

# *Consciousness in Human and Nonhuman Animals*

Joseph E. Capizzi

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“Most human beings are speciesist,”<sup>1</sup> announced philosopher Peter Singer in 1975, and thus a public weary of being accused of its failings had to concern itself with another, namely, the charge that it discriminates without justification against other species of animals. At least among academics and the media, Singer’s accusation is of a piece with increasingly prevalent views about the relationship of the human animal with other, nonhuman animals.<sup>2</sup> Such views usually find strength from Darwinist evolutionary theories that assert the non-teleological nature of evolutionary change. These theories insist that humans are not the apex or goal of eons of biological change. Accordingly, no rational justification exists for preferring human beings to other kinds of animals. Steven Jay Gould writes, “Our impression that life evolves towards greater complexity is probably only a bias inspired by a parochial focus on ourselves.”<sup>3</sup> In this way, any qualitative biological and even moral distinction between humans and other animals diminishes; all animals, humans included, are simply (well, maybe not simply) the consequence of an extremely long developmental process, and whatever apparently distinguishing features humans possess cannot serve as the basis for claiming human superiority and moral distinction.

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Joseph Capizzi, Ph.D., is an associate professor of moral theology/ethics at the Catholic University of America in Washington, D.C.

<sup>1</sup>Peter Singer, *Animal Liberation* (New York: HarperCollins, 2002), 9.

<sup>2</sup>For the rest of the article, I will use the shorthand “humans and other animals” to distinguish between human animals and the rest of the animal kingdom. Humans are, of course, animals, as I shall discuss momentarily.

<sup>3</sup>Steven Jay Gould, “The Evolution of Life on Earth,” *Scientific American* 271.4 (October 1994): 87.

So today much scientific and philosophic attention has turned to corroborating evolutionary theory's insight that humans and animals are not qualitatively distinct. One area of recent growth in science and philosophy has been in the study of human and animal consciousness. It would be no exaggeration to claim that for many in the field, the results they expect to find will lodge consciousness firmly in the brain. "Consciousness grows as brains grow," states Susan Greenfield in a recent article.<sup>4</sup> Consciousness would then itself be a product of evolutionary development and not some qualitative state distinguishing humans or higher animals from other animals. We would expect to find consciousness, then, in any animals, human or otherwise, with sufficiently large brains. Consciousness would cease to be a distinguishing feature of human existence and could lend support to those who claim that other animals may be persons<sup>5</sup> and those who claim that unless or until humans have sufficiently large brains they do not count as persons.<sup>6</sup>

### The Cartesian Misconception

Like a stubborn child, the facts, however, keep resisting the conclusion. Neither science nor philosophy has yet cooperated with the goal of deciding in favor of locating consciousness utterly in the brain and its operations. Further, simply defining consciousness has proved notoriously difficult. Before proceeding to the claims made today about consciousness, we must take a moment to establish the stakes. Many religious and nonreligious interlocutors share the opinion that increased progress in the philosophy and science of mind may be bad news for religious doctrines, ranging from creation to human freedom, the distinctiveness of the human being, and Christ's salvific act—in other words, pretty much all of Christian doctrine. The opinion seems to be that sooner or later science will show something about consciousness that pulls the legs out from under Christian (and other religious) views. These interlocutors share as well some historically peculiar assumptions about Christian philosophy and theology. In particular, they seem unaware of basic interests and assumptions of many theologians, including the extent to which many, like Thomas Aquinas, were convinced of the essential animality of the human and the presence of soul in other animals. In other words, Christian theology and philosophy have nothing to fear from the study of mind; indeed, as we shall see, contemporary views about consciousness may suggest a return to an Aristotelian-Thomistic account of the human mind.

A claim by Martin Schönfeld is representative of the peculiar view about Christian notions of soul: "If one assumes that consciousness is a static entity, similar to a Christian soul (which is supposed to exist either fully or not at all), then the differences between humans and animals will invite the conclusion that animals lack

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<sup>4</sup>Christof Koch and Susan Greenfield, "How Does Consciousness Happen?" *Scientific American* 297.4 (October 2007): 81.

<sup>5</sup>Most famously Singer; see his *Practical Ethics* (Cambridge: Cambridge University Press, 1979).

