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The Animal Soul in the Seventeenth Century

The Opposing Views of Descartes and Gassendi

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The most salient feature of the relationship between René Descartes and Pierre de Gassendi is the long controversy that marred their friendship. The question of the animal soul is a prominent part of that controversy. Descartes denies animals possession of a soul, while Gassendi admits the existence of an animal soul, although he denies animal reasoning ability. A comparison of each thinker's philosophy of animal nature reveals that Descartes's animal and Gassendi's animal are strikingly similar, highlighting the fact that their dispute over the question of the animal soul is less about conflicting theories of animal nature than it is about Gassendi's discontent with Descartes's arguments for an immaterial soul.

The Seventeenth Century saw much debate over the nature of animals, especially in France. Michel de Montaigne¹ and Pierre Charron² had espoused classical views that conceded abilities to animals that rivalled or even excelled those of humans, and this direct challenge to human supremacy incited opposition. Marin Mersenne highlights mental abilities exclusive to humans in *La vérité des sciences : contre les sceptiques ou pyrrhoniens* (1624), while Pierre Chanet refutes the reasoning ability of animals in *Considérations sur la Sagesse de Pierre Charron* (1643) and *De l'instinct et de la connoissance des animaux : avec l'examen de ce que M. de la Chambre a écrit sur cette matière* (1646). Marin Cureau de la Chambre responded to the latter by publishing *Traité de la connoissance des animaux* (1648), in which he expands on his position that instinctive animal behavior constitutes reasoning.

¹ See the *Essais* (1580), particularly *L'Apologie de Raimond Sebond*.

² Most pointedly in the three volumes of *De la sagesse* (1601).

The debate between Chanet and Cureau de la Chambre is a minor controversy beside the dispute that erupted between René Descartes and Pierre Gassendi. As was the case with Chanet and Cureau de la Chambre, the nature of animals played a great part in their disagreement; however, when they clash heads in Gassendi's *Disquisitio Metaphysica*³ (1644), the question of animal nature arises primarily to elucidate the nature of the human soul. Descartes argues for an immaterial soul to account for all thought and Gassendi the possibility that matter produces thought-this accounts for the majority of their disagreement. As for animal nature and, in particular, the existence of an animal soul, Descartes and Gassendi also disagree. Descartes famously denies the existence of an animal soul in *Discours de la méthode* (1637), while Gassendi argues to the contrary. Despite this seemingly profound distinction, their conceptions of animal nature share many features. Descartes draws a sharp line between animals and humanity, denying animals any reasoning ability. While Gassendi attributes certain mental abilities to animals that Descartes rejects, they are still incapable of higher functions that would properly constitute reasoning. The theories of both Descartes and Gassendi support the human supremacy that Montaigne and Charron undermine.

1. Descartes's Soulless Animal

The primary purpose of Descartes's theory of animal nature in the *Discours de la méthode* is to distinguish humans from animals. The separation of the two is necessary to avoid dire theological consequences. If human and animal nature are the same, then there is no reason to believe that human and animal souls differ. According to Descartes, if this is the case, then there is no reason to believe that humans have an immortal soul: «après l'erreur de ceux qui nient Dieu [...] il n'y en a point qui éloigne plutôt les esprits faibles du droit chemin de la vertu, que d'imaginer que l'âme des bêtes soit de même nature que la nôtre, et que, par conséquent, nous n'avons rien à craindre, ni à espérer, après cette vie, non plus que les mouches et les fourmis»⁴. Thierry Gontier inscribes Descartes's fear in a tradition including both classical and Renaissance authors whose influence determines the context in which Descartes reacts to Montaigne: «Le contexte dominant dans lequel Descartes lit Montaigne le porte ainsi à voir dans le discours sur les animaux de l'*Apologie* de Raimond Sebond non une simple critique de l'orgueil anthropocentrique, mais le germe d'une psychologie matérialiste destructrice du dogme de l'immortalité de l'âme humaine»⁵. Thus Descartes refuses to examine the possibility that both humans and animals may

³ Full title: *Disquisitio Metaphysica seu dubitationes et instantiae adversus Renati Cartesii metaphysicam et responsa*.

⁴ R. Descartes, *Discours de la méthode*, Paris 1970, ch. V, pp. 124-25.

⁵ T. Gontier, *De l'homme à l'animal: Montaigne et Descartes ou les paradoxes de la philosophie moderne sur la nature des animaux*, Paris: 1998, pp. 193-194.

have immaterial souls, but rather hinges the distinction between the two on its possession.

For Descartes to accomplish his goal, he must define the soul so that no animal behavior depends upon it, while some human behavior is inexplicable without it. To this end, Descartes marks a clear division between body and mind. The body is purely physical and hence mechanical, while the soul is an immaterial, reasoning substance. The human body is like «une machine qui, ayant été faite des mains de Dieu, est incomparablement mieux ordonnée, et a en soi des mouvements plus admirables, qu'aucune de celles qui peuvent être inventées par les hommes»⁶. Animal bodies, too, are like machines, but there is a significant difference between humans and animals in this respect. If there was an actual machine that mimicked perfectly the construction of an animal body — Descartes uses the example of a monkey — there would be no way to distinguish the machine from the real animal. As Descartes puts it, one could not tell that the machine was not «tout de même nature» as the animal⁷. In essence, he is saying that the body of the animal and its workings are identical to the nature of the animal. The choice of a monkey underscores that this is true for all animals, even those that may appear to be intelligent. All animal behavior is explicable as the response of a material body to external stimuli.

This is not the case with humans. A real human is distinguishable from a machine that replicates the body by its inability to speak coherently. A mechanical replica is unable to «arrange[r] diversement» words «pour répondre au sens de tout ce qui se dira en sa présence»⁸. A machine cannot partake in a rational conversation, even though it may be able to «profère des paroles»⁹. A machine's utterances would simply be physical responses to environmental stimuli, and therefore independent of rational thought.

