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Descartes and the Monstrous Thesis

Descartes held that nonhuman animals are material automata (AT VI 58-59/ CSM I 140-141). Call this view animal automatism. Human beings, by contrast, are composites of material automata and immaterial soul (AT VII 82/ CSM II 57). Some of the earliest readers of Descartes reacted in horror to his views on nonhuman animals. For example, in a letter to Descartes, Henry More describes Descartes's view of animals as "the internecine and cutthroat idea that you advance in the [Discourse on] Method, which snatches life and sensibility away from all the animals" (*December 11 1648*, AT V 243). More recently, Norman Kemp Smith describes Descartes as endorsing the "monstrous thesis" that "animals are without feelings or awareness of any kind" (Smith 1952). More and Smith's worry seems to be that Descartes is claiming that animals merely act *as if* they have the states traditionally ascribed to the sensitive soul, such as sensations, perceptions, appetites, etc., but that they do not really have such states (Hatfield 2007; 2008a; 2008b). In other words, More and Smith are worried that Descartes is an eliminativist about sensitive states in animals.

Let us call the view that Descartes endorses the monstrous thesis, i.e. the view that animals lack feeling and awareness, the traditional reading. There is a minority tradition that questions the traditional reading and instead offers revisionist readings of animal automatism. Interest in revisionist readings was piqued by the publication of John Cottingham's classic defense of revisionism (1978). Since Cottingham's classic article, revisionist authors have articulated a variety of revisionist readings and noted several different bases of textual evidence for revisionism. The present state of the debate, however, is in a state of gridlock. Traditionalists

¹ But revisionism did not begin with Cottingham. As early as 1861 Jean Pierre Flourens argued that Descartes merely meant to deny animals reason but not sensation (Flourens 1861)

and revisionists have each articulated the evidence for their respective views and developed strategies for explaining away apparent counterevidence.

In this paper, I attempt to break this gridlock by appeal to neglected evidence from Descartes's historical context. Revisionists have argued that passages that appear to deny sensitive states to animals merely deny that animals have higher order awareness of their sensitive states. Consequently, revisionists reason, passages in which Descartes appears to ascribe sensitive states to animals should be interpreted as according animals first order sensitive states. Some version of the distinction between first order and higher order mental states is thus central to Descartes's conception of animals on the revisionist picture. I argue that Descartes and his contemporaries were accustomed to drawing such distinctions and were likely even familiar with the possibility that such a distinction maps onto the animal/human distinction. Given this, if revisionism is correct, then we should expect Descartes to explicitly exposit his doctrine of animal automatism by claiming that animals have first order sensitive states but lack higher order awareness of these states. And yet, Descartes never clearly articulates the distinction between first order and higher order mental states in presenting his view of animals despite articulating such distinctions in other contexts.

Descartes's engagement with critics also provides crucial contextual evidence against revisionism. Critics of animal automatism almost universally took Descartes to endorse the monstrous thesis. If revisionism is correct, then Descartes should respond to these critics by asserting that they have simply misunderstood his view. But Descartes never clearly articulates this response. In fact, in at least one case he seems to explicitly double down on the monstrous thesis. This forces us to conclude that if revisionist readings are correct, then Descartes either

deliberately or incompetently presented his view of animals as being far more radical than it actually is.

Here is a quick roadmap for the paper. In §1, I present various forms of revisionism suggested by the secondary literature and the passages alleged to constitute evidence for revisionism. Along the way, I briefly indicate how traditionalists can handle these passages. In §2, I argue that Descartes and his contemporaries were accustomed to drawing the distinction between first order and second order mental states, and, they were likely familiar with the possibility that such a view mapped onto the animal/human distinction. In §3, I argue that Descartes's engagement with critics supports the conclusion that he rejects the view that animals have first order awareness and instead embraces the monstrous thesis. I conclude in §4 by considering and responding to an objection.

§1 Varieties of Revisionism

In this section of the paper I distinguish between two different types of revisionism and indicate the evidence that exists for these readings. Along the way, I will indicate how traditionalists have and can accommodate apparent evidence for revisionist theses. In §1.1 I consider the view that Cartesian animals have states of sensory consciousness. In §1.2 I consider the view that Cartesian animals have nonconscious sensory awareness.

