless, no; for if our soul should be transported into those bodies, it would have that same series of sensations and other thoughts much more sublime than ours. It is easy to apply this to the soul of beasts. It is admitted that it senses bodies, that it discerns them, that it desires some of them and abhors others. This is enough. It is therefore a substance that thinks, and thus is capable of thought in general. It can therefore receive all sorts of thoughts. It can then reason; it can know what is good, the universals, the axioms of metaphysics, the rules of morality, and so on. For, from the fact that wax can receive the impression of a seal it clearly follows that it is capable of receiving the figure of any seal. It must also be said that as soon as a soul is capable of having one thought, it is capable of having every thought. It would be absurd to argue as follows: "This piece of wax has received the impression of only three or four seals; therefore it cannot receive the impression of a thousand. This piece of pewter never was a plate; therefore it cannot be a plate; and it is of a different nature than this pewter plate that I see there." They do not reason any better when they assert, "The soul of a dog has possessed nothing but sensations, and the like; therefore it is not capable of ideas of morality or metaphysical notions." How does it happen that one piece of wax bears the image of the prince and the other does not? It is because of the seal that has been applied to one and not the other. This piece of pewter which has never been a plate will be one as soon as you cast it in the mold of a plate. Cast, in the same way, this soul of a beast in the mold of universal ideas and notions of the arts and sciences; I mean, unite it to a well-chosen human body; and it will be the soul of a capable man, and no longer that of a beast.

One sees, therefore, that the Schoolmen are not able to prove that the soul of man and the soul of beasts are of a different nature. Let them say, and let them repeat thousands and thousands of times, "The soul of man reasons and knows universals and virtue; that of animals knows nothing about all this." We shall answer them: "These differences are only accidental and are no sign that there is a difference in the species of the sub-

jects. Aristotle and Cicero at the age of one did not have more sublime thoughts than those of a dog; and if they had remained in infancy for thirty or forty years, the only thoughts in their souls would have been sensations arid childish passions for playing and eating. It is then by accident that they have surpassed the beasts; it is because their organs, on which their thoughts depend, acquired such and such modifications, which do not happen to the organs of beasts. The soul of a dog in the organs of Aristotle and Cicero would have lacked nothing for acquiring all the knowledge of those two great men."

Here is a very false line of reasoning: such a soul does not reason and does not know universals; therefore it is of a different nature from the soul of a great philosopher. For if this line of reasoning were just, then it would be necessary to say that the soul of small children is not of the same species as that of mature men. What are you thinking of, you Peripetatic philosophers, when you dare to claim that if the soul of beasts does not reason, it is substantially less perfect than souls that do? You would first have to prove that the defect in reasoning in beasts is due to a real and internal imperfection in their soul, and not to the organic dispositions on which it depends. But you can never prove this; for it is clear that a subject capable of the thoughts that you give to the soul of animals is capable of reasoning and of all other thoughts; from which it follows that if it does not actually reason, this is due to certain accidental and external obstacles; I mean due to the fact that the Creator of all things has fixed to each soul a certain series of thoughts by making it dependent on the movements of certain bodies. This is what accounts for the fact that children at the breast, fools, and madmen do not reason.

We cannot think without horror of the consequences of this doctrine: "Man's soul and that of beasts do not differ substantially. They are of the same species. The one acquires more knowledge than the other, but this is only an accidental advantage and depends on arbitrary factors." This doctrine is the necessary and inevitable result of what is taught in the Schools regarding the knowledge of beasts. It follows from this that if their souls are material and mortal, the souls of men are so also, and if the soul of man is an immaterial and spiritual substance, the soul of beasts is so also. These are horrible consequences no matter which way one looks at them. For, if, in order to avoid the immortality of the soul of beasts, we suppose that the soul of man dies with the body, we thereby overthrow the doctrine of another life and undermine the foundations of religion. If, however, in order to preserve for our soul the privilege of immortality, we extend it also to the soul of beasts, then into what an abyss shall we fall? What will we do with so many immortal souls? Will there also be a paradise and a hell for them? Will they migrate from one body to another? Will they be annihilated in proportion as beasts die? Will God incessantly create an infinitude of spirits, to plunge them back again so soon into a state of nothingness? How many insects are there who live only a few days? Let us not imagine that it suffices to create only the souls of beasts we know of. Those that we

are not acquainted with are still more numerous. The microscope reveals them to us by the thousands in one drop of liquid. We could find many more if we had more perfect microscopes. And let it not be said that insects are machines, for that hypothesis would better explain the actions of dogs than those of ants and bees. There is, perhaps, more genius and more reason in invisible animals [i.e., microscopic organisms] than in grosser ones. We are now going to see how vainly the Schools try to establish a difference in species between the soul of the beast and that of man.