The machine's abilities and limitations correspond to the abilities and limitations of animals. Descartes notes that parakeets and magpies can pronounce words, for instance, but that they are incapable of engaging in conversation¹⁰. For Descartes, animals are unable to do what nearly any human can do, namely, «arranger ensemble diverses paroles, et d'en composer un discours par lequel ils fassent entendre leurs pensées»¹¹. Magpies and parakeets cannot use language even though they have vocal organs capable of articulating human language, which Descartes offers as proof of their lack of rationality¹². In the case of other animals, were they rational, they would at least be able to communicate their thoughts via signs as the case of human deaf-mutes illustrates¹³. Since no animal do so, this is proof that they have no thoughts to communicate, evidence «pas

⁶ R. Descartes, *Discours de la méthode*, cit., chap. V, p. 120.

⁷ *Ibid.*

⁸ *Ibid.* p. 121.

⁹ *Ibid.*

¹⁰ *Ibid.*, p. 122.

¹¹ *Ibid.*

¹² *Ibid.*

¹³ *Ibid.*

seulement que les bêtes ont moins de raison que les hommes, mais qu'elles n'en ont point du tout»¹⁴. Like a machine, animals are unthinking, and since they have no thoughts to communicate, they cannot use language.

In the *Discours*, Descartes responds to two misconceptions concerning the possibility of animal language that date back to the ancient world. The first is that the cries and calls of animals constitute language. What seems to distinguish animal cries from language is the fact that a machine could duplicate them: «on ne doit pas confondre les paroles avec les mouvements naturels, qui témoignent les passions, et peuvent être imités par des machines aussi bien que par les animaux»¹⁵. These cries are not a communication of thought, but rather reactions resulting from the passions, which do not qualify as thought.

The second misconception is that animals have their own languages, but that humans are unable to understand them. Descartes specifically criticizes following the lead of «quelques anciens»¹⁶ in this regard. R.W. Serjeantson believes that this warning against believing that animals speak although we do not understand their language is directed against Montaigne and Charron¹⁷. The fact that animals such as magpies and parakeets have vocal organs capable of articulating human speech nullifies this belief, «car s'il était vrai, puisqu'elles ont plusieurs organes qui se rapportent aux nôtres, elles pourraient aussi bien se faire entendre à nous qu'à leurs semblables»¹⁸. If a magpie language did exist, it would mean that magpies are capable of thought. Since magpies can articulate human speech, they would be able to use human words to communicate their thoughts. That they do not, as Descartes shows previously, is proof that they do not think¹⁹.

Descartes's responses to each of the misconceptions he addresses highlight animals' lack of rationality. It is true that animals emit cries and calls of various sorts, but these are not properly words, and they do not communicate thoughts. They, therefore, do not require the influence of a rational soul. The inability of animals like magpies and parakeets to use human speech precludes the existence of their own animal languages, since it demonstrates their lack of thought. Since they do not think, they have no rational soul. This is the difference between humans and animals that a lack of language brings to light. Even a child can use language, while even the most perfect of monkeys and parakeets cannot, a fact which argues for a soul «du tout différente» in nature from the human soul²⁰.

¹⁴ *Ibid.*, pp. 122-123.

¹⁵ *Ibid.*

¹⁶ *Ibid.*

¹⁷ R. W. Serjeantson, *The Passions and Animal Language, 1540-1700*, «Journal of the History of Ideas» 62(2001), 425-444, p. 437.

¹⁸ R. Descartes, *Discours de la méthode*, cit., p. 123.

¹⁹ In his paper on the subject, *Descartes, La Mettrie, Language, and Machines*, Keith Gunderson backs Descartes's view that one cannot conclude from isolated instances, such as the speech of a parrot, that animals reason or use language as humans do. In effect, Gunderson claims that arguing that from like effect we must conclude like cause is unsound in cases involving human intelligence, and uses the case of computer calculations to make his point.

²⁰ R. Descartes, *Discours de la méthode*, cit., p. 123.

Animals do not have a rational, immortal soul, but the purpose of Descartes's arguments goes beyond this conclusion. What is most important for Descartes is its implication. Humans possess something that animals do not; therefore they are fundamentally different from animals.

Attributing language to animals is only one of the classical arguments for animal reasoning ability and combatting human supremacy. A popular method which both Montaigne and Charron employ is to remark on the many ways in which animal abilities surpass those of humans. Descartes uses the *Discours* to refute this line of argument by providing a mechanical explanation for even the most complex of animal behaviors. Using again the idea of a mechanical replica of a human being, Descartes states that one may distinguish the replica from a real human by cataloguing the diversity of its abilities. Whereas humans are able to adapt to a widely diverse set of circumstances and engage in suitable behaviors to meet their needs, a machine is capable of only a finite number of activities in response to a limited number of stimuli «bien qu'elles fissent plusieurs choses aussi bien ou peut-être mieux qu'aucun de nous»²¹. Excellence in one or even several abilities does not mean that a machine is of the same nature as a human being. The limitation of machines shows, in fact, that they act «pas par connaissance, mais seulement par la disposition de leurs organes»²². The reason this is so is because a machine cannot possibly be of a complexity that can account for the diversity of human behavior that results from rationality:

Car au lieu que la raison est un instrument universel, qui peut servir en toutes sortes de rencontres, ces organes ont besoin de quelque particulière disposition pour chaque action particulière ; d'où vient qu'il est moralement impossible qu'il y en ait assez de divers en une machine pour la faire agir en toutes les occurrences de la vie, de même façon que notre raison nous fait agir²³.