§1.1 Cartesian Animals and Consciousness

Cottingham appears to hold that Descartes held, or at least could have held, that animals have consciousness but lack self-consciousness. Cottingham explains the passages in which Descartes appears to endorse the monstrous thesis by claiming that Descartes "failed to eradicate a certain fuzziness from his thinking about consciousness and self-consciousness" (1978: 558).

On Cottingham's reading what is important about Descartes's view of animals is that they lack self-consciousness, but due to the fuzziness of his thinking he appears sometimes to deny animals consciousness.

Cottingham makes two main arguments in favor of his revisionism. Firstly, Cottingham argues that revisionism should be adopted because it resolves a puzzle generated by Descartes's argument for animal automatism. In Part 5 of the *Discourse on Method* (hereafter *Discourse*), Descartes appears to argue that the fact that animals do not speak or display evidence of a general intelligence comparable to human reason demonstrates that animal are automata (AT VI 58-59/ CSM I 140-141). Accordingly, if traditionalism is correct, then Descartes appears to be guilty of drawing the egregious non-sequitur that animals do not feel because they do not speak (Cottingham 1978, 556). But, Cottingham points out, this puzzle does not arise in the first place on revisionist readings. However, there are alternative solutions to the puzzle of Descartes's argument for animal automatism (Hatfield 2008a; Thomas unpublished manuscript). So, the traditionalist can plausibly respond to this first argument by embracing one of these alternative solutions to the puzzle of Descartes's argument for animal automatism.

Cottingham's other argument for revisionism relies on textual evidence from two pieces of correspondence: the *Nov. 23 1646 Letter to Marquess of Newcastle* and the *Feb. 4 1649 Letter to More* (AT IV 574-575/ CSMK 303;AT V 278/ CSMK 366). In these letters Descartes writes as if animals have passions. For example, in the letter to Newcastle Descartes writes that "all the things which dogs, horses and monkeys are taught to perform are only expressions of their fear, their hope or their joy" (AT IV 574/ CSMK 303). Similarly, in the letter to More Descartes writes that "all animals easily communicate to us, their natural impulses of anger, fear, hunger, and so on" (AT V 278/ CSMK 366). Prima facie, Descartes attributes passions to animals in

these letters. And, presumably, if animals have passions, then they also have other sensory states such as perceptions and feelings like hunger.

However, traditionalists can plausibly argue that the mentalistic language in these passages should be regarded as mere *façon de parler*. Prior to asserting that animals express passions in the letter to Newcastle, Descartes writes:

As for the movements of our passions, even though in us they are accompanied by thought because we have the faculty of thinking, it is nevertheless very clear that they do not depend on thought, because they often occur in spite of us. (AT IV 573-574/CSMK III 303)

Descartes then goes on to argue that all animal behavior can be characterized as merely expressing passions. The conclusion that Descartes draws from this is that all that animals do "can be performed without any thought" (AT IV 574-575/CSMK III 303). So, the overall argumentative thrust of the letter to Newcastle is to argue that we have no reason to ascribe animals thought. Similarly, the overall thrust of the letter to More is that we have no reason to attribute thought to animals even if we cannot rule out that they have thought because "the human mind does not reach into their hearts" (AT V 276-278/CSMK III 365-366).

Consequently, in the passages in which Descartes applies mentalistic language to animals he remains clear that we are not justified in attributing thought to animals. And, there are numerous passages in which Descartes claims that passions, feelings, and sensory perceptions are all modes of thought. For example, in the 6th Meditation, Descartes claims that feelings like pain are "confused modes of thinking which arise from the union and, as it were, intermingling of the mind with the body" (AT VII 81/ CSM II 56). In the *Principles of Philosophy* Descartes asserts that thinking encompasses sensory awareness (AT VIIIA 7/CSM I 195). And, in the *Passions of the Soul* (hereafter *Passions*), Descartes asserts that the passions are perceptions in

the soul (AT XI 349/CSM I 338-339). So, in the very passages alleged to support revisionism Descartes appears to clarify that his description of animals as having passions should not be interpreted as attributing them the passions proper, which he assigns to thoughts in the soul in his published work.

