

LIBERTY UNIVERSITY

TOWARD A THOMISTIC ENVIRONMENTAL ETHIC:  
HOW AQUINAS'S METAETHIC PROVIDES THE GROUNDWORK FOR AN  
ENVIRONMENTALLY AND ZOOLOGICALLY RESPONSIBLE MORAL SYSTEM

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## **Abstract**

While the trend in contemporary discussions of environmental ethics is often to dispense with traditional anthropocentric conceptions of morality in favor of more biologically and ecologically inclusive perspectives, I will argue that Natural Law Theory and Virtue Ethics, both integral components of the moral philosophy of Thomas Aquinas, provide the groundwork for an ecologically and zoologically responsible ethic. Thus, utilizing the core of Aquinas's ethical system, I will attempt to construct a robust moral framework that is Thomistic in every important sense while at the same time satisfies the sufficiency conditions for a successful environmental code of conduct.

## CONTENTS

### CHAPTER ONE: Introduction

- I. Anthropomorphism and Environmental Ethics.....6
- II. Identity Conditions for a Thomistic Ethic.....9

### CHAPTER TWO: Three Reasons why Environmental Ethicists have Abandoned Aquinas

- I. Aristotelian Roots.....12
- II. Aquinas on Animal Treatment.....13
- III. Animal Treatment in Christianity.....16

### CHAPTER THREE: Aquinas's Theory of Value

- I. Thomas on Soul.....18
- II. Kinds of Souls.....21
- III. A Graded Theory of Value.....22
- IV. Being as Intrinsic Good.....24
- V. Principle of Plenitude in Creation.....26
- VI. Evaluation Thomas's Theory of Value.....28

### CHAPTER FOUR: Thomas on Animals

- I. What is an animal?.....32
- II. A Thomistic Zoological Epistemology.....36
- III. Thomas on the Natural Right.....39
- IV. Thomas's Applied Ethic of Animal Treatment.....40

### CHAPTER FIVE: A Natural Law and Virtue approach to Environmental Ethics

- I. Thomas's Moral Philosophy.....45

II. Natural Law and Animal Treatment.....	47
III. Environmental Virtues.....	53
IV. Anthropocentrism and the Environment.....	58
V. The Thomistic Ethic Applied.....	60
VI. Conclusion.....	62
BIBLIOGRAPHY.....	64

## List Of Abbreviations

<i>CPA</i>	<i>Commentary on the Posterior Anyltics of Aristotle</i>
<i>QDA</i>	<i>Quaestiones Disputatae de Anima</i>
<i>QDSC</i>	<i>Quaestio Disputata de Spiritualibus Creaturis</i>
<i>QDV</i>	<i>Quaestiones Disputatae de Veritate</i>
<i>SCG</i>	<i>Summa Conta Gentiles</i>
<i>ST</i>	<i>Summa Theologica</i>

## CHAPTER ONE: INTRODUCTION

### Anthropomorphism and Environmental Ethics

Many contemporary environmental ethicists have abandoned traditional anthropocentric approaches to morality largely due to the perceived negative impacts such systems have had on society's attitude toward the environment, animals, and the planet as a whole.<sup>1</sup> It is widely believed that Christian human exceptionalism, the idea that God has placed man over and above all other creatures, is one of the main contributing factors to our current environmental crisis.<sup>2</sup> Because nearly every major metaethic in the history of western philosophy (virtue ethics, Kantian ethics, natural law, Mill's utilitarianism, etc.) has presupposed anthropomorphism and human exceptionalism, many environmental ethicists endeavor to build a wholly new metaethic that seeks establish ethical principles solely on the basis of their contribution to the environmental project.<sup>3</sup>

The renown medieval Christian philosopher and theologian Thomas Aquinas is sometimes specifically cited as one of the principle reasons why the western world has a relatively apathetic attitude toward many environmental and zoological issues. Aquinas's view of animals as automatons and idea that all of creation is designed to serve mankind lead many to believe that a Thomistic metaethic is essentially and necessarily inadequate when it comes to addressing contemporary environmental issues. Given these concerns, I have three primary goals

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<sup>1</sup> Biocentric and ecocentric ethics have enjoyed great popularity in the relevant literature since the advent of environmental ethics in the 1970s. Perhaps most significantly, Aldo Leopold's ecocentrism and Arnes Naess's concept of deep ecology have been particularly influential.

<sup>2</sup> Lynn White's famous treatment on the roots of our environmental crisis exemplify this notion. See his 1967 article "The Historical Roots of our Ecological Crisis" for a detailed historical analysis of Christianity's role in contributing to the environmental crisis.

<sup>3</sup> Holmes Rolston III, *Philosophy gone Wild*, (New York: Columbia University Press, 1994), 20.

in writing this paper: first, I shall explore the facets of Aquinas's thought that have the most significant ramifications for environmental ethics and zoological issues; second, I shall examine why and how Aquinas arrives at his problematic conclusions regarding animals and the environment; and finally, I shall endeavor to show how one can utilize the core principles of Aquinas's metaethics in order to construct a moral system that is both environmentally and zoologically responsible, culminating in an Thomistic environmental ethic derivative of natural law theory, virtue ethics, and Aquinas's nuanced theory of value.

Before proceeding further, it is necessary to explain exactly what environmental ethicists are looking for when evaluating moral systems. What are the sufficiency conditions of a responsible and robust environmental ethic? While most have some conceptual notion of what this should look like, explicitly delineating some criteria for sufficiency will allow us to adjudicate our success in finding a suitable Thomistic environmental ethic. In his book *Character and Environment*, ethicist Ronald L. Sandler develops such sufficiency conditions based on what most all environmental ethicists believe to be intuitively necessary for a successful environmental ethic. While these criteria could potentially be expanded upon, intuitively, they seem to a good beginning point. According to Sandler, any sufficient environmental ethic must satisfy the following criteria:<sup>4</sup>

(1) *A satisfactory environmental ethic must provide a basis for reliable, sustained, and justified critiques of environmentally unsustainable practices, policies, and lifestyles.* Clearly, whatever ethical system we adopt should not permit undue or excessive strain on our environment. This point is perhaps the least controversial of the three, as even the most

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<sup>4</sup> Ronald L. Sandler, *Character and Environment*, (New York: Columbia University Press, 2007), 108.

anthropocentric systems typically require sustainable practices for the good of mankind. Not only does overuse of natural resources and unsustainable lifestyles pose a threat to ecosystems and habitats, but also to the long-term survival needs of the human race.

(2) *It must provide action and policy guidance in concrete situations involving individual or communal interactions or relationships with the natural environment.* No moral system, no matter how clever or elegant, is of any use if it is not practical and determinate. A robust environmental ethic ought to be able to offer concrete decision making procedures that have the potential to influence policy and impact ordinary lifestyle choices.

(3) *It must provide arguments, reasons, or justifications that that are efficacious in moving people to adopt the policies or perform the actions recommended.*<sup>5</sup> A successful environmental ethic should be epistemically compelling, cohering with our other beliefs about reality in a fashion that compels us toward desirable behaviors. This can only be accomplished if the core principle(s) of our moral system produce results that square with our moral intuitions and ordinary beliefs about the world.

Given these criteria, it will likely become clear why Aquinas's moral thinking is seen as counterproductive to the environmental movement. As I will demonstrate in the following chapter, it appears that Aquinas does not believe that there is anything *inherently* wrong with animal cruelty. His belief that the sole purpose of creation is to serve mankind also has troubling implications regarding our obligations to the natural world. Given these difficulties, one may wonder why anyone would endeavor to create an environmentally responsible Thomistic ethic or what would be included in such a system after removing the troubling components. First, I will

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<sup>5</sup> Ibid.

argue that one of the primary problems with the recent environmental ethics movement is its total rejection of traditional anthropomorphic systems, many of which have proven to be intuitively and philosophically satisfying for thousands of years. As I hope to show with this paper, one need not entirely reject anthropomorphism in order to create obligations towards animals and the environment that are sufficiently responsible. The rejection of these systems, particularly the Aristotelian/Thomistic system, involves not only a rejection of the practical implications that some find unsettling, but also the rejection of a robust and compelling metaphysics that has contributed invaluable insights to philosophy and academia as a whole. If the sole motivation for rejecting such notions is because of their implications for environmental philosophy, it may be preferable to only amend (or simply reinterpret) the axioms of a time-tested metaethic.

### **Identity Conditions for a Thomistic Ethic**

As mentioned in the previous section, the main project of this essay is to develop an environmentally responsible Thomistic ethic despite the seemingly troubling ideas Thomas himself held regarding animals and the environment. Thus, it is clear that we will be deviating from some of the conclusions that Thomas drew on these matters. This being said, it is important to establish some identity conditions for a genuinely “Thomistic” ethic, lest our final product fail to resemble his thinking in any recognizable form. Here, then, are the features I believe to be fundamental to Aquinas’s metaethic:<sup>6</sup>

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<sup>6</sup> This list is not necessarily exhaustive, but should suffice to outline the relevant essential features of Thomas’s thought. There may be some features that some would take to be essential to Thomism that are not listed here because they are not directly relevant (God’s simplicity, for example).

*Anthropocentrism.* Human excellence is an inescapable axiom of Aquinas's thought.<sup>7</sup> His anthropocentric theory of personhood is so intimately tied to his metaphysics that it is neither possible nor desirable to reject it. For our purposes, we will take "anthropocentrism" simply to be the idea that humans are the most significant species on the planet and that morality is primarily concerned with their well being. While the term itself has different connotations depending on the context in which it is used, this definition is broad enough to encompass all of its flavors.<sup>8</sup>

*A perfectionist Theory of Value.* Aquinas believes that things are good insofar as they perfect their own nature, which in turn will lead to a fulfillment of their teleology. A thing acting in accordance with its purpose seems to be both a necessary and sufficient condition for a thing being called good on Aquinas's conception. Given Aquinas's anthropocentrism, Mark Timmons summarizes Aquinas's theory of value as, "Some state of affairs S is intrinsically good if and only if (and because) the realization of S is part of what perfects human nature."<sup>9</sup> This will be our working definition of "intrinsic value" for the remainder of this essay, as it comports well with Aquinas's intentions on my estimation.