<sup>6</sup>This view has aptly been called the "mind causes dignity" perspective; see Thomas Berg, L.C., "Human Brain Cells in Animal Brains: Philosophical and Moral Considerations," *National Catholic Bioethics Quarterly* 6.1 (Spring 2006): 94.

consciousness.”<sup>7</sup> Animals lack consciousness on the Christian view, according to Schönfeld, because Christians believe animals lack soul.<sup>8</sup> On this purported Christian account, animals are sophisticated machines, or mechanisms. Like other machines, they feel and experience nothing. Schönfeld thus traces back to earlier Christians a mechanistic view of animals that many usually attribute to René Descartes. Likewise, Singer provides “a short history” of the speciesism mentioned above, during which he lays at the feet of Christianity and Aquinas in particular the charge of using religious, moral, and metaphysical ideas to “mask the naked self-interest of human dealings with other animals.”<sup>9</sup> Christians and others made false claims about the superiority of humans among animals, and supported those with bogus metaphysics and supernatural revelation. Descartes’ mechanistic view of animals then represents the “nadir” of a development begun long ago by other Christians.

Descartes is important not because of his influence on the development of speciesism, but because of his strategy of saving humans from the mechanistic fate to which he assigned other animals.<sup>10</sup> Essentially, Descartes’ dualistic strategy so influenced subsequent discussion that contemporaries like Schönfeld and Singer cannot help but see the problem through dualist lenses. Their attribution of mechanistic views of animals to Aquinas results from a failure to see beyond dualist resolutions of the problem.

Animals, according to Descartes, are subject to the same mechanistic laws as the rest of the universe: they are thoroughly material beings, and like all matter are subject to laws governing matter. Humans differ from animals by the presence in them of souls. The soul, unique to humans, enables them to resist the mechanisms of the universe. Humans are the conjunction of soul (used interchangeably with mind, sometimes called the “thinking thing” by Descartes) and matter. The soul, the immaterial part of the human, enables thought. Humans, though superficially similar to animals, are actually quite unlike them on the Cartesian view, because of the conjunction in them of body and soul. The real person is soul, of course; the body is merely the means of moving the soul about.

This Cartesian perspective has been termed “supernatural dualism,” because it resolves the problem of protecting human uniqueness by positing humans as a union of matter and immaterial soul, the latter of which is understood as above

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<sup>7</sup>Martin Schönfeld, “Animal Consciousness: Paradigm Change in the Life Sciences,” *Perspectives on Science* 14.3 (Fall 2006): 356.

<sup>8</sup>By no means is Schönfeld alone in this view. I take him merely as illustrative.

<sup>9</sup>Singer, *Animal Liberation*, 186; see ch. 5, “Man’s Dominion: A Short History of Speciesism” for the full accusation.

<sup>10</sup>To what extent the views attributed to Descartes are his has been contested. See John Cottingham, “‘A Brute to the Brutes’? Descartes’ Treatment of Animals,” *Philosophy* 53 (1978): 551–561. But that is not my problem here. Whether the views are Descartes or another’s (Malebranche, for instance), certainly Descartes is blamed for entrenching a mechanistic view of animals such as I briefly discuss. For the view that Descartes’ noxious opinions on animals “brutally violates the old kindly fellowship of living things,” see A. Boyce Gibson, *The Philosophy of Descartes* (1932; repr. New York: Garland, 1987), 214.

nature. Supernatural dualism has few followers among contemporary thinkers.<sup>11</sup> There are many issues supernatural dualism seems incapable of resolving, including, for instance, the problem of how something immaterial (mind or soul) moves and affects something material (the human body). The Cartesian perspective then finds few adherents, because of its noxious moral consequences for animals and because philosophically and scientifically it does not compel.

### The Human Animal

It is not clear, however, that the Thomistic account fails to meet the objections against dualism or the arguments in favor of materialism.<sup>12</sup> Indeed, much of the contemporary rejection of dualism in favor of materialism seems to derive from dualism. Although materialist thinkers will deny the existence of something immaterial, they assume that the choices are either immateriality and materiality or mere materiality. They reject out of hand that there may be some other substance; something like what Aquinas, following Aristotle, suggested was a “material and spiritual” substance.<sup>13</sup> As David Braine writes, “dualism sets aside the Aristotelian conception that the physical universe embraces a spread of different types of thing, each successive type liable to be marked by different kinds of principle of activity, a world within which there is a pluralism of radically varied kinds of bodily thing apart from any pluralism of radically varied substance.”<sup>14</sup> Further, in terms more specific to the question of consciousness, the materialist rejection of dualism has not seemed capable of shaking off a dualist analysis of the relationship between mental states and brains, in particular the view that the inner state of the mind is logically and causally independent of the world or the “outer” person.<sup>15</sup> The rejection of the dualism of the human being has often accompanied a dualism about the human mind.