Moreover, there are passages in which Descartes appears to explicitly affirm the monstrous thesis. For example, in the *Passions* Descartes writes that animals have the "movements of the nerves and the muscles which usually accompany the passions and not, as in us, the passions themselves" (AT XI 369-370/ CSM I 348). And in a letter to Mersenne Descartes asserts that:

I do not explain the feeling of (*le sentiment de*) pain without reference to the soul. For in my view pain exists only in the understanding. What I do explain is all the external movements which accompany this feeling in us; in animals it is these movements alone which occur, and not pain in the strict sense" (AT III 85/ CSM III 148)

Given this, the traditionalist can plausibly claim that Descartes's apparent ascriptions of passions to animals in the letters to Newcastle and More are loose talk.

To conclude, revisionists have rightly pointed out that there are passages in which Descartes appears to ascribe passions to animals. However, traditionalists can plausibly respond to this difficulty by asserting that in these passages Descartes is merely speaking with the vulgar while remaining clear that he does not actually attribute animals thought nor hence the passions proper. I turn now to examining a different form of revisionism defended by Gaukroger.

§1.2 Cartesian Animals and Nonconscious Sensory Awareness

Cottingham appears to hold that Descartes never meant to explicitly deny that animals have consciousness. Gaukroger, by contrast, asserts that animals for Descartes are sentient but nonconscious (Gaukroger 2003: 395). In claiming that animals are sentient, Gaukroger appears

to mean that they have material states produced by the stimulation of their sensory organs that are genuinely representational or intentional. Descartes's animals, Gaukroger writes, have perceptual representations that "mean something" (2003: 398).

The primary evidence that Gaukroger cites for his view are passages from the *Treatise on Man* in which Descartes describes material states of the pineal gland as *ideas*:

figures traced in the spirits on the [pineal] gland... should be taken to be ideas, that is, to be the forms or images that the rational soul will consider directly when, being united to this machine, it will imagine or will sense any object. (AT XI 176)

Gaukroger reasons that if Descartes is prepared to employ intentional language when describing material states of the pineal gland, then he recognizes a genuine class of mental phenomena that animals can share with humans. However, as Hatfield notes, the traditionalist can accommodate this passage by claiming that these material states are "ideas" only in the derivative and loose sense that the rational soul will or could consider them directly. There is consequently no need to take this passage as evidence that Descartes had an account of intentionality that grants animals intentional states.

Baker and Morris defend a revisionist that resembles Gaukroger's. Baker and Morris argue that Cartesian animals are sentient and that sentience for Descartes consists in " (the 'input' half of) fine-grained differential responses to stimuli" (1996: 99). On their view, Descartes sets out to mechanically explain rather than to eliminate sentience in this sense (1996: 91). Baker and Morris point to Descartes's definition of thought in the *Principles* to support their interpretation:

By the term 'thought', I understand everything which we are aware of as happening within us, in so far as we have awareness of it. Hence, thinking is to be identified here not merely with understanding, willing and imagining, but also with sensory awareness. For if I say 'I am seeing, or I am walking, therefore I exist', and take this as applying to vision or walking as bodily activities, then the conclusion is not absolutely certain. This is

because, as often happens during sleep, it is possible for me to think I am seeing or walking, though my eyes are closed and I am not moving about; such thoughts might even be possible if I had no body at all. But if I take 'seeing' or 'walking' to apply to the actual sense or awareness of seeing or walking, then the conclusion is quite certain...

Baker and Morris observe that in this passage Descartes distinguishes between two different notions of vision. There is vision "as bodily activit[y]", and vision as the "actual sense or awareness of seeing" (ibid.). Baker and Morris argue that this distinction is between a wholly corporeal kind of vision and higher order awareness of this vision. In other words, it is argued that the above passage claims that appropriate bodily stimulation is *sufficient* for first order sensory awareness.