*A Virtue-Oriented Approach rooted in Natural Law.* Given the perfectionist theory of value explicated above, Aquinas's conception of virtue is necessarily teleological. A person acts virtuously when he performs actions that work toward the perfection of his nature, and acts wrongly when his actions frustrate the perfection of his nature. We shall see later that because

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<sup>7</sup> Francisco Benzon, "Thomas Aquinas and Environmental Ethics: A Reconsideration of Providence and Salvation," *The Journal of Religion* 85, no. 3 (July 2005), 446.

<sup>8</sup> Angelika Krebs, *Ethics of Nature*, (Berlin: Gruyter, 1999), 173.

<sup>9</sup> Mark Timmons, *Moral Theory*, (Plymouth, United Kingdom: Rowman and Littlefield, 2013), 75.

man's nature is that of a rational animal, mankind has an obligation to act in accordance with reason. This idea will be explored more deeply in the coming chapters.

*A commitment to Christian Theism.* Aquinas makes no apology for the fact that his moral system is not only strictly theistic, but exclusively Christian. Most of the primary sources consulted for outlining his moral theory here are just as much theological as they are philosophical. Thus, because our goal here to to explicate a Thomistic environmental ethic, no attempt will be made here to reconcile these ideas with philosophical naturalism.

*An acceptance of Aristotelian Metaphysics.* Finally, our ethical theory must not contradict any major tenet of Aristotelian metaphysics or epistemology. Implicit in our discussion will be an acceptance of hylomorphic dualism and Aristotelian causality and a rejection of Platonic forms, innate ideas, and cartesian dualism. This will be exceedingly important as we move forward, as much of the supposed guilt attributed to Christianity regarding our environmental crisis can be traced back to substance dualism rather than Christianity proper.

These five aspects of Aquinas's moral theory seem to exhaust the essential components of a Thomistic ethic. There may be other accidental components that nuance his position, but I believe that most will agree that any ethic meeting the above criteria is genuinely Thomistic. We are now in a position to analyze the troubling areas of Aquinas's moral thinking, which will be the focus of the next chapter.

## CHAPTER TWO: THREE REASONS WHY ENVIRONMENTAL ETHICISTS HAVE ABANDONED THOMAS

### Reason One: Aristotelian Roots

Aristotle's influence on Aquinas's thinking is undeniable. Many of Thomas's overly anthropocentric concepts that trouble environmental ethicists clearly have their root in Aristotle. Perhaps the most significant example of this is Aristotle's hierarchy of subserviency. Aristotle held that there exists a hierarchy of reasoning ability, with each being existing for the purpose of the being immediately above it in the hierarchy<sup>10</sup>. For example, plants exist for the use of animals, animals exist for the use of man, etc. Because man is the penultimate being on Aristotle's conception, he concludes that "all animals [exist] for the sake of man."<sup>11</sup> We find in Aristotle the first notions of the supremacy of mankind, with all of creation serving the chief end of our consumption and enjoyment.

Peter Singer argues that Aristotle's notion of a hierarchy of subserviency leads to obviously immoral conclusions not only by the standards set by those in the animal liberation movement, but nearly everyone in the contemporary western world. While his primary criticism of Aristotle stems from the deleterious effects that his thinking has contributed to how society views and treats animals, Singer is equally concerned by how this same concept was used to justify slavery.<sup>12</sup> Because Aristotle's hierarchy is based on rationality, Aristotle indicates that the less rational human populations (for Aristotle, the surrounding barbarian tribes) exist for the sake

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<sup>10</sup> Aristotle, *Politics*, Book I chapter 8, as published by MIT classics, <http://classics.mit.edu/Aristotle/politics.1.one.html>.

<sup>11</sup> Ibid.

<sup>12</sup> Peter Singer, *In Defense of Animals*, New York: Basil Blackwell, 1985, pp. 1-10. <http://www.animal-rights-library.com/texts-m/singer01.htm>

of the more rational ones (Greeks), rendering slavery not only perfectly natural, but also just.<sup>13</sup> Because slavery is clearly unjust, Singer indicates that we are justified in believing that Aristotle's hierarchy is an incorrect (or perhaps unhelpful) moral principle.

### **Reason Two: Thomas's Remarks on Animals**

“Saint Thomas has ushered in centuries of neglect, and even callousness towards, the non-human world,” writes Andrew Linzey and Ara Barsam.<sup>14</sup> Their sentiments are not uncommon; throughout my research, various parties have consistently blamed Thomas Aquinas as one of the chief causes of our current environmental crisis and widespread mistreatment of animals.<sup>15</sup> Though I will later argue that his metaethic and ontology lend themselves to responsible care of the non-human world, it cannot be denied that Aquinas himself had a rather low view of animals. Aquinas's ideas about non-human creatures demonstrates an inconsistency in how he applies his own metaphysics to the value and treatment of animals. Saint Thomas's personal views on the treatment of animals need not indicate a deficiency in his metaethic, but rather a mere misapplication of otherwise sufficiently compelling moral principles.

To begin, there are a few places in Thomas's writings where he indicates that animals have no value outside of their instrumental use to humans. Referencing Augustine, Aquinas writes, “According to the Divine ordinance the life of animals and plants is preserved not for themselves but for man. Hence, as Augustine says (De Civ. Dei i, 20), ‘by a most just ordinance of the Creator, both their life and their death are subject to our use.’”<sup>16</sup> Here, it becomes clear

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<sup>13</sup> *Politics*, Book I, part 5.

<sup>14</sup> Andrew Linzey and Ara Barsam, “Saint Francis of Assisi,” *Fifty Key Thinkers on the Environment*, (New York: Routledge, 2011), 26.

<sup>15</sup> See White, Singer, and Barad for more examples.

<sup>16</sup> *Summa Theologica*, The Second Part of the Second Part, Question 64, article 1.

that Aquinas draws heavily from Augustine's arguments against the intrinsic value of non-human animals. Augustine is even more pointed than Aquinas in his insistence that animals have only intrinsic value, stating that to refrain from killing animals because of moral reasons is "the height of superstition."<sup>17</sup> He believes this principle to be evident in Scripture, citing Mark 5 where Jesus commands a multitude of demons to possess pigs, running them off of a cliff and eventually drowning.<sup>18</sup>

Similarly, Aquinas states that there is nothing intrinsically wrong with torturing animals. Because all animals exist for man's sake, the only reason one is not permitted to torture a non-human animal is because it could inadvertently bring about some injury to his fellow man.

Aquinas writes the following regarding alleged scriptural prohibitions regarding animal cruelty:

Indeed, if any statements are found in Sacred Scripture prohibiting the commission of an act of cruelty against brute animals, for instance, that one should not kill a bird accompanied by her young (Deut. 22:6), this is said either to turn the mind of man away from cruelty which might be used on other men, lest a person through practicing cruelty on brutes might go on to do the same to men; or because an injurious act committed on animals may lead to a temporal loss for some man, either for the agent or for another man; or there may be another interpretation of the text, as the Apostle (1 Cor. 9:9) explains it, in terms of "not muzzling the ox that treads the corn" (Deut. 25:4).<sup>19</sup>

The above passage is interesting for our purposes for at least two reasons; first, it seems to be a tacit admission that Scripture, at least *prima facie*, prohibits some instances of animal cruelty. At first glance, one might think that these prohibitions are made out of compassion, and Aquinas would likely partially agree with this; instead of seeing them as directing compassion toward the animals themselves, however, Aquinas sees these prohibitions as a mandate to exercise

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<sup>17</sup> Augustine, *The Catholic and Manichaeon Ways of Life*, (Washington DC: Catholic University Press, 1966), 102.

<sup>18</sup> *Ibid.*

<sup>19</sup> Thomas Aquinas, *Summa Contra Gentiles*, Book III, Chapter 112, edited by Joseph Kenny, (New York: Hannover House, 1955).

compassion *as a virtue*. The successful adherence to these prohibitions are not for the sake of the animals themselves, but purely for the betterment of the individual man. This virtue-oriented approach is of course the central component of Aquinas's ethic.

Soon after his analysis of scriptural prohibitions against animal cruelty, Aquinas gives his reasons for stating that it is an error to believe that it is a sin to kill brute animals. He writes that, "...animals are ordered to man's use in the natural course of things, according to divine providence. Consequently, man uses them without any injustice, either by killing them or by employing them in any other way."<sup>20</sup> This squares well with Aquinas's teleological view of nature and the belief that every being possesses its own final causality. Aquinas indicates that we know the chief end of animals not only through natural means (by observations of what they are good for), but also through special revelation such as Genesis 3:9.<sup>21</sup> Thomas's insistence that animals exist for man's use is likely also derivative from Aristotle's hierarchy of subserviency.

Clearly, animal value is entirely reduced to instrumental value for Aquinas. It is these kinds of notions that have caused environmental ethicists to abandon the Thomistic position in favor of non-anthropocentric systems. As we shall see in the coming sections, while these specific pronouncements may seem to be insurmountable obstacles in formulating a Thomistic environmental ethic, our analysis of Aquinas's overarching theory of value, life and natural law should demonstrate his inconsistency in applying his thought to the non-human world.

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<sup>20</sup> Ibid.