The intractability of the problem of consciousness, its moral implications for thinking about humans and other animals, and the general desire even among secular philosophers to get beyond dualism (and its quasi-dualist cousins) suggest that a return to an alternative account might be instructive.<sup>16</sup> Before one even moves to

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<sup>11</sup>There are exceptions; see Karl Popper and John Eccles, *The Self and Its Brain: An Argument for Interactionism* (London: Routledge, 1977).

<sup>12</sup>I am using “materialism” to cover both the view that everything is matter and also “physicalist” views in the theory of mind.

<sup>13</sup>See, for example, Thomas Aquinas, *Summa theologiae*, I, Q 75.1. There can be no question that Aristotle and Aquinas are “dualist” in a sense; that is, by agreeing with Plato that the soul is necessary to matter in making the thing what it is. On the other hand, it is clear as well that their hylomorphic conception of the soul-body relationship is not dualist in either the Platonic or Cartesian senses.

<sup>14</sup>See David Braine, *The Human Person: Animal and Spirit* (Notre Dame: University of Notre Dame Press, 1992), 2.

<sup>15</sup>*Ibid.*, 25–28.

<sup>16</sup>John Searle has repeatedly called for philosophical reflection on the mind-body problem to eschew dualism. See Searle, *Consciousness and Language* (New York: Cambridge University Press, 2002), 47.

the specific questions associated with consciousness, already, at the very beginning, the Aristotelian-Thomistic approach recommends itself because of its attention to the vast similarities between humans and other animals. Unlike other approaches that begin abstractly, the Aristotelian-Thomistic approach starts from reflections on animal behavior. Anyone with even limited experience with animals will have difficulty denying that animals feel pain or experience something like happiness, anxiety, and suffering; one can only wonder, as John Searle says, “why in philosophy and science we have so much trouble seeing that such sorts of answers [that animals do experience these things] are the correct ones”<sup>17</sup> So the path to understanding animals (and, by implication, humans) correctly does not seem to start by positing theoretical differences between humans and other animals, but by studying human and animal behavior and taking note of the obvious similarities through a vast range of activities. Following Aristotle and Aquinas, we ought to begin by taking philosophical measure of human animality.

The initial distinction made by Aristotle and Aquinas following him was between animate (ensouled) and inanimate things.<sup>18</sup> Humans were classified with other animals among the animate. As Alasdair MacIntyre notes, by beginning from human animality, we cannot escape noting that whatever rationality humans possess is animal rationality.<sup>19</sup> This is a critical point whose significance is easily missed. Not only does it suggest an affinity between humans and animals, it suggests as well that Cartesian dualism will not illuminate either animals or humans. For in stressing the animal nature of human rationality, both Aristotle and Aquinas focus our attention on the organic structure of rational thought. According to their account, rational thought is a consequence of the kind of being humans are. Certainly, a dualist or materialist could make the same claim, but the claim I am making refers to a different kind of being than either of their replies permits. We are not speaking of a soul-infused body or a mere body which in both cases posits some dichotomy of mind and body. Instead, with the rest of animate life, humans are simply the unitary kinds of beings that have motion and sentience and souls as principles of their organization.<sup>20</sup> They are fully bodily, or animal, beings, and all their experiences, beliefs, intentions, and desires pertain to and are inseparable from that animality.<sup>21</sup> The human mind works, then, as the mind of the human kind of animal, and one cannot help but wonder whether that means other kinds of animals think as well.

So what might we say about animal consciousness? Although there is no agreed-upon definition of consciousness in the literature, we can certainly distinguish

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<sup>17</sup>Ibid., 62.

<sup>18</sup>Aristotle, *De anima* 413a 20; Aquinas, *Summa theologiae*, I, Q 18.1.