However, traditionalists can point out that this passage can be read as merely conceding that there is a commonsense notion of sensory awareness according to which it is a *necessary* condition on sensory awareness that one's sense organs be stimulated in the right way. Descartes begins his definition of thought in the above by claiming that thought encompasses sensory awareness. Then, Descartes pauses to clarify this claim. Descartes recognizes that on a commonsense understanding of what it means to see, vision requires optical stimulation. The example that Descartes uses to illustrate this point is that of dreaming that one is seeing something. Because one's eyes are closed, there is a sense in which one cannot be seeing anything. However, Descartes claims, there is another sense of the claim "I am seeing" on which it is not conceptually necessary for one's eyes to be open. Perhaps Descartes has something like the following in mind for this second sense. Suppose we have someone with their eyes closed doing a guided visualization exercise, and we ask them: "What do you see?" It would be natural for them to respond by describing the contents of their visualization, rather than by saying that they see nothing because their eyes are closed. It is the second sense of the claim "I am seeing" which is made true merely by the presence of an appropriate thought in the soul. Descartes's

overarching point, then, is that the commonsense intuition that optical stimulation is necessary for vision is no refutation of his claim that sensory awareness is a species of thought when this claim is properly understood. And to make this point Descartes clearly does not need to claim that appropriate bodily stimulation is sufficient for visual awareness. Consequently, traditionalists can claim that this passage provides very weak evidence for the claim that Descartes had a notion of nonconscious wholly bodily vision.

§2 Orders of Awareness and Animals in Descartes's Historical Context

The revisionist interpretations that I canvassed in §1 are united around the claim that Descartes ascribes first order awareness to animals while merely denying them some form of higher order awareness. Revisionists are forced to this conclusion by the recognition that Descartes clearly denies animals thought. They suggest that this does not force us to conclude that animals are mindless automata, because the passages in which Descartes appears to claim that sensory awareness and passions are thoughts can be reinterpreted as merely claiming that higher order awareness of these states are thoughts.

In this section, I argue that Descartes and his contemporaries were accustomed to the distinction between first order and higher order awareness, and, were likely even familiar with the possibility that such a view maps onto the animal/human distinction. Towards this end, I begin in §2.1 by noting that Bourdin appears to defend the view that animals have first order but not second order awareness in the 7th Objections. Then, in §2.2 I argue that readers familiar with Thomas Aquinas's views of animals would be familiar with the view that animals lack forms of self-knowledge available to human beings. And, hence, are likely to have considered the possibility that animals have first but not second order awareness. This is a particularly important point because while Descartes professes to not read many books, there is good evidence that

Descartes was familiar with Aquinas's writings on animals and he reports having a copy of Aquinas's *Summa Theologica*.

§2.1 Reflexive Perception in the 7th Objections

In the 7th Objections, Bourdin poses a dilemma to Descartes arguing that the conception of thought that he restricts to the immaterial soul is either sound but not new, or new but not sound. Bourdin describes the first horn of the dilemma in the following way:

By 'thinking' you may mean that you understand and will and imagine and have sensations, and that you think in such a way that you can contemplate and consider your thought by a reflexive act. This would mean that when you think, you know and consider that you are thinking (and this is really what it is to be conscious and to have conscious awareness of some activity). Such consciousness, you claim, is a property of a faculty or thing that is superior to matter and is wholly spiritual, and it is in this sense that you are a mind or a spirit. This claim is one you have not made before, but which should have been made; indeed, I often wanted to suggest it when I saw your method struggling ineffectively to bring it forth. But the claim, although sound, is nothing new, since we all heard it from our teachers long ago, and they heard it from their teachers, and so on, I would think, right back to Adam. (AT VII 534/ CSM II 364)

Bourdin suggests that Descartes would do well to clarify that by "thought" he refers to a form of cognition whereby one contemplates one's cognition by a "reflexive act." In other words, the thought of the immaterial soul should be defined as a kind of cognition that is accompanied by higher order awareness. However, Bourdin suggests that while such a view would be sound it is nothing new but rather something old that we've "heard... from our teachers long ago."