<sup>21</sup> "Every moving thing that liveth shall be meat for you; even as the green herb have I given you all things."

### **Reason Three: Animal Treatment in Christianity**

Because Aquinas's ethic is unapologetically Christian, it may be beneficial to say a few words regarding how Christianity has historically been perceived in the environmental movement. As was the case with Thomas, throughout the contemporary literature, Christianity is commonly maligned as being one of the primary culprits of the historical mistreatment of the non-human world. Peter Singer writes, "It is beyond dispute that mainstream Christianity, for its first 1,800 years, put non-human animals outside its sphere of concern. On this issue the key figures in early Christianity were unequivocal."<sup>22</sup> This is evidenced by the many acts of extreme animal cruelty that were not only permitted in medieval Christian Europe, but actively promoted. Various blood sports such as bear baiting and bull baiting played a major role in entertaining Europeans from the 12th to 19th century, with some specific sports set aside specifically to commemorate Christian festivals.<sup>23</sup> The sport of cock-throwing, for example, in which participants would throw rocks at a rooster until it died of its injuries, was commonly played on Shrove Tuesday in England up until the 18th century.<sup>24</sup>

Additionally, claims regarding the environmentally callous nature of Christianity are substantiated by passages of Scripture such as the edenic mandate, where God commands humankind to subdue the earth and all of its creatures.<sup>25</sup> While many environmentally conscious Christians and Jews view this command as one to care for creation rather than lord over it, there

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<sup>22</sup> Singer, 2.

<sup>23</sup> Encyclopædia Britannica Online, s. v. "bearbaiting", accessed April 7, 2016, <http://www.britannica.com/sports/bearbaiting>.

<sup>24</sup> Joseph Strutt, *The Sports and Pastimes of the People of England*, (London, Methuen & co., 1903), accessed at <http://www.sacred-texts.com/neu/eng/spe/index.htm>.

<sup>25</sup> Genesis 1:28-31

have been relatively few efforts within evangelical Christianity to . Similarly, in 1 Corinthians 9, Paul indicates that some of the Scriptural commands that seem *prima facie* to benefit animals are actually in place for the benefit of man.<sup>26</sup> While Luke 12:6 states that God cares for non-human creatures, this point is only made to emphasize how much more valuable Mankind is than the lesser creatures.<sup>27</sup>

This being said, it is not difficult to see why Thomas, perhaps more than any other figure in historical Christianity, is portrayed as a primary antagonist to the environmental project. In his response to Lynn White's scathing denouncement of Judeo-Christian environmental values, Baird Callicott suggests that the intellectual legacy of ancient Greek natural philosophy is equally (if not more) culpable than that of Christianity.<sup>28</sup> He explains that though post-enlightenment Christians such as Newton and Galileo believed the scientific project to be a natural outworking of a belief in the *imago dei* and the idea that science was aimed at "thinking God's thoughts after him," "the details of the creator's supposed thoughts were inspired by Pythagoras and Democritus, not Moses and Paul."<sup>29</sup> Thus, when placing Thomas in an intellectual tradition, he has the unhappy distinction of belonging to all culpable parties; not only was Thomas greatly influenced by the Judeo-Christian tradition, but also ancient Greek philosophy.

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<sup>26</sup> "For it is written in the Law of Moses: 'Do not muzzle an ox while it is treading out the grain.' Is it about oxen that God is concerned? Surely he says this for us, doesn't he? Yes, this was written for us, because whoever plows and threshes should be able to do so in the hope of sharing in the harvest."

<sup>27</sup> "Are not five sparrows sold for two pennies? Yet not one of them is forgotten by God. Indeed, the very hairs of your head are all numbered. Don't be afraid; you are worth more than many sparrows."

<sup>28</sup> Baird Callicott. *Beyond the Land Ethic: More Essays in Environmental Philosophy*, (New York: State University of New York Press, 1999), 190.

<sup>29</sup> *Ibid*, 191.

## CHAPTER THREE: THOMAS'S THEORY OF VALUE

### Thomas on Soul

One of the most pivotal features of any ethic is its underlying theory of value. This is especially true in environmental and animal welfare ethics, where non-human entities are often ascribed rights and intrinsic value. While no single excerpt of Thomas's writing succinctly summarizes his theory of value, a comprehensive system can be derived from his remarks on the nature of the soul and his graded theory of beings.

A correct understanding of Thomas's view of the soul is of utmost importance in understanding his theory of value, as his perspective is ultimately what will enable us to allocate intrinsic value to non-human animals. Those not familiar with Thomism or theists who accept the Aristotelian tradition may assume that all Christians are committed to some form of Cartesian dualism, particularly in the context of personhood. It is often presumed that Christianity must maintain that human beings are comprised of two distinct substances- namely, body and soul (mind)- in order to make sense of the orthodox Christian conception of the afterlife. It is not uncommon to find an emphasis on the primacy of the soul over the body in popular Christian literature. For example, George Macdonald writes:

[Children] ought to be taught that they have bodies; and that their bodies die; while they themselves live on. Then they will not think, as old Mrs Tomkins did, that THEY will be laid in the grave. It is making altogether too much of the body, and is indicative of an evil tendency to materialism, that we talk as if we POSSESSED souls, instead of BEING souls.<sup>30</sup>

This tendency of placing human identity in an immaterial substance has its roots in the often Platonic early Church fathers and theologians. Augustine, whose influence on both Thomas and

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<sup>30</sup> George Macdonald, *Annals of a Quiet Neighborhood*, (New York: Harper & Bros, 1895), Chapter 28, accessed February 10, 2016, <http://www.gutenberg.org/files/5773/5773-h/5773-h.htm>.

the whole of Christian theology is undeniable, emphasizes the distinct identities and properties of body and soul and paves the way for the popularization of Platonic ideas in Christian theology.<sup>31</sup>

As Thomas puts it, the Platonic view of persons relates the soul to the body as a sailor to his ship; the soul is the rational and volitional identity, and the body is merely its vessel.<sup>32</sup>

Thomas, following Aristotle, explicitly denies this Platonic view of personhood.

Embracing hylomorphism, Thomas denies that the human person is merely a “soul using a body,” but rather that both body and soul are essential components of personhood and ultimately of the same substance.<sup>33</sup> Simply put, the soul is the form of living bodies. Thomas noted that this hylomorphic view could eradicate some of the most vexing difficulties of Plato’s theory of the soul, perhaps most notably the issue of how two distinct substances could be united and how such substances could interact with one another. While Plato needed some intermediate substance (something like Descartes’s pineal gland) to unite body and soul, Thomas had no need for such things. He writes:

Some held that there is a certain spirit and humor existing as a medium between soul and body; other posited light; still others, the powers of the soul, or something else of this sort. But none of these [entities] are necessary if the soul is the form of the body, because anything whatever, inasmuch as it is a being, is one.<sup>34</sup>

This idea that the soul is merely the form of a living body serves two purposes: first, it eliminates the common issues usually associated with dualistic systems while still providing a meaningful distinction between body and soul; and secondly, it lays the groundwork for

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<sup>31</sup> Roland Teske, “Augustine’s Theory of Soul,” in *Cambridge Companion to Augustine*, ed. Eleonore Stump and Norman Kretzmann, (New York: Cambridge University Press, 2001).

<sup>32</sup> Thomas Aquinas, *Quaestio Disputata de Spiritualibus Creaturis* (Disputed Questions on Spiritual Creatures), Article 2.

<sup>33</sup> *SCG*, II, 57.

<sup>34</sup> *QDA*, article 9.

metaphysical common ground between human and non-human living bodies. The Platonic/Cartesian tradition typically dictates that human beings are the only ensouled creatures, as humans are supposed to be the only creatures that survive death according to orthodox Judeo-Christian tradition. The Platonic idea that we *are* souls merely *using* a physical body alienates us from the rest of the physical world in a way the Aristotelian/Thomistic tradition does not. Platonism has a tendency of vilifying the physical realm, such that death becomes a release from our burdensome physical bodies. The world of shadows is merely a prison that must be suffered until we reach our desired immaterial home.

It is not difficult to see how Platonism can easily produce a mindset that is not conducive to environmental or zoological responsibility. For Plato, the environment and all its non-human inhabitants constitute a shadowland that will ultimately be overcome by the brilliant realm of ideas. Rather than a common home, the environment becomes a purgatory. The Platonic emphasis on the impermanence and ultimate insignificance of our Earthly dwelling does little to inspire benevolence toward it, but instead vilifies it. The Aristotelian/Thomistic view, however, has an opposite effect; by defining soul merely as “the principle of life” and the form of living bodies, man becomes an *essentially* physical creature. For Aristotle and Thomas, the soul is intimately tied to the material body just as matter is to form.

Additionally, Aristotle is one of the first philosophers to characterize all life forms (including plants) as possessing the *same* life-giving principle. Prior to Aristotle, it was not uncommon to believe that the differences among life forms were too vast to be characterized by any single characteristic. Alexander of Aphrodisias, for example, indicates that the differences

among plants, animals, and humans are too severe to warrant one single definition of “soul.”<sup>35</sup> Aquinas defends Aristotle’s definition by pointing out that creatures with graded capacities can fall under the same genus just as numbers with vastly different values can call under the same genus of “numbers.”<sup>36</sup> Just as the numbers 1 and 10<sup>57</sup> have vastly different values yet can be called numbers, so too can all living beings, regardless of their vast differences, be called “ensouled” beings (and thus occupy the same genus).