Descartes cannot imagine the possibility of a machine in human form that could contain all the necessary mechanisms to account for the nearly infinite diversity of human action.

As in the case of the inability of machines to use language, their behavioral limits apply directly to the case of animals. Just as the excellence of a machine in particular abilities does not indicate that it is of the same nature as a human being, the excellence of animals in certain domains does not mean they are of the same nature as humans. The reason is the same lack of diversity in their behaviors. The same animal that exhibits a skill surpassing human ability in one domain «n'en témoignent point du tout en beaucoup d'autres»²⁴. The absence of skill in a large number of areas demonstrates that animals do not have intelligence equal to or greater than humans, as their skill in particular cases might imply, but «plutôt qu'ils n'en ont point»²⁵.

²¹ *Ibid.*, p. 121.

²² *Ibid.*, p. 123.

²³ *Ibid.*, pp. 121-122.

²⁴ *Ibid.*, p. 123.

²⁵ *Ibid.*, p. 124.

Descartes likens the special abilities of animals to a clock: «c'est la nature qui agit en eux, selon la disposition de leurs organes : ainsi qu'on voit qu'un horloge, qui n'est composé que de roues et de ressorts, peut compter les heures, et mesurer le temps, plus justement que nous avec toute notre prudence»²⁶. The nature of animals is to act according to the disposition of their bodily organs, just as the nature of a clock is to measure out time according to its mechanical construction. Obviously, the movements of a clock do not necessitate its having a rational soul. Thierry Gontier characterizes the difference between the apparent reason in animal behavior and human behavior as a difference between external and internal intelligence. A human's behavior results from his own reasoning ability, while the animal's behavior is directed by God: «Pour Descartes...la sagesse n'est pas absente des œuvres des animaux, mais elle est à rapporter à l'intelligence divine»²⁷. Accordingly, the behavior of animals, even those that surpass human abilities, are not contingent upon a rational soul. The entirety of Descartes's arguments against a reasoning animal has the sole purpose of drawing a clear line between humans and animals.

For Michael Miller the motive behind Descartes's criteria for reasoning ability is the exclusion of the possibility of rational animals²⁸. Furthermore, Descartes states «that there are no varying degrees or varying uses of rationality»²⁹, which automatically biases his reasoning ability criteria against animals. They must reason as humans do in human circumstances to be considered rational. Animals' material bodies account for the entirety of their behavior, whereas humans have a rational soul, a thinking substance, that manifests in thought and accounts for such things as language and complex behaviors beyond the capabilities of even the most intricate machines.

2. Gassendi's Soulful Animal

Although animal nature is a key component of the debate between Descartes and Gassendi, the *Disquisitio Metaphysica* is not an objection to Descartes's *Discours*, where Descartes's exposition of animal nature appears. Instead, the *Disquisitio* is a systematic refutation of the *Méditations métaphysiques*, in particular, Descartes's espousal of an immaterial soul. Gassendi believes that the animal soul, like everything else, consists of matter, though of an extremely subtle variety. His writings indicate a strong measure of doubt — despite the contrary opinion of the church — concerning the immateriality of the human soul. Indeed, the primacy of matter is so great a part of Gassendi's thought that Olivier Bloch views the essence of Gassendi's objections to Descartes's

²⁶ *Ibid.*

²⁷ T. Gontier, *De l'homme à l'animal: Montaigne et Descartes ou les paradoxes de la philosophie moderne sur la nature des animaux*, p. 227.

²⁸ M. Miller, *Descartes' Distinction Between Animals and Humans: Challenging the Language and Action Tests*, «American Catholic Philosophical Quarterly» 72.3 (1998), pp. 339-370, pp. 355-357.

²⁹ *Ibid.*, p. 358.

Méditations to reside in his «refus global du principe de méthode sur lequel repose le système cartésien, à savoir l'exigence d'un 'ordre des raisons' différent de l'ordre des matières, et qui serait le véritable ordre philosophique»³⁰. Gassendi's philosophical investigations start from the material world, whereas Descartes sets off from the purely rational. Recourse to animal nature is merely one of several means in the *Disquisitio* by which Gassendi contests Descartes's theory of an immaterial soul.

To see precisely how Gassendi's theory of animal nature differs from Descartes's, it is necessary to look outside the *Disquisitio*. In François Bernier's *Abrégé de la philosophie de Gassendi*, which is a translation and reorganization of Gassendi's corpus, a reader has the chance to see Gassendi's own opinions concerning the nature of the human soul and the nature of animals, although his adhesion to the authority of the church clouds much of what he writes about the former³¹.

Among all the passages pertaining to animals in the *Abrégé*, one can also find a direct response to the idea of an animal-machine, although Descartes's name does not appear in the text. Bernier labels the pertinent passage «Si les Brutes sont de pures Machines» and tellingly includes it in a chapter on the immortality of the soul. Gassendi attributes the idea of the animal-machine not to Descartes but to «un Espagnol nommé Perera»³², evidently the sixteenth-century theologian Benedict Pereira, diminishing any claims Descartes may have to an original theory. Contemporaries, «quelques-uns de nos Modernes» as Gassendi puts it, take up the opinion «à l'égard des Brutes, afin, disent-ils, de les mieux distinguer des Hommes»³³. The reason the idea of the animal-machine appears in a chapter on the immortality of the soul becomes clear when Gassendi divulges the impetus behind the argument for a non-sentient animal.