On the first horn of the dilemma, then, thought is characterized as revisionists claim it should be characterized: thought is a form of cognition accompanied by higher order awareness. Bourdin's description of the second horn of the dilemma makes clear that if thought is instead characterized in a more expansive way such that first order cognitions are thoughts the result will be Descartes has denied animals even first order cognition:

Finally, you may mean that understanding, willing, imagining, and having sensory awareness— i.e. thinking— are properties of a mind in such a way that no animals whatever, except for man, can think or imagine or have sensations, or see, or hear. This is indeed something new, but it is quite unsound. It will turn out to be an arbitrary and unacceptable claim...

On the second horn of the dilemma the conception of thought that is restricted to immaterial souls is not a reflexive form of cognition. Rather, thought is conceptualized in a more expansive way so as to include all understanding, willing, imagining, and sensory awareness even when such states are merely first order. However, Bourdin notes that if we characterize thought in this way then it will follow that animals lacking thought do not have any genuine cognition. But such a conclusion is an "arbitrary and unacceptable claim." So this conception of thought is indeed new but it is unsound.

Bourdin is clearly aware of the of the kind of view that revisionists wish to attribute to Descartes, indeed he describes such a view as 'sound' and as something we've all "heard... from our teachers long ago" (AT VII 534/ CSM II 364). Bourdin was thus not only familiar with drawing distinctions between first order and higher order awareness but also suggested to Descartes that he should use such a distinction to accord animals a form of cognition. I'd like to turn now to briefly examining the sort of doctrine that is likely the basis of Bourdin's claim that "we all heard... from our teachers long ago" that the thoughts of the immaterial human soul possess a unique form of higher order awareness. The view that the immaterial soul of human beings is capable of unique forms of self-knowledge was a mainstream view in Descartes's historical context.

§2.2 Higher Order Awareness in Aquinas

The following assumptions were relatively widespread among medieval Scholastic philosophers:

- i) Humans, unlike animals, have subsistent immaterial souls (i.e. immaterial souls capable of existence separately from the body).
- ii) Subsistent immaterial souls are capable of unique forms of self-knowledge.

These two assumptions suggest an obvious strategy for making sense of differences between human and animal cognition. Animals can be said to have lower order forms of awareness, whereas at least one distinguishing feature of human cognition is the possession of distinctive forms of self-knowledge. In this section, I argue that Descartes was very likely familiar with this line of thought. I begin by first arguing that Descartes was likely familiar with Aquinas's views on these issues. Then, I show that Aquinas shares assumptions i) and ii) above. I conclude that Descartes was likely aware of the possibility that animals have lower order but lack higher order awareness.

My reasons for focusing on Aquinas are twofold. Firstly, we know that Descartes was likely taught Aquinas as part of his Jesuit education (Clarke cite), and that he reports having a copy of Aquinas's *Summa Theologica* (hereafter *ST*) later in life (AT II 629–630). Secondly, there are striking thematic parallels between Aquinas's and Descartes's writings on animals. For example, in his discussion of whether animals choose their actions, Aquinas compares the motions of animals to those of clocks (*ST* I-II q. 13 a. 1). Like Aquinas, Descartes frequently compares animals to clocks, indeed animal automatism may be characterized as taking these comparisons literally (CSM I 141; CSMK 304).

We have good reason to conclude, then, that Descartes was familiar with Aquinas's views on these issues. And Aquinas, like many other Scholastic philosophers, held that only subsistent immaterial souls are capable of reflexive acts, i.e. acts in which "the principle of action becomes the terminus of action" (Cory 2016). Aquinas concludes from this, in turn, that subsistent immaterial souls are capable of unique forms of self-awareness. For example, in the

early *Scriptum super libros Sententiarum* (hereafter *Sent*), Aquinas argues that the senses which depend on material sense organs cannot sense their own acts:

A material power does not reflect on its act because of its being determined according to the structuring of the organ. Indeed, the individual sight-power can only cognize things whose species can be received spiritually in the pupil; and therefore sight cannot comprehend its own act.... And therefore it must be said that immaterial powers reflect upon their objects; for the intellect understands itself to understand, and similarly the will wills itself to will and to love. The reason is that the act of an immaterial power is not excluded from the account of their [proper] object. For the object of the will is the good; and under this account the will loves everything that it loves; and therefore it can love its act insofar as it is good; and the same applies to the intellect. (*Sent* I.17.1.5, ad 3, translation from Cory 2016)

Aquinas thus appears to hold a view that implies that animals have sensory perceptions but lack higher order awareness of these perceptions. For Aquinas holds that animals have sensitive souls, but lack subsistent immaterial souls. When Aquinas refers to "immaterial powers" in the above, he clearly refers to the powers of the subsistent immaterial soul. Hence, animals would be able to have sensory perceptions, but would be unable to have higher order cognitions of their own acts of sensory perception.

Unfortunately, things are not as cut and dry as this. Consider Aquinas's discussion of the sensory powers in the *Summa*. Like in the *Sent*, Aquinas asserts that the proper sensory powers cannot perceive themselves. The reason for this is that sensory perception depends on:

a change effected in the material organ by a sensible exterior thing. But it is impossible for something material to effect a change within itself; instead, one material thing is affected by another. (*ST* I q. 87 a. 3)

However, Aquinas goes on to clarify that this does not show that only creatures with subsistent immaterial souls are capable of higher order awareness. For Aquinas goes on to ascribe perception of the act of the proper sensory powers to the common sensory power (*sensus communis*) "the act of a proper sensory power is perceived through the common sensory power" (ibid.). The common sensory power is an interior sense which collects together the

representations of the five exterior senses. As a sensory power, the common sense also depends on a material organ (usually identified as a structure in the brain). Hence, Aquinas's view in the *Summa* appears to be that creatures without subsistent immaterial souls may have forms of higher order awareness. But, each order of awareness is provided by its own sensory power which requires its own sensory organ. By contrast the "intellect does not have intellective understanding through any material change in an organ" and so the cases of sensory perception and intellection are not parallel (*ST* I q. 87 a. 3). Hence, the intellect may cognize its own act.

Aquinas, then, appears to grant animals not only first order but also second order awareness in the *Summa*. This may seem to undermine my claim that Descartes's familiarity with Aquinas supports a traditionalist reading of Descartes. However, we should note two points in my favor. Firstly, Aquinas is clearly drawing distinctions between orders of awareness. In particular, Aquinas distinguishes between the perception of external sensible objects and the perception of these acts of perception. Secondly, Aquinas also exemplifies a general trend in medieval philosophy according to which materiality is a prima facie hindrance to a creature obtaining self-knowledge, and immateriality is a prima facie boon. Because sensory powers are dependent on changes in material organs, they are incapable of fully reflexive acts. Subsistent immaterial souls by contrast are capable of fully reflexive acts. Consequently, puzzles arise about the possibility of self-knowledge in material creatures that don't arise for human beings with immaterial souls. Unsurprisingly, then, a common theme in medieval scholastic philosophy is that subsistent immaterial souls capable of unique forms of self-knowledge (Cory 2016).

Given this historical context, I find it hard to believe that Descartes wasn't aware of the possibility of a view of animals that ascribes them first order but not higher order awareness.

Evidently, Bourdin held that Descartes's contemporaries were all aware of the possibility of such

a view. But if these conclusions are correct, then it is very doubtful that Descartes would fail to make clear that he holds such a view if revisionism is correct.

Of course, it remains possible that Descartes was simply ignorant of much of the philosophical discourse surrounding animals in his historical context. So, Descartes may have simply failed to encounter in his studies the idea, as Bourdin apparently had, that animals are distinguished from humans by the possession of merely first order cognition. Perhaps, then, Descartes arrived independently at the sort of view that Bourdin claims was well-known in the period and simply failed to express this view clearly and explicitly.