### **Kinds of Souls**

Now that we have established how Thomas defines soul, we are prepared to discuss what sorts of souls there are. Aquinas held that there are three divisions of soul, each suited to fulfill a specific function. The vegetative soul, the only part common to all living things and the only division present in plant life, is responsible for the basic physical functions that keep any given organism alive. This includes nutritive, augmentative, and generative capacities. The second highest division, common to all higher-order animals and mankind, is the sensitive soul; this part is responsible for sensory experience, consciousness, and self-direction. The final division of the soul, found only in mankind, is the rational part. This part is responsible for our ability to think on our own actions, comprehend moral facts, and assists us in achieving our final end of knowledge and union with the Divine.<sup>37</sup> While Thomas speaks of the vegetative soul, sensitive soul, and rational soul, he makes it very clear that beings that possess two or more of these capacities do not possess a multiplicity of souls, but rather a single soul that possesses these

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<sup>35</sup> Alexander of Aphrodisias, *Supplement to On the Soul*, Translated by R. W Sharples, (London: Duckworth, 2004).

<sup>36</sup> Thomas Aquinas, *Commentary on Aristotle's De Anima*, book II lesson 5, translated by Kenelm Foster and Sylvester Humphries, (New Haven: Yale University Press, 1951).

<sup>37</sup> *ST*, Part I, article 78.

various potencies.<sup>38</sup> Thus, while non-human animals have a vegetative and sensitive soul, that is not to say they possess two souls, but rather that their single soul possess these two capacities.<sup>39</sup>

### **A Graded Theory of Value**

As noted above, Aquinas divides beings into roughly four categories: inorganic (soulless) beings, plants (those that possess only a vegetative soul), animals (those that possess a sensitive soul), and finally human beings (those that possess the rational soul). One may be inclined to picture these divisions as one would a ladder; inanimate objects are on the lowest rung, plants above it, with human beings being the final rung. This conception, however, can be misleading. Thomas tells us that there is a graded ontology, with the lowest forms of animal life closely resembling the highest forms of plant life and vice versa. This gradation is similar from genus to genus, painting the picture of a gentle slope rather than clearly divided rungs, with the lowest forms of one genus having a great degree of resemblance to the highest forms of the one below it. Thomas writes:

We are made to understand that the diversity of forms requires different grades of perfection. This is quite clear to one who observes the natures of things. He will find, in fact, if he makes a careful consideration, that the diversity of things is accomplished by means of gradations. Indeed, he will find plants above inanimate bodies, and above plants irrational animals, and above these intellectual substances. And among individuals of these types he will find a diversity based on the fact that some are more perfect than others, inasmuch as the highest members of a lower genus seem quite close to the next higher genus; and the converse is also true; thus, immovable animals are like plants.<sup>40</sup>

This seems to fit very well with our observations and intuitions of the animal kingdom.

Thomas's graded account of living beings makes good sense of our belief that chimpanzees and

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<sup>38</sup> *Commentary on de Anima*, Book II, Lesson 5, article 279.

<sup>39</sup> *Ibid.*

<sup>40</sup> *SCG*, Book III, article 97.

humans have a remarkably high degree of similarities, both anatomically and cognitively. It has become clear to us through scientific investigation and ordinary observation that higher-order mammals such as elephants, whales, and apes have emotional and relational capacities that are not dissimilar to our own. This is predicted by Thomas's view of soul and serves to demonstrate his theory's veracity.

A graded theory of value flows naturally from this graded ontology- Thomas himself gives a categorical division of living things that has the potential to greatly inform a Thomistic theory of natural value. Thomas tells us that when one considers the multiplicity of forms, it is clear that each form possesses a varying degree of perfection.<sup>41</sup> Creatures with greater powers (such as humans and higher-order mammals) possess a greater degree of perfection than those with lesser powers (such as plants and insects). For Thomas, beings with a higher degree of perfection have a greater degree of participation in God, as beings ultimately derive their being from Him. Though every creature is a "mirror" of God insofar as they manifest some degree of being, those with the highest degree of perfection best manifest God as the most perfect being.

This graded view of being and value is further manifested in the ancient Greek idea that the less perfect is subservient to the more perfect. According to Aristotle, this hierarchy of perfection mandates that plants are proper for the use of animals, and animals are proper for the use of man. Aristotle writes:

Clearly we must suppose that nature also provides for them in a similar way when grown up, and that plants exist for the sake of animals and the other animals for the good of man, the domestic species both for his service and for his food, and if not all at all events

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<sup>41</sup> Ibid.

most of the wild ones for the sake of his food and of his supplies of other kinds, in order that they may furnish him both with clothing and with other appliances.<sup>42</sup>

Thomas gives us no reason to believe that he disagrees with Aristotle's view of nature. Moreover, that it is proper for greater being to use the lesser is made plain to us by observation; no one doubts that plants are reliant upon inanimate resources for their existence, just as animals are reliant upon plants for their existence. It is not uncommon to describe an ecosystem's health in terms of the realization of these dependencies; thus, a proper function of the ordered whole emerges from this hierarchy subserviency.

### **Being as Intrinsic Good**

Thomas's graded theory of value discussed above stems largely from his conception of being as goodness. Though this chapter is focused primarily on the metaphysics that substantiates Thomas's theory of value, we must now turn to the most basic tenet of his metaethic, namely that goodness is convertible with being. As with Thomas's explication of divine simplicity, perhaps the most precise way to flesh out Thomas's view of being is through the employment of Frege's sense and reference distinction.<sup>43</sup> Regarding Thomas's conception of goodness, Eleonore Stump writes that being and goodness are the same in reference, yet differ in sense.<sup>44</sup> Put another way, being and goodness are *convertible*. This idea stems from his view that desirability is a necessary component of goodness; that is, what is good is that which is properly desired. Stump writes, "If a thing is desirable as a thing of a certain kind, then, on Aquinas's views, it is desirable to the extent to which it is perfect of that kind, i.e., to the extent to which it

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<sup>42</sup> Aristotle, *Politics*, Book I, 1256b, translated by H. Rackham, (Harvard University press, 1932).

<sup>43</sup> Gottlob Frege, "Sense and Reference," *Philosophical Review* 57, no. 3 (May 1938), 209-230.

<sup>44</sup> Eleonore Stump, *Aquinas*, (New York: Routledge, 2003), 62.

is a whole, complete specimen, free from relevant defect.”<sup>45</sup> Thus, what makes something good is that which perfects its nature.<sup>46</sup> As stated in the previous section, for Thomas, a thing is perfect (good according to its form) insofar as it is in being. Thus, as Thomas says, “the perfection of anything is its goodness.”<sup>47,48</sup>

Thomas’s view of being as goodness lays the foundation for a concept notoriously difficult to ground in competing environmental ethics: *intrinsic* value of non-human entities. While there is some very real sense that Aquinas sees animals and the environment as having only instrumental value as they relate to human beings, there is another sense in which all beings have value in themselves. Crudely put, on Thomas’s conception, “it is good to be.” Every being, by virtue of its existence, is a manifestation of goodness. As we noted above, *every* being is necessarily a reflection of God on Thomas’s conception because all entities derive their being from Him. Even rocks are a reflection (albeit, a comparatively dim reflection) of the divine by way of their existence; that is, they reflect God’s nature insofar as they exist just as God exists.

This idea of creation as a reflection of God is further manifested in Thomas’s epistemology. God knows nothing through sense experience or inference; he does not “look at” his creation to know its contents or happening. Instead, Thomas believes that God intimately knows all things only through knowledge of himself.<sup>49</sup> One may wonder how this is possible; how can beings that are distinct from God be known by God only through knowledge of himself?

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<sup>45</sup> Ibid.

<sup>46</sup> *SCG*, Book 1, article 37.

<sup>47</sup> *SCG*, Book I, 38.

<sup>48</sup> It is important to note that “goodness” here ought not be taken in a moral sense, but rather in a metaphysical sense.

<sup>49</sup> *SCG*, Book I, 65.

Thomas responds by positing that God knows other creatures insofar as he is the cause of their being. He writes:

From the fact that God understands Himself primarily and essentially we must posit that He knows in Himself things other than Himself. An effect is adequately known when its cause is known. So “we are said to know each thing when we know the cause.” But God Himself is through His essence the cause of being for other things. Since He has a most full knowledge of His essence, we must posit that God also knows other things.<sup>50</sup>

He continues to say that “the likeness of every effect somehow preexists in its cause; for every agent produces its like. But whatever is in something is in it according to the mode of that in which it is. If, then, God is the cause of certain things, since according to His nature He is intellectual, the likeness of what He causes will exist in Him in an intelligible way.”<sup>51</sup> This view of God’s knowledge necessitates that we participate in the divine nature.<sup>52</sup> By deriving our being and powers from God, creation becomes a mirror of himself, reflecting his attributes and powers analogously through his creatures.

### **Principle of Plenitude in Creation**

If Creation is a mirror of the divine, it is not difficult to see how the multiplicity of creatures is appropriate to manifest the divine. Every species has its own set of properties and powers that make it uniquely suited to fulfill a specific telos. The multiplicity of these attributes constitute a much clearer picture of the divine than a single finite being ever could. This idea that that the world is comprised of a (perhaps maximally) diverse plethora of beings is commonly referred to as the “principle of plenitude.” Though this principle has been a part of western

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<sup>50</sup> *SCG*, Book I, Chapter 49.

<sup>51</sup> *Ibid.*

<sup>52</sup> It should be noted here that Thomas does not mean participation in the Platonic sense, but rather simply that everything that has being derives its being from God; in that sense, all things participate in the divine essence, which itself is being.

philosophy since ancient Greece, various ancient and medieval thinkers have interpreted and applied it differently. The concept first seems to originate with Plato, where he indicates that the universe must contain every possible degree of being in order to be complete.<sup>53</sup> Following Plato, Augustine used the Principle of Plenitude as a solution to the problem of evil. According to Augustine, a universe containing lesser and greater things (i.e., a hierarchy of being) is greater than a universe that only includes greater beings. This means, however, that by necessity, some beings will enjoy a greater and more enjoyable existence than others. Though this sort of world may contain more suffering than a world of only great beings, such a world is still preferable because being is manifested *to a greater degree*. Because being is convertible with goodness on Thomas's account, God must create the world of greater being because God must, by nature, create the greatest world that he can.