Ils pretendent donc [...] que si on admet que les Brutes pensent, ou mesme qu'elles ayent du sentiment, quelque grossier et imparfait qu'il puisse estre l'on ne satisfiera jamais aux objections de ceux qui veulent que l'Ame de[s] Brutes, et celles des Hommes ne different que selon le plus, et le moins, c'est pourquoy pour se tirer tout d'un coup d'embarras, et sans considerer si le remede qu'ils apportent n'est point pire que le mal, ils soûtiennent avec cet Autheur [Pereira] que les Brutes ne sont que de pures Machines, comme pourroient estre des Horloges, et qu'elles ne voyent, ni n'entendent, ni ne connoissent, ou pour me servir de leurs termes, qu'elles sont destituées de tout sentiment soit exterieur, comme la Veüe, l'Oüye, etc. soit interieur comme la Phantaisie³⁴.

³⁰ O. Bloch, *La Philosophie de Gassendi: Nominalisme, Matérialisme et Métaphysique*, The Hague 1971, p. 49.

³¹ Isabelle Moreau points out that Bernier's *Abrégé* does not present Gassendi's philosophy in its entirety, as the title suggests; rather, Bernier «transmet à ses contemporains ce qu'il faut savoir de la philosophie de Gassendi» (I. Moreau, *Guérir du sot: les stratégies d'écriture des libertins à l'âge classique*, Paris 2007, p. 402). According to Moreau what is missing are the fruits of Gassendi's «dialectique humaniste» and his «intentions pédagogiques et concordantistes de l'écclesiastique» (*Ibid.*, p. 403), neither of which have direct bearing on his theories of animal nature.

³² F. Bernier, *Abrégé de la philosophie de Gassendi en VII tomes*. Évreux 1992, t. VI, p. 214.

³³ *Ibid.*

³⁴ *Ibid.*, pp. 214-215.

Gassendi recognizes that the idea of an animal-machine is merely an attempt to protect religious dogma and not an attempt to present a true account of animal existence that accords with experience. He agrees that the existence of an animal-machine would be useful if there were clear proof of its veracity, but the proposition, he contends, is patently false:

Certainement il seroit à souhaiter qu'on pût bien clairement demontrer ce qu'avance Perera, et ses Sectateurs, parceque cela etabliroit une difference tres considerable entre l'Ame des Brutes, et celles des Hommes; mais quel moyen de demontrer une chose qui paroît si manifestement fausse? Et qui est ce qui en pourra jamais estre persuadé? Ou qui est ce qui pourra jamais croire qu'un Animal qu'on ecorche tout vif, qui crie qui se debat, et qui grince des dents, ne sente pas davantage qu'un morceau de parchemin qu'on dechireroit³⁵?

Gassendi preserves his piousness by admiring Pereira's intent, but dissents on the grounds that his argument lacks persuasive power. To illustrate this fact, Gassendi resorts not only to the example of sensation he deems undeniable in the citation above, but also employs a string of examples that indicate reasoning ability among animals.

Gassendi's initial examples are the web use of spiders, the construction of dams by beavers, and the maternal behavior of hens³⁶. As complex as some of these behaviors are — Gassendi gives a detailed description of the architecture of a beaver's lodge — they still represent what one might term instinctive behaviors. He adds various examples which show that animals can deny instinctive responses, such as a donkey that refuses to advance over the edge of a cliff no matter how hard its master beats it. This, he claims, demonstrates its ability to reason despite its reputation for being the stupidest animal:

Mais pour vous faire souvenir de l'exemple de l'Animal qu'on pretend estre le plus sot de tous les Animaux; quand on a conduit un Asne jusques sur le bord d'un precipice, on a beau le battre, on a beau pousser la Machine à coup de pieds, elle n'avancera jamais, il ne precipitera jamais, mais ou il suspendra son mouvement, encore qu'il soit porté, ebranlé, et determiné vers le precipice, ou il se detournera mesme enfin si on le presse trop, et retournera sur ses pas, tant il est vray qu'il connoit le danger, qu'il a quelque pressentiment du mal qui lui arriveroit s'il se precipitoit, et qu'il semble preferer les coups, et la douleur presente à une future³⁷!

In addition to the extensive list of examples that Gassendi provides, he maintains the possibility of a great number more: «Je pourroy icy rapporter cent autres particularitez des Animaux qui toutes seroient des marques authentiques de leur connoissance»³⁸. All of these examples of animal reasoning suggest the falsehood of the animal-machine theory.

³⁵ *Ibid.*

³⁶ *Ibid.*, pp. 215-216.

³⁷ *Ibid.*, p. 217.

³⁸ *Ibid.*, p. 218.

Gassendi makes it clear that he does not mean to say that animals reason exactly as humans, but Leonora Cohen Rosenfield correctly notes that for Gassendi «the difference between animal and human reasoning is one of degree and not of kind»³⁹. He does, however, uphold the superiority of human reasoning ability, which operates at a higher degree of perfection than that of animals:

Mais quoy, disent-ils, en voulez vous donc faire des Animaux qui soient proprement et absolument Raisonnables comme les Hommes? Non assurement; car quelque perfection que nous remarquions dans leurs actions, elles paroissent toujours si basses, et si imparfaites au regard de celles des Hommes, qu'on est contraint d'avouer qu'elles partent d'un principe tout à fait different...⁴⁰.

A «principe tout à fait different» implies more than a difference of degrees, and when Gassendi details the gap between human and animal reasoning abilities, the differences are considerable enough to support that conclusion:

...elles sont incapables de parvenir par le Raisonnement à la connoissance des choses incorporelles, de se reflechir sur leurs propres actions, qui est une des principales marques du vray Raisonnement; de faire des abstractions, et de raisonner sur les choses universelles; de connoître le Bien honneste, et de le suivre abandonnant le Bien sensible; et qu'enfin elles sont sans liberté, et toujours determinées à une certaine chose selon les mouvemens divers et nécessaires de la matiere dont elles sont et composées, et agitées⁴¹.