<sup>19</sup>Alasdair MacIntyre, *Dependent Rational Animals: Why Human Beings Need the Virtues* (Chicago: Open Court, 1999), 12.

<sup>20</sup>See Aquinas, *Commentary on De anima*, I lectio 3; *Summa theologiae*, I, Q 75.1 and reply 2. In the *Commentary* Aquinas writes of “sensation” and movement; in the *Summa* of “knowledge” and movement.

<sup>21</sup>See, for example, Aristotle, *De anima* 412a 21, “The soul is the actuality of a body,” and 413a 4, “The soul is inseparable from its body.”

consciousness from minimal states of awareness of one's surroundings. There is currently little to no controversy about whether higher animals are aware of their surroundings, and certainly we can distinguish sleeping, drugged, or comatose animals from awakened and alert ones. The controversy begins instead with a conception of consciousness attributing to humans, and possibly other animals, certain subjective states related to what the field calls "qualia."<sup>22</sup> Qualia are related to those "what it is like" experiences described by Thomas Nagel in his essay, "What Is It Like to Be a Bat?"<sup>23</sup> Is it possible to ascribe to animals subjective experiences of what it is like to be that particular version of that kind of animal? Is it possible to say that this bat has an experience of "what it is like" to be *this bat*?

Nagel points out that no act of human imagination will allow us to capture the specifically subjective experience of what it is like to be a bat; however,

if anyone is inclined to deny that we can believe in the existence of facts like this [subjective experience] whose exact nature we cannot possibly conceive, he should reflect that in contemplating the bats we are in much the same position that intelligent bats or Martians would occupy if they tried to form a conception of what it was like to be us. The structure of their own minds might make it impossible for them to succeed, but we know that they would be wrong to conclude that there is not anything precise that it is like to be us.<sup>24</sup>

In the essay, Nagel seeks to refute physicalist accounts of the mind. While Nagel admits that reductive physicalism works well in many fields as an objective account of reality, it fails in the study of mind precisely because mind is subjective. As conscious experiences are essentially subjective, an objective approach of study would be absurd. That they cannot be studied objectively, however, does not mean conscious experiences do not exist. This anti-reductive approach suggests, then, a kind of epistemic humility.<sup>25</sup> We are cautioned not to draw the conclusion drawn by Daniel Dennett,<sup>26</sup> for instance, who in agreeing about the imaginative hurdles associated with "thinking like a bat" thus infers that neither the bat nor we can be proved to be more than zombies. Zombies (nonconscious beings) could exhibit the same external behavior as we do, but consciousness is not thereby implied, nor is it necessary to explain what they do. Since their behavior does not require consciousness to explain it, neither

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<sup>22</sup>"Qualia" is a notoriously difficult term to define. Searle calls it the qualitative subjective aspect of consciousness. *The Rediscovery of the Mind* (Cambridge, MA: MIT Press, 1992), 42.

<sup>23</sup>Thomas Nagel, "What Is It Like to Be a Bat?" in *Mortal Questions* (Cambridge: Cambridge University Press, 1979), 165–180.

<sup>24</sup>*Ibid.*, 170.

<sup>25</sup>Nagel denies that his anti-physicalism commits him to dualism and considers himself instead "anti-reductive." See "Conceiving the Impossible and the Mind-Body Problem," *Philosophy* 73.285 (July 1985): 337.

<sup>26</sup>Daniel Dennett, *Consciousness Explained* (New York: Back Bay, 1991). See also David Chalmers, *The Conscious Mind* (New York: Oxford University Press, 1996), 94–95. In this essay I call this view the "Dennett view," aware that others share it and may even hold it more tightly than he.

does ours.<sup>27</sup> The zombie argument is thus supposed to show the superfluosity of consciousness: it is neither logically nor explanatorily necessary.

But the zombie argument illuminates how off the Dennett view seems. While we can imagine “zombies,” can we really imagine zombies that would be physically and behaviorally identical to us? Dennett and others believe so. And as Searle explains, “this is a kind of mirror image of Descartes’ argument. Descartes argued that it is conceivable that my mind could exist without my body; therefore my mind cannot be identical with my body. And this argument says it is conceivable that my body could exist and be exactly as it is, but without my mind.”<sup>28</sup> Searle is right that we are back, then, to a version of dualism. The mind (or soul) is separable from and indeed useless to the body; subjective experiences of pain and pleasure are mere spectra and explanatorily unnecessary, and not only for other animals, but for us humans as well. We have done Descartes one better, then, and made mechanisms of all creatures, human and nonhuman.