Thomas's notion of goodness was greatly influenced by Augustine and he seems to accept the Augustinian conception that being is convertible with goodness; thus, for Aquinas, the best world will be the one that includes the greatest degree of being. Thomas's view of the Principle of Plenitude is slightly different than that of Augustine's, however; where Augustine saw the principle as implying that God must have *necessarily* created the greatest number of kinds of beings possible, Aquinas's version of the principle is not as strong. Instead, Aquinas says only that it is *fitting* that God should create a great plurality of beings, as such a world would most fully manifest his nature.<sup>54</sup>

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<sup>53</sup> Plato, *Timaeus*, 41b-c.

<sup>54</sup> Stratford Caldecott, "Creation as a Call to Holiness," *Communio* 30, no. 1 (Spring 2003): 164.

## Evaluating Thomas's Theory of Value

As argued in the previous chapter, Thomas's notion that being and goodness are referentially identical, differing only in sense, is the foundation for a Thomistic theory of value. Ironically, Thomas is able to accomplish what so many contemporary environmental ethicists try very hard to do, namely, establish some philosophically robust basis for the intrinsic value of non-human (and even non-living) things. This point is perhaps best illustrated through a thought experiment. Imagine a distant planet (so distant, in fact, that no human technology could ever allow us to observe or otherwise come into contact with anyone or anything on its surface) filled with beautiful landscapes, lush vegetation, and cascading waterfalls. Though the planet would be remarkably pleasing to any intelligent observer, no sentient life exists on or anywhere in the vicinity of this planet. Due to its immeasurable distance from any sentient observer, the planet has no potential of ever being observed or cultivated for utilitarian purposes. Let us also suppose that the United States, through some remarkable advancement in astrophysics and military technology, has acquired the power to completely destroy this planet and all of its contents. As tensions begin to rise with some of the US's adversaries, the president wishes to destroy the planet as a demonstration of the United State's military and technological power. Does the USA have a moral obligation to refrain from destroying the planet, or would such an action be morally permissible?

Intuitively, there seems to be something deeply wrong with destroying entire environments and ecosystems, even when they can offer no utility or enjoyment to human persons. The prohibition of such an action seems to consign at least some sort of intrinsic value to lifeless landscapes; if we have ruled out *any* form of instrumental value, our only option is to

say it must have some value in itself. These types of thought experiments and the rationality that accompanies them have served as the springboard for several radically a-traditional ethical approaches. Aldo Leopold's *Land Ethic*, for example, seeks to extend a moral status not only to plants and animals, but to soil, water, and everything else that comprises the "biotic community."<sup>55</sup> Similarly, the deep ecology movement, pioneered largely by Norwegian philosopher Arne Naess, attributes *equal* intrinsic value to every living thing, regardless of consciousness, cognitive capacity, or relational ability.<sup>56</sup>

While these radical ethics attempt to explain why our intuitions may lead us to decide we ought not destroy the planet, they also seem to ignore seemingly obvious differences between mankind's perceived moral status and that of animals. If all creatures have the *same* intrinsic value and moral worth as many of those in the deep ecology movement suppose, it is not at all clear what we ought to do when faced with moral dilemmas that cause us to choose either saving the lives of several animals or saving the life of one human. Suppose you are sitting alone on a secluded beach when you notice that a fishing vessel has abandoned several of their nets that are now drifting toward the shore. As you are watching the nets, you suddenly notice the cries of two young dolphins struggling to free themselves from the snares, desperately gasping for air as they attempt to surface. As you go to assist them, you notice yet another cry coming from the water, this time from a young man who is quickly drowning from a similar entanglement several hundred feet in the distance. Let us suppose you are sure that you only have time to save either the two dolphins or the man, and that any attempt to save either would have a very good chance

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<sup>55</sup> Aldo Leopold, *A Sand County Almanac*, 12.

<sup>56</sup> Arne Naess, "The Shallow and the Deep, Long-Range Ecology Movement." *Inquiry* 16, 95-100.

of success. For most, the choice would be simple; humans are more valuable than animals, and the one man's life is worth more than both of the dolphins. If all life has equal intrinsic value as deep ecology purports, however, the choice is much less clear, and would perhaps err on the side of saving two lives over one. Most of us are willing to admit, I think, that this seems quite wrong. Surely it is the case that humans are more valuable than animals, even the higher-order animals such as marine mammals and primates.

We find an unexpected middle ground in Thomas. He offers us a means of predicating intrinsic value to non-human creatures (and even soil, oceans, and mountains) without asserting that they more or equally as valuable as human beings. Following the Augustinian tradition, being is convertible with goodness for Aquinas. Things exhibit varying degrees of goodness insofar as they reflect the ultimate being, namely God. Even rocks reflect the divine by their mere existence; because "to be" is essentially good, rocks exhibit a characteristic of the divine insofar as they exist. Animals are more valuable than rocks because not only do they reflect the divine in mere existence, but in many other qualities as well. They mirror the divine in their ability to form relationships with their own kind and humans, through their capacity to make choices, and through their ability to think and solve problems. On this model of ontology, humans retain their perceived status as the most valuable of all creatures, as we reflect the divine to the greatest degree by our moral and rational capacities. Man is a rational animal, and rationality is the highest reflection of divinity.

Thus, I think it quite likely that Saint Thomas would tell us that we are not permitted to blow up the planet in question. Though it may be inanimate and thus does not reflect the divine in any sort of relational or cognitive way, its mere *existence* is sufficient for value. It is good to

exist, and thus bringing something out of existence without sufficient reason is irrational and thus evil. This ultimately provides us with an ontology that ascribes intrinsic value to water, landscapes, and soil as Leopold wishes, while at the same time preserving the primacy of the human species in accordance with our intuitions and classical conceptions of morality.

## CHAPTER FOUR: THOMAS ON ANIMALS

### What is an Animal?

As seen in the previous chapter, Thomas places animals above plants and inanimate objects in his hierarchy of being because of their more perfect natures. The closer a being is to resembling the perfection of God, the more perfect its nature is.<sup>57</sup> Because a single finite being could never fully manifest God's perfection, a plurality of being is required as dictated by the principle of plenitude. It is necessary to further explicate his beliefs about what an animal is and what sorts of capacities it possesses before we evaluate his zoological ethic.

To begin, Thomas notes that one way to distinguish between higher and lower animals is in terms of their locomotive power. While Thomas asserts that locomotive power is usually an attribute of animals, there are some lower-order animals that have sensation (which is the primary attribute that distinguishes plants from animals) but not locomotion, such as shellfish.<sup>58</sup> Self-motion is a necessary condition for an ensouled being,<sup>59</sup> and the degree by which an animal can move itself is typically an indication of perfection.<sup>60</sup> The concept of self-motion as a necessary condition for ensouled beings is difficult to interpret in light of Aquinas's conception of instinct, which seems to resemble something of a mechanical process. Thomas writes the following regarding an animal's ability to choose:

Since choice is the taking of one thing in preference to another it must of necessity be in respect of several things that can be chosen. Consequently in those things which are altogether determinate to one there is no place for choice. Now the difference between

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<sup>57</sup> *SCG*, Book III, 97.

<sup>58</sup> *CDA*, Book I, Lectio 3.

<sup>59</sup> Here, "self-motion" does not necessarily denote locomotive power. Thomas considers vegetative powers to be a species of self-motion.

<sup>60</sup> *Ibid.*

the sensitive appetite and the will is that, as stated above, the sensitive appetite is determinate to one particular thing, according to the order of nature; whereas the will, although determinate to one thing in general, viz. the good, according to the order of nature, is nevertheless indeterminate in respect of particular good. Consequently choice belongs properly to the will, and not to the sensitive appetite which is all that irrational animals have. Wherefore irrational animals are not competent to choose.<sup>61</sup>

In the next section, Thomas goes on to compare animals' choices to that of an arrow shot from a bow. Just as the arrow can only move insofar as it is put into motion by the rational agent that moved it, so to are animals put into motion by God such that they move according to their ordained end.<sup>62</sup>

In another place, however, Thomas asserts that animals *voluntarily* move towards their end through a knowledge of their end. Though the rational animal is able to know their end *as an end*, even the irrational animal can know its end, even though its end is not known to the creature *as an end*.<sup>63</sup> Thomas concludes that the animal's imperfect knowledge of its end is sufficient for voluntary action.<sup>64</sup> This seems to contradict his earlier statements that compare animal choices to mechanistic processes. How can Thomas say that animals act voluntarily and simultaneously without choice?

Judith Barad believes that this paradox can be solved by Thomas's distinction between three levels of animal life that range from lower-order animals without a capacity for memory to

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<sup>61</sup> *ST*, First part of the second part, question 13, article 2.

<sup>62</sup> *Ibid.*

<sup>63</sup> *ST*, First part of the second part, question 6, article 2.