There is little difference between Gassendi's animal and a machine. The description above sheds some light on the role of the will Gassendi purports in animal impulsive actions. If the animal has understanding, it cannot reflect upon that understanding. If it knows the relationship of cause to effect, as in the example Gassendi gives concerning a dog that reaches a desired food item by mounting items nearby to reach it⁴², it is nonetheless drawn to the food item mechanically. If one applies Gassendi's limitations to the case of the donkey that refuses to plunge over a precipice, the donkey's will is apparent in its denial of the impulse to advance that its master's blows represent, and it chooses the pain of the blows over that of the fall from a height, this latter because it has an understanding of the peril that faces it. Nonetheless the whole process is deterministic in nature because of the completely material nature of the beast. Gassendi's animal is a machine, but apparently not purement machine because he allows for animal sensation, imagination, and understanding, even though the last he limits to non-abstract and non-reflexive functions. Olivier Bloch even notes similarities between Gassendi's proofs of the gap between human and animal intellectual abilities in the *Syntagma Philosophicum* and those found in

³⁹ L. Cohen Rosenfield, *From Beast-Machine to Man-Machine: Animal Soul in French Letters from Descartes to La Mettrie*. New York 1941, p. 10.

⁴⁰ F. Bernier, *Abrégué de la philosophie de Gassendi en VII tomes*, cit., t. VI, p. 218.

⁴¹ *Ibid.*, pp. 218-219.

⁴² *Ibid.*, p. 217.

Descartes's *Discours de la méthode*⁴³. Despite human perfections and Gassendi's description implying a difference of kind rather than degrees, he reaffirms that the difference between human and animal mental abilities is not enough to warrant a distinction of kind to humans: «Il est vray, disent les plus Zeler, qu'il y a une grande difference entre les operations des Brutes, et celles des Hommes, mais cela ne semble pas suffire pour etablir une difference specifique entre elles et nous»⁴⁴. Gassendi thus concurs with Montaigne that humans are animals, and as Rosenfield points out, «Man is simply the highest type of animal»⁴⁵. His description of animal abilities, however, does contradict his conclusion to some extent.

Aside from the differences that do exist between Gassendi's animal and the «purement» machine animal, and the evidence for falsehood of the animal-machine, Gassendi does have another reason for refuting the idea. Since he believes that the opinion exists only to support Christian dogma, he worries that perceived need of such a support undermines the church. He finds the animal-machine just as dangerous for religion as Descartes finds the rational animal:

Certainement je ne porte point envie à leur zèle, j'ay déjà dit qu'il seroit à souhaiter que cela se peust bien démontrer, mais cependant je les prie de prendre garde, comme j'ay aussi déjà insinué, que le remede qu'ils veulent apporter ne soit pire que le mal, et que ce ne soit, comme je pense, une des plus dangereuse[s] Doctrine[s] qui puisse[nt] estre introduite[s] dans le Christianisme: Car de prendre à tasche comme ils font de detruire toutes les raisons sur lesquelles les Philosophes, et les Theologiens ont jusques ici établi la difference specifique de l'Ame Humaine, et de celle des Brutes, et de soutenir que si l'on n'admet pas que les Brutes soient insensibles, l'on soit obligé d'admettre qu'elles sont de mesme Categorie que nous, ou que nous sommes donc de mesme Categorie qu'elles; c'est vouloir fonder cette difference, c'est à dire la spiritualité de l'Ame humaine, sur l'Insensibilité des Brutes, ou ce qui est le mesme, c'est vouloir fonder un article de Foy sur un principe qu'ils ne prouvent par aucune raison, qui paroît évidemment faux, qu'ils ne persuaderont jamais à personne, et dont ils ne sont apparemment point persuadé eux mesmes, ce qui est assurement sinon un tres malicieux, du moins tres dangereux Dessein: Comme si la Religion ne pouvait plus subsister sans ce beau et nouveau principe, *Les Brutes ne sentent point, les Brutes ne sont que de pures Machines!* Admirable fondement de la plus importante vérité du Christianisme⁴⁶!

In essence, Gassendi states that it is below the church to use animal nature to found religious truths. His argument illustrates how reason can cut both ways, as Descartes is among those who declare the rational animal dangerous for Christianity, and Gassendi holds the same to be true of the animal-machine. Gassendi does not object to the distinction made between human and animal spirituality, and so his philosophy offers evidence that a rational animal can coexist with an immortal soul exclusive to humans.

⁴³ O. Bloch, *La Philosophie de Gassendi: Nominalisme, Matérialisme et Métaphysique*, cit., pp. 403-404.

⁴⁴ F. Bernier, *Abbrégé de la philosophie de Gassendi en VII tomes*, cit., t. VI, p. 219.

⁴⁵ L. Cohen Rosenfield, *From Beast-Machine to Man-Machine*, cit., p. 10.

⁴⁶ F. Bernier, *Abbrégé de la philosophie de Gassendi en VII tomes*, cit., t. VI, pp. 219-220.

To understand how this is possible in Gassendi's case, one needs to examine his theories of the soul. Bernier's presentation of Gassendi's philosophy of the soul consists of three chapters. The first deals with the question of the materiality or immateriality of the soul, the second is on the nature of the animal soul, and the third is on the nature of the human soul. These divisions show the importance of the materiality/immateriality of the soul and the distinction between humans and animals that differences in the soul represent to Gassendi's philosophy. Gassendi's task is difficult, because despite the similarity between humans and animals he admits, his philosophy must allow for some difference to justify the immortality of the human soul. Even more difficult is any suggestion that implies the materiality of the human soul, for the official position of the church is that the soul is incorporeal. Gassendi must avow his adherence to church dogma even as he questions it. Accordingly, just such an avowal appears in Bernier's chapter on the question of the materiality or immateriality of the soul.