### Animal Consciousness

I think it is safe to say that Dennett’s denial of experiences of pain to humans and animals would have impressed Aristotle and Aquinas no more than it does us.<sup>29</sup> Zombies are not possible in the sense implied by the thought-experiment because consciousness is not epiphenomenal. Consciousness does affect our behavior: this indeed is part of the thrust of the Aristotelian-Thomistic understanding of the person. Everything humans do they do as ensouled bodies, the conjunction in them of form and substance. As Braine states in criticizing materialism and dualism, “in animals and human beings, we have a new kind of nature—a new kind of thing or substance which is not to be ranked as ‘a body’ or ‘a material entity.’”<sup>30</sup> A zombie (that is, a being physically and behaviorally identical to us) is impossible because the removal (if possible) of mind or soul or consciousness does not leave behind an identical being, but a being more like a corpse than like a human being. It is simply unimaginable on this account that a zombie’s behavior would be identical to a human’s. A soulless human being ceases to be a human being. A soulless horse, or dolphin, or hydrangea ceases to be a horse, dolphin, or hydrangea.<sup>31</sup> A zombie, in the Aristotelian-Thomist account, would seem to be just the kind of lifeless body Aquinas rejects when arguing that the soul could not be a body.<sup>32</sup>

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<sup>27</sup>The notion that consciousness is unnecessary to explain behavior is called “epiphenomenalism.” See Searle’s rejection of this view in *Mind: A Brief Introduction* (New York: Oxford University Press, 2004), 71.

<sup>28</sup>Searle, *Mind*, 65.

<sup>29</sup>See Dennett, *Consciousness Explained*, especially chs. 10 and 11.

<sup>30</sup>Braine, *Human Person*, 291.

<sup>31</sup>There are other issues that remain, however, but it is beyond the scope of this essay to address them.

<sup>32</sup>Aquinas, *Summa theologiae*, I, Q 75.1, and *Summa contra gentiles*, bk. 2, ch. 65.

Epistemic humility would move us, then, away from the kinds of conclusions drawn by Dennett. But it cautions us as well not to draw false conclusions about the absence of animal consciousness when animals exhibit behavior suggestive of consciousness, as many clearly do.<sup>33</sup> If we are going to be led by reflection on behavior to conclude the presence in humans of conscious experiences, we should follow the same method in thinking about other animals, as Nagel suggested. Many animals do exhibit behavior similar to human behavior, and many studies show not only that different kinds of animals are capable of behaving in ways suggestive of a variety of emotions; some animals also show an enormous range of social interaction and communication.<sup>34</sup> Animals, like humans, dolphins, and chimpanzees, can play, they can choose and pursue goals, and they can resist desires.

Were it not for the philosophical interlude associated with mechanistic views of nonhuman animals, none of this would come as a surprise, nor would we be inclined to think the emergence of data highlighting animal intelligence a threat to human uniqueness. MacIntyre notes the lengthy treatment of intelligent, goal-directed behavior Aristotle recounts in *The History of Animals*, and again, this is not just individual behavior, but often socially intelligent behavior, as when cattle look after each other after one has gone missing.<sup>35</sup> Further study of behavior among higher animals will probably only enforce MacIntyre's conclusion that "exclusive, or almost exclusive, attention to . . . differences may and commonly does obscure the significance of the continuity and resemblances between some aspects of the intelligent activities of nonhuman animals and the language-informed practical rationality of human beings."<sup>36</sup> Instead, if our reflections follow the Aristotelian-Thomistic path, the necessary animality of the human will illuminate both human and animal intelligence. Such reflection will enrich our understanding of animals, and of course of humans as well, because everything the human does is done as a particular kind of animal. Influenced by Aristotle and Aquinas, MacIntyre states, "our whole initial bodily comportment towards the world is originally an animal comportment and . . . we never make ourselves independent of our animal nature and inheritance."<sup>37</sup>

Our epistemic humility suggests that we follow the behavioral similarities between humans and other animals to the acknowledgment of some level of animal consciousness, but reflection on behavior also suggests some significant difference between humans and other animals. For instance, while some animal studies show the ability of certain higher animals to use language, none yet (and one imagines never will) show animals creating language. In other words, whatever linguistic abili-

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<sup>33</sup> See MacIntyre, *Dependent Rational Animals*, 31, and his discussion of animals as "pre-linguistic" as opposed to "nonlinguistic," 29–41.