<sup>64</sup> *Ibid.*

<sup>65</sup> Judith Barad, "Aquinas's Inconsistency on the Nature and Treatment of Animals," *Between the Species* 4, (1988): 104.

higher-order beings that exhibit captivities for behavioral adaptation through sense experience.<sup>65</sup>

Aquinas writes:

Now in some animals memory arises from the senses, but in others it does not; and for this reason the former are prudent and more capable of being taught than those which are unable to remember. Those which cannot hear sounds are prudent but unable to learn, as the bee and any other similar type of animal there may be. But any which have this sense together with memory are able to learn. Thus other animals live by imagination and memory...<sup>66</sup>

From these distinctions, three classes of animals are established: the lowest animals, those that lack memory and hearing; intermediate animals, being those that possess memory but lack the capacity to hear; and the highest animals, which are those that have the capacity to both hear and remember. It is also worth noting that Aquinas ascribes an *imagination* to higher order animals, which seems to be indicative of vivid consciousness mental capacities. Given these distinctions, Barad believes that when Thomas speaks of animals acting mechanistically, he is referring only to lower order animals; when he refers to animals making voluntary choices based on knowledge of some end, he is referring to higher-order animals. This means that only lower-order animals act *purely* according to instinct, while higher-order animals have complex behavioral patterns that are not uniform within a single species. Barad's interpretation of Aquinas (expanded upon by John Deely<sup>67</sup>) has at least two significant strengths. First, it reconciles some of the apparent contradictions found in Aquinas's treatment of animals, and secondly, it fits very well with Thomas's graded ontology discussed in the previous chapter. If lower-order animals resemble

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<sup>66</sup> Aquinas, *Commentary on Metaphysics*, Book I, Lesson 1, translated by John P. Rowan (Chicago, 1961). Accessed at <http://dhspriority.org/thomas/Metaphysics.htm>.

<sup>67</sup> John Deely, "Animal Intelligence and Concept Formation," *The Thomist* 35, no. 1 (January, 1971): 62.

higher-order plants and higher-order animals resemble rational animals, it is only natural, and perhaps necessary, that there should be some significant divisions within the animal kingdom.

Thomas writes:

It should be noted, however, that not only in the apprehensive powers but also in the appetitive there is something which belongs to the sensitive soul in accordance with its own nature and something else according as it has some slight participation in reason, coming into contact at its highest level of activity with reason at its lowest. There is verified here the statement of Dionysius that the divine wisdom ‘joins the ends of the first things to the beginnings of the second.’<sup>68</sup>

This idea that higher-order animals have some “slight participation in reason” is one of Thomas’s most illuminating insights. Elsewhere, Thomas writes, “The cogitative and memorative powers in man owe their excellence not to that which is proper to the sensitive part; but to a certain affinity and proximity to the universal reason, which, so to speak, overflows into them. Therefore they are not distinct powers, but the same, yet more perfect than in other animals.”<sup>69</sup> From this it follows that the cognitive capacities of mankind and the highest animals are not entirely disparate, with a close resemblance between primitive modes of rationality and higher-order animal intelligence.

It is also worth noting that Thomas ascribes similarity between humans and animals regarding their emotional capacities. For Thomas, emotions in all creatures are a reaction to some fulfillment or frustration of some good (or at least a perceived good).<sup>70</sup> Thomas even goes as far as to say that there is some analogy for the love a husband and wife share in the animal kingdom. In his treatment of marriage in the *Summa Contra Gentiles*, Thomas writes:

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<sup>68</sup> *QDV*, question 25, article 2.

<sup>69</sup> *ST*, First part, Question 78, article 4.

<sup>70</sup> *ST*, Part I, question 81, article 3.

Furthermore, the greater that friendship is, the more solid and long-lasting will it be. Now, there seems to be the greatest friendship between husband and wife, for they are united not only in the act of fleshly union, which produces a certain gentle association even among beasts, but also in the partnership of the whole range of domestic activity.<sup>71</sup>

### **A Thomistic Zoological Epistemology**

We have already established that certain animals possess cognitive and memorative capacities similar to human beings, and now we shall go on to examine animal knowledge in light of Thomas's classical epistemology. While a thorough explication of his detailed system is impossible here, a basic understanding should be sufficient for our purposes. Succinctly put, we obtain knowledge by abstracting the form of an object from a material particular. I come to knowledge of what it means to be a man through abstracting the form of "manness" via observation of particulars. I can make conceptual distinctions between a thing's form and the matter that instantiated it such that I come to knowledge of universals.

It should go without saying that Aquinas would not ascribe any sort of knowledge to plants, as they do not have the capacity to have sense experience and are not conscious. Animals, however, seem to have the capacity to abstract to varying degrees. Upon seeing me, my dog immediately recognizes that I am his caregiver; that is, through experience, my dog has abstracted a shape, smell, appearance, etc. from a particular (myself). This knowledge is not as complete as human knowledge, however, because the dog does not seem to be abstracting universals, but only particular forms. Brad notes, however, that we do have some evidence of animals abstracting general principles through experience of particulars.<sup>72</sup> For example, one

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<sup>71</sup> *SCG*, book III, chapter 123.

<sup>72</sup> Barad, 105.

study rewarded dolphins if and only if a new trick was performed. Eventually, the dolphins discovered that old tricks would not be rewarded and began jumping and contorting themselves in new ways.<sup>73</sup> Thus, the process by which the dolphins discovered that new tricks would be rewarded is the same way basic concepts are formed in humans. Particular instances of reward were observed and general principles were formed based on experience of specific situations. Barad takes this as evidence that the dolphins arrive at some general principle such as “all new tricks will be rewarded.”<sup>74</sup> This is significant because such abstraction, even at this very basic level, means that the dolphin is surpassing purely memorative or instinctual capacities.

Another insightful claim that Thomas makes is that man and animals share largely the same same senses, including what he calls the *estimative* sense, which he considers to be one of the highest faculties of animal cognition.<sup>75</sup> According to Thomas, there are three “grades” of animal cognition. Thomas writes, “The first of these is something which seems to be common to all animals<sup>76</sup>, namely, that they have a certain connatural faculty [i.e., potency, i.e., power] for estimating about sense-perceptible things.”<sup>77</sup> For Thomas, the estimative sense is the ability to judge whether or not an object poses a potential for pleasure or danger *without having experienced the thing in the past*. Thomas writes:

Again we must observe that if an animal were moved by pleasing and disagreeable things only as affecting the sense, there would be no need to suppose that an animal has

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<sup>73</sup> Bernd Wursig, “Dolphins,” in *Animal Societies and Evolution*, (San Francisco: W. H. Freeman and Company, 1981), p. 86.

<sup>74</sup> Barad, 105.

<sup>75</sup> *ST*, Question 78, article 4.

<sup>76</sup> Here, the context seems to indicate that Thomas is only referring to higher order animals (which, earlier in the passage, he refers to as “perfect animals”), as we have already established that some lower order animals are moved only by instinct.

<sup>77</sup> *CPA*, book II, lectio 20.

a power besides the apprehension of those forms which the senses perceive, and in which the animal takes pleasure, or from which it shrinks with horror. But the animal needs to seek or to avoid certain things, not only because they are pleasing or otherwise to the senses, but also on account of other advantages and uses, or disadvantages: just as the sheep runs away when it sees a wolf, not on account of its color or shape, but as a natural enemy: and again a bird gathers together straws, not because they are pleasant to the sense, but because they are useful for building its nest. Animals, therefore, need to perceive such intentions, which the exterior sense does not perceive. And some distinct principle is necessary for this; since the perception of sensible forms comes by an immutation caused by the sensible, which is not the case with the perception of those intentions.<sup>78</sup>

The fact that Thomas attributes an estimative sense to animals has huge implications for their epistemology, as it highlights the similarities between human and animal cognition. First, it means that animals have the ability to judge whether or not a being is beneficial or dangerous to its nature purely through abstracting some particular's form. By implication, the animal has some innate knowledge of some properties of a thing even on experiencing it for the first time (i.e., it's usefulness, predatory potential, relative power, etc.). This estimative sense is clearly manifested in every higher order animal, and the degree to which it is accurate is often astonishing. When my dog was exposed to the sound of fireworks for the first time, she ran and hid because she estimated that they pose some danger to her. To some important degree, she was right in doing so, as close proximity to an exploding firework would do great harm to any animal. She did not know to run and hide because of some past experience with fireworks, but rather because of her properly functioning estimative sense.

It should also be noted that some animals seem to have a *more acute* estimative sense than humans in some circumstances. For example, it is not uncommon to hear reports of dogs who have alerted their owners to potential malicious persons who intended harm before the

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<sup>78</sup> *ST*, Question 78, article 4.

person is aware that such a danger is present. In these instances the dog, having never met the dangerous person before, innately intuit the danger through some external sense. This is significant because, according to Aquinas, these internal senses (estimative, memorial, imaginative, etc.) are cognitive, operating independently of the external senses. Thus, it seems that some animals possess some cognitive faculties *to a greater degree* than humans in some specific cases.

### **Thomas on the Natural Right**

In the *Summa Theologica*, Thomas makes a distinction between two kinds of rights, namely natural and positive rights. Natural rights include things due to a thing by its nature, while positive rights are those that arise out of common agreements or contracts.<sup>79</sup> Thomas says that man is, by nature, commensurate with a woman to beget offspring by her; this is an example of a natural right. For Thomas, “right” is the object of justice.<sup>80</sup> Given this definition, it may come as some surprise that Thomas extends the natural right not only to humans, but also to animals. He writes, “Now it belongs not only to man but also to other animals to apprehend a thing absolutely: wherefore the right which we call natural, is common to us and other animals according to the first kind of commensuration.”<sup>81</sup>

Because the natural right is something due to an object given its nature, a modest interpretation of the above passage is simply to state that animals, like humans, have goods that are appropriate to the kind of beings that they are. All mammals, for example, have a natural “right” to procreate through sexual activity between a male and female. This is a good that

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<sup>79</sup> *ST*, Second part of the second part, question 57, article 2.

<sup>80</sup> *Ibid*, article 1.