The chapter opens, however, with a denial that exact knowledge of the soul is Gassendi's goal: «Si nous entreprenons icy de traiter de l'Ame, comme la marque interieure par laquelle les Animaux sont distinguez du reste des corps, ce n'est point tant que nous esperions de connoitre sa nature, que parce qu'on ne doit pas ignorer jusques où les Philosophes ont en cela poussé leurs connoissances»⁴⁷. Gassendi's strategy, therefore is to display the opinions of antiquity regarding the nature of the soul, among which are both those for and against its immateriality. The declarations of several classical minds on the inpenetrability of the soul precedes Gassendi's own assertion of the same which he rests on the limitations of human reason to which the disagreement among philosophers attests: «cette grande discorde des Philosophes fait assez voir qu'il n'est rien de plus foible, de plus obscur, de plus inconstant [than human reason]; ce n'est pas que la véritable raison soit contraire à ce que l'Esprit de Dieu définit, mais l'Esprit humain fragile, et chancelant raisonne ordinairement mal lorsqu'il est abandonné à lui-même»⁴⁸. This comment serves to buttress Gassendi's disclaimer at the opening of the chapter.

Gassendi does make a pronouncement on the nature of the soul before his list of philosophical opinions on the matter, not based on human reasoning but rather on faith:

La Foy nous enseigne une chose dont nous ne devons point douter, asçavoir *Que l'Ame humaine est une substance incorporelle, et immortelle, qui n'est point tirée de l'essence Divine, ni de quelque domicile Celeste où elle existast auparavant; mais qu'elle est cré[e]e de rien, multipliée selon le nombre des corps, existante par soy, et essentiellement forme*. C'est ainsi que les derniers Conciles l'ont défini⁴⁹.

⁴⁷ *Ibid.*, t. V, p. 291.

⁴⁸ *Ibid.*, p. 293.

⁴⁹ *Ibid.*, p. 292.

Here is a very precise account of the soul that accords with Descartes's immaterial and immortal version fairly well, and that no one should doubt according to Gassendi. Yet he follows this definition with a remark that undermines the authority of the church's pronouncement by ingenuously bringing to light its conflict with earlier church opinion: «De sorte que les SS. Peres, S. Hierôme, S. Augustin, S. Gregoire, ne peuvent plus dire à l'égard de l'Origine de l'Ame, *Qu'ils n'en ont rien de certain, rien qui soit défini, que cette question e[s]t indissoluble dans cette vie, et autres choses semblables*⁵⁰. He even connects these opinions indirectly with heresy: «La chose nous est maintenant marquée, et définie, l'Eglise ne souffrant pas que nous balancions entre tant de différentes Opinions de Philosophes, et d'Herétiques»⁵¹. These remarks in tandem with his superficial affirmation of the official stance of the church are representative of his technique throughout the chapter on the question of the materiality or immateriality of the soul. He never departs from a position of complete propriety, in line with church dogma, but supplies evidence that gives reason to doubt the dogma to which he defers.

The extent to which Gassendi deviates from church dogma and the sincerity of his religious convictions are a matter of debate, but Olivier Bloch demonstrates that his faith is real, as are his efforts to reconcile a materialist philosophy with his religion⁵². Some matters lie purely in the realm of faith, and Gassendi places them «au-dessus de toute discussion»⁵³. Gassendi's treatment of the soul, however, appears to question a religious doctrine that contradicts observation and experience, although he ostensibly accepts the immortality of the soul.

He dutifully reports a quantity of philosophical opinions in favor of the incorporeal soul such as Pythagorus, Plato, and Aristotle. In addition, he also includes the heretical Manicheans and he closes his presentation of Aristotle's immaterial soul with a couple of off-hand objections⁵⁴. His list of those who support the corporeal soul is much more extensive, thus already throwing some doubt on the immaterial soul by the sheer weight of the opinions to the contrary. The group consists of Diogenes, Anaximander, Anaxagoras, Archelaus, Leucippus, Democritus, Epicurus, Hippocrates, and Zenon and the Stoics⁵⁵. Speaking of Epicurus, Gassendi takes the opportunity to show that common opinion both agrees and disagrees with his corporeal soul, depending on whether it is the human or animal soul that is in question: «quoy qu'on accorde à Epicure que l'Ame est Corporelle à l'égard des Brutes, on ne [le] luy accordera point à l'égard de l'Ame humaine, principalement entant quelle est

⁵⁰ *Ibid.*

⁵¹ *Ibid.*, pp. 292-293.

⁵² O. Bloch, *La Philosophie de Gassendi: Nominalisme, Matérialisme et Métaphysique*, cit., p. 299 *et passim*.

⁵³ *Ibid.*, p. 320.

⁵⁴ F. Bernier, *Abrégé de la philosophie de Gassendi en VII tomes*, cit., t. V, p. 298.

⁵⁵ *Ibid.*, pp. 298-299.

Raisonnables, Esprit, Entendement, comme nous dirons ensuite plus au long»⁵⁶. To counterbalance this approval of Epicurus, Gassendi reminds his readers that he elsewhere demonstrates the weakness of Epicurus' argument for the necessity of a material soul⁵⁷. Gassendi's views regarding Epicurus are important for his own speculation concerning the soul that occurs in the following chapters.