## F. (A difference in species between human and animal souls.)

They say that the soul of beasts is a material form, but the soul of man is a spirit created immediately by God. But how do they prove this? I assume that they reason only on the basis of the principles of the natural light without having recourse to either Scripture or the doctrines of religion, and I ask them for a good proof that the soul of beasts is corporeal while ours is not. They will tell me of the beauty and extent of human knowledge, and the smallness, grossness, and obscurity of animal knowledge; and they will conclude that a corporeal principle is capable of producing the knowledge of beasts, but not the reflections, the reasonings, the universal ideas, the ideas of virtue, which are in the soul of man. And consequently this latter soul ought to be of an order superior to matter. It ought to be spiritual. Let us no longer tell them that they are rash in claiming that the soul of beasts does not reason and that it has no idea of what is virtuous. Let us set this objection aside, and let us say only that it is a thousand times more difficult to see a tree than to know the act by which we see it. So that if a material entity is capable of knowing an infinitude of things that take place outside of it, it will be much more capable of knowing its own thoughts and comparing them together and multiplying them. Thus the reflections, conclusions, and abstractions of man do not require a more noble principle than matter. A very capable Peripatetic [Ignace Pardies, in his Discours de la Conoissance des Bestes grants this. Let us hear him speak. His admission will be more persuasive than my objections: "If you once admit that whatever is most wonderful in the actions of beasts can be accomplished by means of a material soul, will you not soon come to say that all that takes place in men can be accomplished also by means of a material soul?... If you once grant that beasts without any spiritual soul are capable of thinking, of goal-directed action, of foreseeing what is to come, of remembering what has happened, of profiting from experience by the particular reflections they make on it; why will you not say that men are capable of performing their functions without any spiritual soul? After all, the operations of men are no different from those that you attribute to beasts. If there is any difference, it is only one of degree. And thus all you could say will be that the soul of man is more perfect than that of beasts because it remembers better than they do, thinks with more reflection, and foresees with more assurance. But in the end you cannot say that their soul is not always material. You will say perhaps that there are certain operations found in men that cannot be compatible with beasts, nor can they

proceed from any other principle than that of a spiritual soul. The operations that cannot belong to beasts or to non-spiritual souls are those by which we gain universal or general knowledge—that is, the methods of reasoning by which we infer one thing from another; and the ideas we have of infinite and spiritual things that are not learned from the senses. But those who deny that there is any knowledge in beasts do not therefore deny that these thoughts and reasonings are in us since we ourselves are conscious of them. Thus they always have the same right as you to prove the existence of the rational soul. But they add besides that all these operations that you find so extraordinary only differ in degree from those operations that you attribute to beasts; and certainly it seems that to engage in goaldirected activity, to learn from experience, to foresee events (which, according to you, are all possibilities for beasts) ought no less to proceed from a spiritual principle than what is found in men. For in the end what is universal knowledge, if not a knowledge that agrees with several similar things, like a portrait of a man that should agree with all the faces that resemble him? What is reasoning but a knowledge produced by another knowledge, as we see that a motion is often produced by another motion? It is definitely the case that if it is once admitted that thought, intention, and reflection can arise from a body animated by a material form, it will be very difficult to prove that reasoning and the ideas of men cannot arise from a body also animated by a material form."

I beg my readers to take note of the unhappy situation in which the Scholastics find themselves with relation to the doctrine of the sensitive soul. They put forth against Descartes the most surprising actions of animals; they choose them purposely to confound him the more. But then they find that they have gone too far, and that they have furnished weapons to their adversary for destroying the difference in species that they wanted to establish between our soul and that of animals. They would much prefer that we forgot all those examples of cunning, planning, docility, knowledge of the future, that they have displayed with so much pomp to show that beasts are not automata. They would prefer that we thought only of the gross actions of an ox who does nothing but graze. But it is too late for this. The same weapons are used to confound them and to prove to them that if a material soul can do all these things, it can also accomplish what the human soul does. It would be required only to ascribe various degrees of refinement to the souls of beasts. Must it not be supposed that the soul of a dog or a monkey is less gross than that of an ox? In a word, if nothing but a spiritual soul can produce the actions of a big clod of a peasant, I will maintain that nothing but a spiritual soul can produce the actions of a monkey. And if you say that a corporeal principle is capable of accomplishing all that monkeys do, I will maintain that a corporeal principle is capable of accomplishing all that stupid people do and that, provided that matter is subtilized and disengaged from what are called earthly particles, phlegms, and so on, it will be the cause of whatever able people do.