<sup>81</sup> *Ibid*, article 3.

humans and non-human animals have in common. We need to be careful here, however, not to interpret this passage using enlightenment conceptions of “rights.” While Aquinas seems to have some conception of “human rights” as we now understand them, Thomas’s notion of “right” and the enlightenment conception of “rights” is clearly distinct.<sup>82</sup> Thomas is not talking about some innate objective entitlement, which is what post-enlightenment Westerners typically think of when using the word “right.” Instead, Thomas just means that there is some basic notion of equity even among animals in the sense that they aim to use only what is required by their nature. Regardless, it is clear that Thomas is saying that animals have natural “rights” according to their natures, just as is the case with mankind.<sup>83</sup> Simply put, animals have things that are commensurate with their natures that result in an achievement of some good if realized.

### **Thomas’s Applied Ethic of Animal Treatment**

As we have seen above, Thomas gives us a very detailed account of the value, cognitive powers, and intrinsic worth of non-human animals. In summary, it has been shown that higher order animals are creatures with a high degree of perfection, “participating” in practical reason in ways not dissimilar to primitive rationality. They are creatures who “voluntarily” act and move themselves based on knowledge of their own end. Thomas’s hierarchy of being places them just beneath humans, indicating a higher degree of intrinsic value than inanimate objects and plants because of degree of perfection and likeness to the divine. Given these things, one may expect that Thomas should come away with a rather high view of animals. Surprisingly, the opposite is

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<sup>82</sup> Anthony J. Lisska, “Human Rights Theory Rooted in the Writings of Thomas Aquinas,” *Diametros* 38 (2013): 134–152.

<sup>83</sup> Barad, 109.

the case. As noted in the first chapter, Thomas himself seems to have a rather low view of animals when it comes to applied ethics. He writes:

We refute the error of those who claim that it is a sin for man to kill brute animals. For animals are ordered to man's use in the natural course of things, according to divine providence. Consequently, man uses them without any injustice, either by killing them or by employing them in any other way.<sup>84</sup>

And later:

Indeed, if any statements are found in Sacred Scripture prohibiting the commission of an act of cruelty against brute animals, for instance, that one should not kill a bird accompanied by her young (Deut. 22:6), this is said either to turn the mind of man away from cruelty which might be used on other men, lest a person through practicing cruelty on brutes might go on to do the same to men; or because an injurious act committed on animals may lead to a temporal loss for some man, either for the agent or for another man.<sup>85</sup>

Thomas repeatedly emphasizes that it is permissible to treat animals only as instruments, without any regard of them as ends of themselves. Why is it that Thomas's ontology and theory of value seem to be opposed to one another? Perhaps the best explanation is that 13th century zoology did not equip Thomas to accurately apply his philosophical system. In other words, Thomas is not advocating animal mistreatment on the basis of faulty philosophy, but rather on incorrect scientific sources.

To begin, some places of Thomas's writings seem to imply *prima facie* that he viewed all animals as merely machines; unconscious organisms that move only according mechanical processes. Many interpreters of Thomas believe that he unequivocally asserts that animals are slaves to instinct, which he seems to take to be an entirely deterministic mechanism. He writes:

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<sup>84</sup> SCG, book III, chapter 112.

<sup>85</sup> Ibid.

Dumb animals and plants are devoid of the life of reason whereby to set themselves in motion; they are moved, as it were by another, by a kind of natural impulse, a sign of which is that they are naturally enslaved and accommodated to the uses of others.<sup>86</sup>

It should be noted that Aquinas is often *wrongly* accused of portraying all animals as automata. Passages like the one above are usually qualified in Thomas's writings. Here, when Thomas refers to "dumb animals," we have good reason to believe that he is not referring to all non-rational animals as some take him to mean, but rather only "lower-order" animals. This interpretation is more sensible for at least three reasons. First, Thomas's explicit use of the adjective "dumb" indicates that he is not referring to every non-human animal; elsewhere when he means *all* non-human animals, he simply uses the term "animals."<sup>87</sup> It should be noted that elsewhere Thomas uses the term "perfect animal" to refer to higher-order animals only, so it makes good sense that he should have a corollary term to denote only lower-order animals. Second, the fact that Aquinas mentions plants and "dumb animals" together indicates he is referring to all animals on the low end of his hierarchy of being, providing further context for interpretation. Thirdly, this interpretation makes more sense of Thomas's statements that perfect animals act voluntarily, which seems to be opposed to his mechanistic understanding of instinct.

Though Aquinas already saw higher-order animals as similar in mode of existence to human beings, modern science has given us more reasons to believe that that the link between humanity and the animal kingdom is greater than Aquinas could have supposed. If any form of evolution is true, it lends credence to the idea that humans and non-human animals have fewer meaningful differences than Aquinas could have justifiably imagined. While some have alleged

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<sup>86</sup> Summa Theologica, The Second Part of the Second Part, Question 64, article 1.

<sup>87</sup> <sup>87</sup> *ST*, Second part of the second part, question 57, article 2, for example.

that evolution is not compatible with Christian theism, many Catholics who embrace the Thomistic tradition have accepted evolution as an accurate scientific theory.<sup>88</sup> Given this major shift from mankind being a creation *totally separate* from all other creatures to being created by God via gradual processes, one should expect a drastic change in how a Thomistic ethic may be applied to animals. Because Aquinas had no reason to doubt that man was an entirely separate creation, it is not difficult to see how he would have believed that mankind is entirely removed from the rest of the animal kingdom.<sup>89</sup> Evolution, however, tells a different story; if evolution is true, it certainly seems reasonable to believe that while animals clearly do not possess the same degree of rational, emotional, and cognitive capacities as humans, they likely possess these attributes in analogous, albeit lesser, forms- an idea that fits particularly nicely with Aquinas's graded ontology.

Similarly, though animal psychology is still an emerging field, some emerging scientific findings may find fault with Thomas's conception of animal freedom. Thomas denies that animals possess any sort of "free will" as humans do; instead, animals are driven *by necessity* to act in accordance with their ends, often relying on instinct to *determine* their actions. Recent studies in animal neuroscience suggests that some higher order mammals such as dolphins, apes, and chimpanzees seem to make decisions such that, on a physiological level, the deliberative process is nearly indistinguishable.<sup>90</sup> It remains a valid question, however, whether or not such

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<sup>88</sup> Pope Francis addressing the Pontifical Academy of Sciences, Vatican City, Oct 27, 2014. <http://www.catholicnewsagency.com/news/francis-inaugurates-bust-of-benedict-emphasizes-stewardship-43494/>

<sup>89</sup> *Summa Theologica*, First Part, Question 91, Article 2.

<sup>90</sup> Bjorn Brembs, "Towards a scientific concept of free will as a biological trait: spontaneous actions and decision-making in invertebrates," *Proceedings of the Royal Society B*, (2011, 278), 930-939.

finding could even theoretically invalidate Thomas's theory of human freedom, as the rational capacity to deliberate persists in an immaterial part of the human person.

## **CHAPTER FIVE: A NATURAL LAW AND VIRTUE APPROACH TO ENVIRONMENTAL ETHICS**

### **Thomas's Moral Philosophy**

So far I have argued that Thomas's graded ontology and metaethic naturally results in a graded perfectionist theory of value that categorizes distinct species in ways that satisfy our intuitions, giving appropriate credence to relevant similarities and obvious differences. Now that we have explicated the relevant features of Thomas's metaphysics, we will now begin analyzing his moral philosophy, ultimately applying it to environmental and zoological issues. Thomas's metaethic combines two distinct moral theories, namely natural law theory and virtue ethics. Both share a co-dependent relationship on Thomas's account. Thomas's metaethic is ultimately grounded in the Augustinian notion that being and goodness share the same referent, differing only in sense.<sup>91</sup> Thus, a thing is good insofar as it exists and actualizes its species-specific potential. The more a thing's nature is perfected, the better it becomes as member of its species. Thus, Thomas's theory of right action can be summarized as follows: An action is good if and only if (and because) it leads to the perfection of a thing's nature, thus bring about some intrinsic good. Conversely, an action is wrong if and only if (and because) it leads to a diminishing of perfection, thus frustrating some intrinsic good.

This theory of right action ultimately becomes Thomas's foundation for his virtue ethic. Because goodness is ultimately achieved through perfection of a being, actions and habits that lead to such perfection are considered good actions. Generally, perfection is achieved via the exercise of species-defining powers; that is, a thing becomes more perfect when it acts in

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<sup>91</sup> *ST*, first part of the first part, question 5, article 1.

accordance with how its nature dictates it should appropriately act. For example, as a rational animal, one of mankind's species defining powers is to act rationally. Thus, one acts to perfect his nature when one acts in accordance with reason. Qualities that demonstrate proper exercise of these species-defining powers are called *virtues*. The four cardinal virtues are human virtues because they are qualities that indicate a proper exercise of reason regarding different facets of human life. For example, Prudence is simply right reason applied to practice.<sup>92</sup> Temperance is right reason applied to passions and desires.<sup>93</sup> Thus, the virtues represent habits that, when applied, bring about a proper exercise of reason, and, in turn, the perfection of one's nature as a rational being.

Similarly, perfection of nature and attainment of teleology is what dictates what Thomas calls the natural law. According to Thomas, there exists first principles (precepts) of both demonstrative and practical reason.<sup>94</sup> These first principles are the foundation on which all other precepts are derived. The laws of logic, for example, are considered the first principles of demonstrative reason because their truth value is self-evident in the sense that it is immediately known to be true provided that one has an adequate understanding of the concepts involved. Practical reason has its own set of precepts that ground propositions included in the natural law. For Thomas, the first principle of practical reason (known as the *synderesis* principle) is that good should be done and pursued, while evil should be avoided.<sup>95</sup> All other precepts contained within the natural law are derived from this principle. Given this precept, if one knows what is

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<sup>92</sup> *ST*, part III, question 47.