The reader leaves the first chapter with a foreshadowing of Gassendi's two-part human soul. He writes, «il ne faut que distinguer deux choses en nous avec Philon, asçavoir l'Animal, et l'Homme, l'Animal acause de l'Ame par laquelle nous vivons, et qui nous est commune avec les Brutes, et l'Homme acause de l'Entendement par lequel nous raisonnons et qui est spirituel, et l'image de Dieu»⁵⁸. This dual understanding of humanity includes a material component, but Gassendi is careful not to openly contradict the church's definition of the soul that appears earlier in the chapter. He simply supplies some reason to doubt current religious dogma in the form of earlier church opinion that supports the materiality of the soul:

Je ne diray rien icy des SS. Peres qui ont cru que l'Ame humaine mesme estoit Corporelle; on scait bien qu'avant que l'Eglise eust defini la chose dans les dernier Siecles, c'estoit une Opinion assez commune; il n'y a qu'à voir les paroles que se lisent dans les anciens Conciles: *Des Anges et des Archanges, et de leurs puissances ausquelles j'ajoute nos Ames, cecy est le sentiment de l'Eglise Catholique; que veritablement ils sont intelligibles, mais qu'ils ne sont pourtant pas invisibles, et destituez de tous corps, comme vous autres Gentils le croyez, car ils ont un corps fort delié soit d'air, soit de feu.* Tertullien devoit estre de ce sentiment lors qu'il soutenoit, *que l'Ame ne seroit rien si elle n'estoit corps, et que tout ce qui est, ou existe est corps à sa maniere.* D'où vient que S. Augustin dit de Tertullien qu'il a cru que l'Ame estoit corps, *par ce qu'il n'a pû la concevoir incorporelle, et qu'ainsi il craignoit que si elle n'estoit corps, elle ne fust rien*⁵⁹.

Gassendi says more than «rien» by concluding his treatment of the human soul with examples of earlier church opinion in support of its materiality. While reading between the lines, Gassendi's own doubt concerning the church's contemporary position seeps through, and the reader is undoubtedly more willing to accept Gassendi's rendering of the human soul and its similarities and contrasts with the soul of animals.

Gassendi defines the animal soul, speaking only of living creatures other than humans, as that force «qui estant dans le corps fait que l'Animal est dit vivre, et exister, comme il est dit mourir lorsqu'elle cesse d'y estre»⁶⁰. He rejects the opinions he treats in his discussion of the immateriality or materiality of the soul that support an immaterial animal soul⁶¹. He speculates that the animal soul is «quelque substance tres tenue, et comme la fleur de la matiere»⁶². Gassendi

⁵⁶ *Ibid.*, p. 299-300.

⁵⁷ *Ibid.*, p. 299.

⁵⁸ *Ibid.*, p. 300.

⁵⁹ *Ibid.*, pp. 300-301.

⁶⁰ *Ibid.*, p. 303.

⁶¹ *Ibid.*, p. 304.

⁶² *Ibid.*

provides reasons that essentially amount to the warmth of the living body and its connection to the movement of small units of matter to support his conclusion that the animal soul is

...une espece de feu tres tenu, ou une espece de petite flamme, qui tant qu'elle est en vigueur, ou qu'elle demeure allumée, fait la vie de l'Animal, lequel meurt lors qu'elle s'eteint, que pour cela il faut que dans le reste du corps il y ait de petites cavitez, et de petis passages libres et ouverts dans lesquelles ce petit feu, ou cette petite flamme puisse se mouvoir librement...⁶³

The animal soul is a material substance that spreads itself throughout the body and is responsible for all basic life functions. What the animal soul lacks is the immortal reasoning soul of humans, what Gassendi refers to in his discussion of the animal soul as «l'Entendement immortel»⁶⁴.

This is the great difference between the human soul and the animal soul. The corporeal soul is of «only one kind» but exists in more and less perfect versions» according to Lolordo⁶⁵. The differences in degrees between animal souls imply the possibility of a corporeal human soul that differs from those of animals only by degree of perfection. Lolordo claims that this is the case of plants and animals in Gassendi's philosophy, the soul of each not differing in kind but rather degree of functionality, animals' souls being capable of both vegetative and sensitive functions⁶⁶. Gassendi may then be a philosopher who does not categorically consider all animals the same, allowing for greater and lesser degrees of perfection between animal species, and therefore greater and lesser reasoning and language abilities. As such he breaks from traditional Western philosophy as Derrida portrays it in *L'Animal que donc je suis*, which characteristically lumps all animals together and deprives them of their difference.

Gassendi's examination of the human soul begins with a strong statement in favor of an immaterial immortal soul, but as in his treatment of the immateriality of the soul elsewhere, he tempers his stance by noting the difficulty that accompanies the position:

Il nous faut maintenant parler de l'Ame Humaine, à l'égard de laquelle la Foy, et la Raison nous obligent de raisonner autrement qu'à l'égard des autres. Car si les libertins qui ne craignent point de passer pour Impies, et pour temeraires, disent en un mot que l'Ame humaine ne differe de celle des Brutes que selon le plus ou le moins, et qu'elle est corporelle, ceux qui reconnoissent que non seulement elle est capable des dons surnaturels et immortels, mais aussi qu'elle est douée d'une faculté d'entendre, et de raisonner qui n'appartient nullement aux autres Animaux, la tiennent Incorporelle, et croient qu'elle tire son origine immediate de Dieu. Cependant une chose peut faire quelque difficulté; c'est que l'Ame de l'homme est non seulement raisonnante, et intelligente, par où l'on peut dire qu'elle est distinguée de celle des Brutes, et qu'elle est Incorporelle, et l'ouvrage de la main de Dieu, mais de plus qu'elle est sensitive, et

⁶³ *Ibid.*, p. 305.

⁶⁴ *Ibid.*, p. 303.

⁶⁵ A. Lolordo, *Pierre Gassendi and the Birth of Early Modern Philosophy*, New York 2007, p. 203.