However, even this hypothesis faces a problem internal to Descartes's texts. This problem is that Descartes explicitly draws distinctions between first and high order awareness on several occasions. However, Descartes never relies on such a distinction in explicating his view of animals. Indeed, Descartes even fails to draw such a distinction when responding to critics who accuse him of denying sensitive states to animals.

§3 Descartes's Engagement With Critics

One of the most controversial aspects of Descartes's philosophy is his commitment to animal automatism. Critics typically took Descartes to endorse the monstrous thesis and criticized him on this basis. If the revisionist reading is correct, then we should expect Descartes to respond to such criticisms by charging his critics with misunderstanding his view. However, in his reply to Bourdin, Descartes appears to do precisely the opposite. Descartes is worth quoting at length here:

My critic says that to enable a substance to be superior to matter and wholly spiritual... it is not sufficient for it to think: it is further required that it should think that it is thinking, by means of a reflexive act, or that it should have awareness of its own thought. This is as deluded as our bricklayer saying that a person who is skilled in architecture must employ

a reflexive act to ponder on the fact that he has this skill before he can be an architect...The initial thought by means of which we become aware of something does not differ from the second thought by means of which we become aware that we were aware of it...And if it is conceded that a corporeal thing has the first kind of thought, then there is not the slightest reason to deny that it can have the second. Accordingly, it must be stressed that my critic commits a much more dangerous error in this respect than does the poor bricklayer. He removes the true and most clearly intelligible feature which differentiates corporeal things from incorporeal ones, *viz.* that the latter think, but not the former... (AT VII 559/ CSM II 382)

Prima facie, Descartes here rejects the suggestion that animals have merely first order mental states whereas humans are distinguished by the possession of higher order states. Indeed, he regards such a view as a "dangerous error". The one true and intelligible distinguishing feature of immaterial substances is not that they reflect on their thoughts but that they think.

One oddity about this passage is the disjunctive gloss that Descartes gives of Bourdin's view. Descartes describes Bourdin as holding that it is either "thinking that it is thinking" or having "awareness of its own thought" that distinguishes immaterial substances from material ones (ibid.). The phrase in the first disjunct, "thinking that it is thinking", suggests a higher order thought about lower order thoughts. It is not surprising to learn that Descartes would reject the view that material substances are capable of first order thoughts whereas immaterial substances are capable of higher order thoughts. And Descartes's remark that the thought by which we become aware of an object does not differ in nature from the thought by which we become aware that we were aware seems well poised to support this rejection. However, Descartes's gloss in the second disjunct, "awareness of its own thought", suggests instead merely the view that immaterial substabces are essentially and necessarily aware of their thoughts. It is prima facie unclear why Descartes would object to this characterization of thought, given that he seems to explicitly endorse it elsewhere (AT VII 246). One possible explanation of this puzzle is that Descartes's objection to the second disjunct is not that it fails to accurately characterize thought,

but rather the implication that there can be thoughts which animals have without being aware of them.

From the above, we may conclude that there is at least one passage in which Descartes seems to explicitly reject the suggestion that animals have first order awareness. Additional evidence that Descartes was accustomed to drawing distinctions between orders of awareness but that he did not accord any level of awareness to animals can be found in his correspondence with Antoine Arnauld. In a discussion of why we have no memories of infancy, Arnauld suggests to Descartes that Descartes should draw a distinction between the reflexivity that is intrinsic to thought and a different kind of reflexivity that is necessary for intellectual memory (AT V 213). In his reply, Descartes rejects this distinction and instead distinguishes between direct and reflexive thoughts:

[T]he first and simple thoughts of infants are direct and not reflexive [. . .]. But when an adult feels something, and simultaneously perceives that he has not felt it before, I call this second perception reflexive, and attribute it to intellect alone, in spite of its being so linked to sensation that the two occur together and appear to be indistinguishable from each other. (*Letter to Arnauld*, 29 July 1648, AT V 221/ CSMK III 357)

Descartes claims that the feelings of infants are constituted by direct thoughts. Infants lack reflexive thoughts by which we can represent a feeling we have as new. This appears to amount to the view that infants have first order states but lack higher order states. But, importantly, the first order states of infants are constituted by thought and hence are absent in animals.