<sup>34</sup> See MacIntyre, *Dependent Rational Animals*, ch. 3, "The Intelligence of Dolphins."

<sup>35</sup> Aristotle, *Historia animalium*, bk. IX, ch. 4.

<sup>36</sup> MacIntyre, *Dependent Rational Animals*, 50.

<sup>37</sup> *Ibid.*, 48–49.

ties animals possess differ significantly from human linguistic ability, leading some philosophers to argue that animals are either nonlinguistic or pre-linguistic.<sup>38</sup>

### The Semblance of Reason

In *Aquinas on Mind*, Anthony Kenny discusses Aquinas's understanding of freedom and willing in the context of questions about animals' reasons for acting.<sup>39</sup> Kenny argues that another difference separating humans from other animals is the unique human ability to give reasons for their actions.<sup>40</sup> Kenny believes this is so because an animal "does X in order to do Y, he does not do X for a reason, even though he is aiming at a goal in doing so. Since he lacks a language, he cannot give a reason; and only those beings who can give reasons can act for reasons."<sup>41</sup> MacIntyre believes Kenny's conclusion overstated; he writes, "we need not and should not deny that on occasion such non-human animals in some sense have reasons for acting as they do."<sup>42</sup> According to MacIntyre, the Aristotelian-Thomistic understanding of the essential animality of the human will supports the notion that some animals have pre-linguistic reasons for acting, even if, as Kenny correctly states, the Aristotelian-Thomistic view will also distinguish between the powers of judgment available to full language users like humans.

Aristotle and Aquinas, MacIntyre argues, extend to animals a "semblance of reason." By calling this a semblance of reason, Aquinas retains the connection of human reason to their animality and distinguishes human reason from the reason of other animals. Again, this derives from the view that whatever humans do they do as animals. They perceive and judge as animals. Yet as Aristotle and Aquinas confirm, humans do possess a unique capacity for reflection upon and judgment of their reasons for acting, and Kenny correctly notes that this requires the distinctively human capacity for language. The starting point of such reflection on reasons for action, however, is possession of the reasons for acting; in other words, the distinctive capacity for judgment and reflection is subsequent to the possession of reasons for acting which presumably, therefore, do not depend on the distinctive capacity for judgment enabled by our language. Insofar as everything we do is done as a human kind of animal, we can imagine then that some other animals have pre-linguistic reasons for acting much as, say, children do.

The important thing to take away from MacIntyre's disagreement with Kenny is its arising in the context of thinking about humans and other animals on a spectrum of animality, in both cases stressing and reflecting upon the continuities between

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<sup>38</sup>See MacIntyre's extensive and fascinating discussion of different philosophical views on animals and language at *ibid.*, 33–51.

<sup>39</sup>Anthony Kenny, *Aquinas on Mind* (London: Routledge, 1993), 81–82. I also rely heavily on MacIntyre, *Dependent Rational Animals*, ch. 6, "Reasons for Action."

<sup>40</sup>Kenny, *Aquinas on Mind*, 82–83.

<sup>41</sup>*Ibid.*, 82.

<sup>42</sup>MacIntyre, *Dependent Rational Animals*, 56.

humans and animals. It enriches our understanding of both humans and other animals and indeed of creation as a whole. Good reflection on consciousness in humans and animals, such as undertaken by Nagel, Searle, MacIntyre, Kenny, Braine, and many, many others, has shown the deficiencies associated with dualist approaches and their materialist progeny. One possible and increasingly plausible alternative turns out to be an old one; the Aristotelian-Thomistic account. If it turns out to have as its unlikely bedfellows certain opponents of moral views often associated with the Thomistic variant of Aristotelianism, this strikes me as so much the better. The basis for a wider esteem of nonhuman animals from within Thomism may provide a framework for reaching out and establishing a wider esteem for the human animal than exists outside the Thomistic perspective.