⁶⁶ *Ibid.*

vegetative, ce qui luy est commun avec l'Ame des Brutes, et qui pourroit donner lieu de croire qu'elle seroit corporelle...⁶⁷

The difficulty is the same that Gassendi points out to Descartes, that similarities between humans and animals argue for a soul of the same nature. A theory of the human soul must take these similarities into account. Gassendi resolves the problem by attributing two souls to humans, the sensitive soul, which it has in common with animals, and the rational soul, which belongs to humanity alone. The sensitive soul is material, and the rational soul immaterial and immortal⁶⁸.

Gassendi sees two principal advantages to the theory of two souls. The first is that it accords well with Christian doctrine:

Or que l'Ame humaine soit composée de deux parties, l'une Raisonnante, et l'autre Irraisonnante, c'est ce qui s'accorde merveilleusement avec les Theologiens, lorsqu'ils distinguent dans nostre Ame deux parties, l'une superieure, l'autre inferieure, appuyant specialement leur distinction sur ces paroles de l'Apostre, *Je vois dans mes membres une autre Loy qui repugne à la Loy de mon Esprit*. Car comme une mesme et simple chose ne peut pas se contrarier à elle mesme, il semble que de ce combat qui est entre le Sens, et l'Esprit, ou l'Entendement, l'on doit inferer que l'Esprit, et le Sens, c'est à dire l'Ame Raisonnante, et la Sensitive sont choses differentes⁶⁹.

The second advantage is that it accounts for both the resemblances and differences between humans and animals without contradiction by attributing a sensitive soul to both and a reasoning soul only to humans. It also has religious benefits:

...on peut commodement expliquer par là [the two-soul system] comment il se peut faire que l'homme à l'egard d'une partie ait été fait un peu moindre que les Anges, et subsiste par cette partie apres le trepas, et a l'egard de l'autre, qu'il ne differe en rien des Brutes, et ayt la mesme destinée que les Chevaux, et autres semblables Animaux, ensorte qu'il soit dit selon la premiere vivre une vie intellectuelle, et Angelique, et selon la derniere une vie Animale, et pareille à celle des Bestes, selon la premiere estre fait à l'image, et à la ressemblance de Dieu, et selon la derniere estre comparable, et semblable aux Chevaux, aux Chiens, et aux autres Animaux qui n'ont point de raison⁷⁰.

Gassendi's human being is, like Descartes's, somewhere between angels and animals, and like Descartes's possesses an immortal, incorporeal soul. Unlike Descartes's human being, Gassendi's also possesses a material soul that accounts for life functions, sensation, and imagination.

The division between human and animal mental functions is not as abrupt in terms of the soul, since animals also possess a sensitive soul and are capable of sensation and imagination, even understanding of a certain kind, as Gassendi's example of the mule that will not jump over a precipice attempts to

⁶⁷ F. Bernier, *Abrégué de la philosophie de Gassendi en VII tomes*, cit., t. V, p. 313.

⁶⁸ *Ibid.*, p. 315.

⁶⁹ *Ibid.* p. 317.

⁷⁰ *Ibid.*, pp. 317-318.

illustrate. In the end, however, Gassendi's animal is not that far removed from Descartes animal-machine. Despite their ability to communicate, to imagine, etc., animals' operative powers do not exceed the domain of the sensitive soul and they therefore do not quite qualify as reasoning beings: «Concluons donc à l'égard des Brutes, qu'on n'en peut véritablement pas faire des Animaux qui puissent proprement, et absolument estre dits Raisonnables [...] mais qu'après tant de marques de sentiment et de connaissance, nous ne pouvons pas aussi en faire de pures Machines insensibles»⁷¹. Gassendi's debate with Descartes is more about the differences in the faculties and properties that each attributes to the rational soul and the possession of a material sensitive soul by humans than about the abilities of animals.

3. Conclusion

Although animal nature figured prominently in the extensive argument between Descartes and Gassendi, the real focus of their disagreement is Descartes's argument for the immateriality of the human soul and its implications. Upon close examination, Gassendi's animals differ little from Descartes's, despite some fundamental differences in theory. For each, the animal is a completely material being, hence matter accounts for every aspect of animal behavior. Descartes's and Gassendi's theoretical differences fall into two general categories: the details of animal mechanics and the existence of animal intelligence. Descartes explains animal mechanics by positing the existence of animal spirits whereas Gassendi attributes the same animal functions to a material sensitive soul. Descartes denies the existence of animal thought of any kind, much less animal reasoning ability, but Gassendi's sensitive soul allows the animal limited intelligence in the form of sensation, imagination, and understanding.

The difference between the two seems to lie in the internal life of animals. The notion of consciousness is not available to either philosopher, but Descartes's *cogito* is a close approximation. The *cogito* is concomitant with the possession of that immaterial thinking substance Descartes equates to the soul. By denying animals a soul, Descartes divests them of any thinking ability at all. Put in another way, matter can never produce thought. This is where Gassendi disagrees; matter, in the form of the sensitive soul, can produce thought of a limited sort. Where the two agree is that animals are incapable of abstract reasoning, this ability is exclusive to humans.

Turning to humans, the similarities between Descartes and Gassendi are even more salient, though this owes something to Gassendi's deference to the church. Descartes cleanly divides human nature into two inextricable substances: the material body and the immaterial mind. The human body functions exactly as an animal's, while the mind accounts for every aspect of human intelligence. Gassendi's human body also operates exactly as that of an animal, with each possessing a material sensitive soul. The sensitive soul does, however, account

⁷¹ F. Bernier, *Abrégué de la philosophie de Gassendi en VII tomes*, cit., t. V,I p. 223.

for those mental functions falling short of true reasoning ability. Gassendi agrees with Descartes that true reasoning ability is the domain of an immaterial soul, and each distinguishes humans from animals by virtue of its possession.