Equally problematic for revisionism are passages in which Descartes fails to push back against his critics by asserting that he accords animals lower order awareness. Consider for example the following passage from a letter to More which is often interpreted as supporting revisionist readings:

Please note that I am speaking of thought, and not of life or sensation. I do not deny life to animals, since I regard it as consisting simply in the heat of the heart; and I do not even deny sensation, in so far as it depends on a bodily organ. (AT V 278/ CSMK 366)

Revisionist claims that this passage supports their reading because it attributes a kind of sensation to the bodily organ. Note, however, that the passage is ambiguous. Descartes's reference to sensation "in so far as it depends on a bodily organ" can be interpreted as referring to the physiological underpinnings of sensation rather than to a kind corporeal sensation. Moreover, in this passage Descartes has a perfect opportunity to clearly say that his view attributes first order sensitive states to animals and merely denies them higher order states. But Descartes doesn't do this. This suggests that Descartes did not actually affirm the view that animals have first order sensitive states.

§4 An Objection and Reply

In a famous passage from the 6th Replies, Descartes distinguishes between three grades of sensory response (AT VII 437–38; CSM II 294-295). The first grade is constituted by material stimulation of bodily organs. Upon such material stimulation, the soul experiences confused perceptions arising from the mind-body union which constitute the second grade (AT VII 437; CSM II 294). Finally, the third grade is instead constituted by intellectual judgments (AT VII 438; CSM II 295).

Descartes's theory of the passions follows a similar pattern. Descartes claims that the behaviors that accompany our passions are automatic (AT XI 358/ CSM I 342-343). Our flight from a terrifying animal is thus an automatic response of the body. When the body undergoes such automatic responses, the soul experiences a corresponding passion which is "among the perceptions which the close alliance between the soul and the body renders confused and obscure" (AT XI 349-350/ CSM I 339). The function of these passions is to dispose the will to

consent to the automatic responses of the body-machine (AT XI 372/ CSM I 349). Descartes's theory of the passions thus also recognizes three grades: bodily mechanisms, confused perceptions which arise from the mind-body union, and acts of will. Call this the "three-grade" theory of the passions.

One might think that Descartes's three grade theories of sense and the passions supports attributing sensitive states to animals given that the first grade is shared with animals. However, this assumes that the three grades correspond to three different senses or types of sense or passion. Hence, if animals have one grade, they have sense and passions in at least one sense. But there are alternative ways of reading the metaphysical relationship between the three grades and the passions. One could hold, for example, that the passions are metaphysically identical to the composite of all three grades. One might also hold that strictly speaking the passions should be metaphysically identified with the second grade only. Given all of these possibilities in the logical space, an argument must be given before we embrace the conclusion that Descartes's three grade theories of the senses and the passions support revisionism.

Here's one such argument that could be given. One could reason that on one way of thinking about sensitive states they are identical to whatever plays a particular causal role in our psychology. Call this the "causal role view" of the senses and passions. And, on Descartes's view, automatic bodily processes play approximately the causal roles associated with sensitive states in humans and analogous bodily processes are found in animals. So, given the causal role view, Descartes's conception of animals doesn't deny animals sensitive states.

This reasoning is fine as far as it goes. However, it presupposes the causal role view of sensitive states. And, there is very good evidence that Descartes rejects such a view. As previously mentioned, Descartes claims that animals move as if they have passions, but that they

do not actually have passions (AT XI 431/CSM I 376-377; AT XI 369-370/ CSM I 348). And, Descartes claims that passions are confused perceptions in the soul (AT XI 349-350/ CSM I 339). So, Descartes appears to ascribe the first grade of the passions to animals but to deny that they literally have passions because they lack a soul with confused perceptions. Similarly, Descartes appears to claim that strictly speaking the sensory faculty corresponds to the second grade of sense AT VII 437; CSM II 294). One reason to reject the contention that Descartes's three grade theories of sense and passion support revisionism is the fact that Descartes doesn't characterize his view in terms that license this inference. Instead, Descartes identifies sensitive states with the second grade only.