A question concerning the freedom of the soul of beasts. There are some authors who suggest that since the human soul has free will, and that that of beasts is destitute of freedom, there must be a difference in species between them, that the one must be spiritual and the other corporeal. In 1630 the Jesuit Théophile Raynaud published a small book entitled Calvinismus Bestiarum Religio [Calvinism, the Religion of Beasts]. His chief aim was to prove that the doctrine of the Dominicans reduces man to the condition of beasts by depriving him of free will: "The Catholic claimed that Calvinism ought to be considered the religion of beasts, chiefly on this account, because according to Calvinist principles man is degraded to a level with beasts and divested of the degree and dignity of man. To prove this in a solid manner he thought it proper to lay down two propositions: one is that man is a man only by virtue of his liberty; the other, that liberty is destroyed by Calvinism." He supposes that the characteristic of man, I mean that which distinguishes him from the beast, is the liberty of indifference. For, as for the liberty that consists only in being free from constraint, or in spontaneity, no Schoolman can deny that it is found in animals. Let us show that it is completely false that a soul endowed with free will is another species than that of a soul without it. The soul of children and that of madmen is destitute of free will; and yet they are of the same species as the soul most amply provided with liberty. Add to this that the advocates of the liberty of indifference agree that it will cease after this life, and yet they acknowledge that the soul of man on earth is the same substance as in heaven or in hell. It is therefore obvious that the liberty of indifference is not an essential attribute of the human creature but is a concession or an accidental favor which the Creator confers upon it. And consequently such souls who do not obtain this concession are not on this account of a different species or kind from those that do receive it. It is then very bad reasoning to employ this argument: the soul of beasts is destitute of free will, and the soul of man is not destitute of it; therefore, the soul of beasts is material, and the soul of man spiritual. Let us push this farther and say that those who admit a sensitive soul have no good reason to take liberty away from beasts. Do they not say that beasts do hundreds of things with extreme pleasure and that they are directed to do this as a result of the judgment they make about the usefulness of objects, a judgment that has excited in them the desire to be united with those objects? If liberty consists only in the absence of constraint and in a *spontaneity* that must be preceded by a discernment of the objects, is it not absurd to deny that animals are free? Has not a hungry dog the strength to abstain from a piece of meat when he is afraid of being beaten if he does not abstain? Does this not amount to having the power to act or not act? His abstinence no doubt comes from his comparison of his hunger with the blows of a stick, and his judgment that the latter are more insupportable than is hunger. Notice that with regard to all the human actions that one attributes to the liberty of indifference, you will find that man never suspends them or chooses one of the contraries except because, having compared the reasons pro and con, he has found either more motives for suspension than for action, or more for this action than that one. Let us listen again to the Jesuit who wrote against the Cartesians [Pardies]: "It is thus difficult to separate reasoning from thought; and it seems easy to prove that, when a substance is capable of thinking, it is also capable of reasoning, that it is endowed with volition and free will, and, in a word, that it can act like men. The ancient philosophers and even the Church Fathers have proven that we have free will by this general argument: that everything that is capable of knowing may know good and evil, that is to say, that this is good for it, and that bad; that consequently, by considering these two objects, he can compare them together, he can deliberate, he can determine to choose one of them and not the other; and it is in these items that the use of our freedom consists. And this is so true that the definition of liberty in general that we still retain is this: the faculty of acting with knowledge [ratione]...."

One of the strongest proofs that is given of man's freedom is drawn from the punishment of evildoers. All societies agree in making examples of them in their punishments, and even in certain cases to extend this to punishing publicly their dead bodies. It is forbidden to bury them, and the bodies are exhibited as spectacles on the wheels and the gallows. If man did not act freely, if a fatal and unavoidable necessity determined a certain series of thoughts, then theft and murder should not be punished, and no benefit could be hoped for from the punishment of the guilty parties. For those who may see the body of a malefactor on a wheel would not be less subject than before to that superior force that makes them act and does not allow them to employ any freedom. This proof of free will is not as strong as it appears. For even though men are convinced that machines have no feeling, this does not stop them from giving the machines a hundred blows with a hammer when they are out of order if they think that by flattening a wheel or another piece of iron the machines will be repaired. They would then flog a pickpocket, even if they knew that he had no free will, provided that experience had taught them that by whipping certain people they restrain them from continuing certain actions. But in any case, if this proof of free will have any force, it obviously serves to show that beasts are not destitute of liberty. They are punished every day, and their faults are thereby corrected. Ochino, at the beginning of his Labyrinth, examines all the reasons that convince us that we act freely; and he says among other things against the arguments drawn from the punishment of malefactors that if the judges were sure that by hanging a horse who had killed a man and leaving him hanging a long time on the highway this would stop other horses from doing evil, then they would employ this punishment every time a horse maimed or killed anyone by his kicking and biting. Apparently he did not know that such spectacles are in use in some countries to intimidate wild beasts. Rorarius was an eyewitness to this. He saw two wolves hung on the gallows in the Duchy of Jülich; and he observes that this makes a stronger impression on other wolves than branding with a hot iron, the loss of ears, and the like does on a thief. He also says that in Africa lions are hung upon a cross to frighten the others, and that this works: "It is usual for the Africans to crucify lions whenever any of them is caught lying in wait near the towns, which they do when they reach old age, because they then no longer have the strength to hunt wild beasts; the dread of which punishment, though they are pinched with hunger, makes them refrain. As I was travelling on horseback from Cologne to Duren through that large forest I saw two wolves trussed up like two thieves hanging on a gibbet. This was to deter others from doing such mischief by the fear of a similar punishment. But every day there is seen among men some who, for their guilt, have been whipped, had their ears cut off, been burned in the cheek, had a hand cut off, an eye plucked out, and yet would not give up their wicked ways until a noose put an end to their lives."

G. (If he could have cleared up the difficulties involved in the ordinary view on this.)

There has been a great to-do, and with good reason, about a book whose title is Le voyage du monde de Descartes [by Gabriel Daniel]. Very great difficulties against the Cartesians are there raised in an agreeable and lively fashion, and they are well pursued. Those concerning the soul of beasts considered as machines are the best that could be proposed, it seems to me. The author sincerely admits how poorly the Peripatetics at first opposed this great paradox of Descartes, and the advantages that the latter's followers gained from this. He cleverly makes use of the unfortunate consequences that can be drawn from this paradox; for he shows that the arguments of the Cartesians lead us to judge that other men are machines. This is perhaps the weakest side of Cartesianism, and this confirms a very judicious view about the nature of human knowledge. It seems that God, who dispenses it, acts like a common father of all the sects; that is, he will not allow one sect to triumph completely over the others and destroy them utterly. An overwhelmed sect, put to rout, and almost worn out, always finds the means to recover as soon as it gives up defending itself, creating a diversion by taking the offensive and retaliating. The combat between sects is always what it was for a while between the Trojans and the Greeks the night Troy was taken. They vanquish each other by turns as they change their ways of fighting. The Cartesian has no sooner overthrown, ruined, annihilated the view of the Scholastics concerning the soul of beasts, than he finds out that he can be attacked with his own weapons and can be shown that he has proven too much; and that if he reasons logically, he will give up views that he cannot give up without becoming an object of ridicule and without admitting the most glaring absurdities. For where is the man who would dare to say that he is the only one who thinks and that everybody else is a machine? Would such a person not be considered as more insane than those who are put in lunatic asylums or kept away from all human society? This consequence of the Cartesian theory is most upsetting. It is like a peacock's feet, whose ugliness mortifies the vanity that the brilliance of the plumage has inspired. Be this as it may, one must agree that the entire strength of Father Daniel's attack against the theory of Descartes consists in the objections he has raised, and not at all in the answers he has given to the objections of the Cartesians. He does not deny that they raise strange difficulties by their questions; but he maintains that they, in turn, are not in less difficulty as a result of the questions put to them, and that *good reprisals* can be made. You would search in vain in his book for the solution of the physical, moral, and theological difficulties that have been raised against the Peripatetics concerning the soul of beasts. He is content to reply that, if there are incomprehensible things in this view, there are some things of the same kind in Descartes's hypothesis. The definition of the beast's soul, "a substance capable of sensation," that is, of seeing, understanding, and the like, is as clear as the Cartesian definition of mind, "a substance that thinks and reasons." These are Father Daniel's words. He then proves them as well as possible. A little earlier he had said that the soul of beasts is neither matter nor spirit, but "a being between the two, capable neither of reasoning nor thought, but only of perception and sensation." The fact that he says nothing better than this should rather be blamed on the nature of the subject than on his abilities.

He will allow me to say that his hypothesis cannot be maintained, and it cannot solve any difficulties. These two terms "matter" and "mind" seem at first glance to be opposed in such a way as to admit of something in between. But when they are examined more carefully, we see that they can be reduced to a contradictory opposition. To show this it is only necessary to ask if the substance that is neither body nor mind is extended or not. If it is extended, it would be wrong to distinguish it from matter. If it is not extended, I would like to know on what basis it is distinguished from mind; for it is like mind in being an unextended substance, and we cannot comprehend how this classification can be divided into two kinds, since the specific attribute that may be given to one—that of being unextended would never be incompatible with the other. If God can join thought to one unextended being, he could also join it with another unextended being, there being nothing but extension that seems to us to make matter incapable of thought. At least, we clearly conceive that an unextended substance which can have sensation is capable of reasoning; and consequently, if the soul of beasts is an unextended substance capable of sensation, it is capable of reasoning. It is then of the same species as man's soul. It is then not a substance between body and mind. Here is a question raised by Father Daniel: "Will the Cartesians deny the possibility of there existing a type of being that is only capable of sensation? And where is that respect that their master [i.e., Descartes] tried to inspire in them for the omnipotence of a God, who, according to him, can make it such that a triangle not have three sides and that two plus two not equal four; and who nevertheless cannot make a being that only has sensations?" This question would puzzle a man who had taken a vow never to deviate from what Descartes said; but one does not encounter Cartesians who subject themselves to such slavery; and we may be sure that Descartes would never have dared to assert seriously that God can make two feet of wax capable of possessing three or four figures, but not capable of having any others. Whatever Descartes may have held on this matter, his disciples will never believe that

they are lacking in the respect due to God if they say that a "being solely capable of sensation" is not more possible than a piece of wax that can have only a square figure. As to that which concerns a "being who only had sensations," they will believe this to be very possible, just as it would be possible that a certain piece of matter would be always round if God wished eternally to prevent the material particles from changing place. It would not displease Father Daniel if I say that he was not aware that "a being solely capable of sensation" and "a being that only had sensations" are not the same thing. The possibility of the first is inconceivable; that of the second is obvious. But just as a piece of wax in which God perpetually prevents the change of position of the particles would be of the same species as a piece of wax, the change of whose extremities would continually produce a new figure, so let us say also that a substance that God always confines to sensations would be of the same species as a substance that might be elevated to reasoning.

It remains for me to show the inadequacy of the Jesuit's hypothesis [i.e., Daniel's hypothesis]. (1) A system is needed that establishes the mortality of the soul of beasts. Now this is not found in a being in between body and mind; for such a being is not extended; it is therefore indivisible, it can only perish by annihilation; diseases, fire, the sword cannot affect it. In this regard, it is then of the same nature and same condition as minds, as the soul of man. (2) We have need of a system that establishes a difference in species between the soul of man and that of beasts. Now we do not find this by this in-between being. For if the soul of beasts, being neither body nor mind, nevertheless has sensations, then man's soul could very well reason even though it were neither body nor mind but something in between the two. It is more difficult for a being destitute of sensation to reach the perception of a tree and the awareness of this tree than for a being endowed with sensation to reach the state of reasoning. (3) We have need of a system that explains the astonishing activities of bees, dogs, monkeys, elephants; and you only give us a soul of beasts with sensations, but which does not think, which does not reason. Consider well, and you will realize that such a soul is inadequate to explain the phenomena. Father Daniel admits this in another part of his work, where he seems to give the Aristotelians only the advantage of being here first. For after having dealt with the difficulties in Cartesianism relating to beasts, he adds: "The Peripatetics also, doubtless, have their difficulties to resolve. But were these even greater than they are, yet so long as the Cartesians have nothing to say that is more satisfactory or intelligible, we ought to stick to the former view and argue on this particular point as a great minister of state did, twenty-five years ago, regarding all philosophy. He was advised not to let his oldest son learn ancient philosophy because, as he was told, there was nothing in that philosophy but puerilities and foolishness. 'I have also been told; he replied, 'that there is much foolishness and illusion in the new philosophy. Thus,' he continued, 'having to choose between ancient and new foolishness, I ought to prefer the old to the new one."...