<sup>93</sup> *ST*, part III, question 141, article 3.

<sup>94</sup> *ST*, first part of the second part, question 94, article 2.

<sup>95</sup> *Ibid.*

good, one knows what ought to be pursued. Thus, Thomas seeks to explicate the intrinsic goods that are proper our species. Because Thomas believes that the good is that which is ultimately desired, intrinsic goods are discovered via observing inclinations.<sup>96</sup> From this, Thomas deduces four primary intrinsic goods: life, procreation, knowledge, and sociability.<sup>97</sup> All precepts of the natural law either command an action insofar as it leads to the attainment of one of these goods or prohibits an action insofar as it frustrates one of these goods. Thus, murder is a violation of the natural law because it frustrates life, lying frustrates sociability, etc.

### **Natural Law and Animal Treatment**

Now that we have given a brief exposition of Thomas's metaethic, we may now analyze how this system should be accurately applied to the issues at hand. Both the natural law and virtue components of Thomas's ethic have ramifications for environmental and animal treatment; the former will be treated in this section, and the latter in the next.

As stated above, Thomas's natural law theory states that goods can be deduced by observing what beings are inclined toward and what contributes to a thing's proper function. As Thomas says, a precept of the natural law is born of something that is due.<sup>98</sup> Additionally, a thing can be due in two senses, namely for itself or for the sake of another. Thomas goes on to say that in *every genus*, that which is due for its own sake ought to take precedence over what is due for the sake of another.<sup>99</sup> This is pertinent when one considers that Thomas is ultimately deriving obligation from teleology (i.e., a thing's being due). As Thomas' says, "Since a precept of law is

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<sup>96</sup> Ibid, article 4.

<sup>97</sup> Ibid.

<sup>98</sup> *ST*, II-II, Q44, A1.

<sup>99</sup> Ibid.

binding, it is about something which must be done: and, that a thing must be done, arises from the necessity of some end.”<sup>100</sup> Thus, if precepts of law are formed via ends, and ends that are proper to a being itself should take precedence over use for the sake by another, it seems to follow that an animal’s ends should take priority over human use. For example, though an elephant’s tusks have a variety of human uses, the elephant itself uses those tusks for its own ends (fighting, digging, etc.).<sup>101</sup> Because Thomas asserts that ends proper to a thing itself take precedence over use of another, the natural law seems to prohibit such activities. As Barad says, “And insofar as animals use their capacities as they are due, these capacities can be matters of precept.”<sup>102</sup> This reasoning comports well with Thomas’s admission that animals participate in the natural right, as established in the previous chapter.

Using this framework, it is fairly easy to deduce what sorts of actions are prohibited by an animal’s participation in the natural law. Thomas readily admits that we share many of our intrinsic goods with animals. He writes, “There is in man an inclination to things that pertain to him more specially, according to that nature which he has in common with other animals: and in virtue of this inclination, those things are said to belong to the natural law, ‘which nature has taught to all animals.’”<sup>103</sup> Life, procreation, and socialization all seem to be goods that we share with higher order animals. The good of knowledge is even partially shared by animals in some sense, as evidenced by their inclination to educate their young.<sup>104</sup> Thus, generally speaking, any

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<sup>100</sup> *ST*, I-II, Q99.

<sup>101</sup> Barad, 108.

<sup>102</sup> *Ibid.*

<sup>103</sup> *ST*, I-II, Q94, A2.

<sup>104</sup> *Ibid.*

action that prematurely frustrates the life of an animal, deprives it of socialization, or causes it some other undue suffering should be prohibited by the natural law.

Though Thomas did not draw these conclusions, it seems that a consistent application of his metaethic and ontology requires him to do so. Thus, Barad suggests that there are two ways that Thomists can apply Thomas's thought consistently: one can either agree with Thomas that animals should be treated merely as instruments, which would require a substantial rework of his ontology, metaphysics, and metaethic; or one could grant that we have real moral obligations to animals because of the type of being that they are, which would require only a reconsideration of peripheral scientific issues.<sup>105</sup> Clearly, the latter option will be most attractive to Thomists who wish to stay true to the pillars of his thought; it seems that Thomas was just wrong in the *application* of his ethic, and that the system itself offers a robust and intellectually satisfying means of grounding a responsible animal treatment ethic.

Given what has been said above, a few important qualifications must now be made. It should be noted that this application of natural theory does not necessarily entail that we ought not frustrate *any* good of *any* higher order animal; it does, however, mean that animals ought not be used in a manner inconsistent with the animal's purposes. Some may be inclined to think that this sort of Thomistic ethic necessarily entails vegetarianism, or at the very least a prohibition of killing *higher-order* mammals for food. I do not believe that this necessarily follows. It seems plausible (and indeed likely on Thomas's account) that some animals are *purposed* to be food for other animals, both human and non-human. This should be expected given Thomas's assertion that the less perfect beings exist for the sake of the more perfect ones. Given the nature of the

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<sup>105</sup> Barad, 109.

created order, it is beyond doubt that one of the intended purposes of the ringed seal is to provide sustenance for the polar bear. If the seals or some other similar marine mammal did not exist, the polar bear would, of course, cease to exist as well. The seal's existence (or something similar to the seal) is necessary for the polar bear's existence. While the seal certainly has basic goods proper to itself as a species, a more general good is still achieved in the ending of its life for food.

Thomas addresses this issue directly in the *Summa Theologica*. He says, "in the parts of the universe also every creature exists for its own proper act and perfection, and the less noble for the nobler, as those creatures that are less noble than man exist for the sake of man, whilst each and every creature exists for the perfection of the entire universe."<sup>106</sup> From this, it is clear that Thomas postulates at least two ends for each being: an end that is proper to the thing itself that directly contributes to the perfection of its own being, and an end that serves to perfect a greater whole. Thomas indicates that while a thing *first* exists for its own proper good, the thing's contribution (via proper function) to the good of the whole is a necessary component of the universes's fulfillment of its own teleology.<sup>107</sup>

This leads us to the distinction of two corresponding types of goods: the first, which we will call private goods, are goods that are specific to individual beings and species. All animals and plants have private goods, i.e., the things that lead to the perfection of their natures. If it is undesirable that these goods should be frustrated, how is it that the killing of animals for food could be permissible? The answer lies, in part, in the second kind of good, which we will call a

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<sup>106</sup> *ST I*, Q65, A2.

<sup>107</sup> *Ibid*.

common good. Common goods are states of affairs that indirectly contribute to the attainment of private goods and can sometimes serve to justify the frustration of private goods.<sup>108</sup> Consider, for example, what happens when deer populations are left unchecked by natural predators or human hunters. Often populations will grow beyond what the natural environment can accommodate, causing a shortage of food for the deer to eat. In serious cases, this can lead to the death of nearly the entire population of deer in a given area. Thus, while the private good of individual deer is to not be killed by a predator, it serves the common good that at least some are. Thus, even though the natural end of the deer is being frustrated, the common good (a general state of affairs that pertains to all deer) is better served if some private goods are frustrated. From this account, two things can be learned: first, it seems that, at least in some instances, it is morally permissible to frustrate certain private goods for the benefit of the common good. We must remember that while each organism has its own end, on the Thomistic account, the ecosystems, environments, and the universe as a whole are ordered to have their own ends. Some of these ends may conflict with private ends, and it seems that the common good should prevail over private goods, as the former is often a necessary condition for the latter. Thus, at the very least, we are permitted to kill animals when it serves the common good. We are strictly prohibited, however, to kill animals for food (or other utilitarian purposes) if it frustrates *both* the private and common good.

Additionally, there is good reason to believe that some higher-order mammals are intended to serve as sustenance for the human race. It is not immoral to kill a chicken for food because it is likely that this is one of the purposes for which chickens were intended. This, however, does not give us license to treat chickens in any way we see fit. Using chickens in a

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<sup>108</sup> This distinction between common and private goods can be found in Thomas's discussion of his political theory in *ST II-II*, Q42, A2.

way *not* intended by God (which would certainly include inflicting unnecessary pain or needlessly depriving them of a basic good) is prohibited under our Thomistic ethic. Thus, while we have an ethic that permits killing an animal for food, it has little tolerance for any instance of animal cruelty. Though there is nothing inherently wrong with eating meat itself, we ought not support industries that needlessly deprive animals of their basic goods, as such behavior is unequivocally unethical given the moral system we are formulating here.

It should also be noted here that we have grounds for believing that some animals are *not* intended to be used as food, and we are thus prohibited from using them as such. For example, many of us in the west find China's Yulin dog meat festival to be morally abhorrent. As of July 2015, over 1.5 million people had signed an online petition calling for an end to the annual celebration that slaughters about 10,000 dogs for their meat.<sup>109</sup><sup>110</sup> Why is it the case that while most of us have no qualms about millions of cows, chickens, and pigs being killed daily for their meat, we find this particular festival appalling? The ethic we have developed here is well equipped to answer this question. It is beyond dispute that dogs have remarkable relational capacities that make them well suited for human companionship. They are highly perceptive of human vocal and physical cues to the point that service dogs can sense an impending medical emergency before many humans. Our dogs have a tendency to calm us down, cheer us up, and provide companionship better than most all other species. For Thomas, a being's teleology is deduced by discovering what it "is good for" and what it is inclined towards. While cows and

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<sup>109</sup> "Please Shut Down the Yulin Dog Meat Festival in GuangXi China," petition submitted to chang.org, Accessed February 2016. <https://www.change.org/p/mr-chen-wu-yulin-governor-please-shut-down-the-yulin-dog-meat-festival-in-guangxi-china>

<sup>110</sup> "China Yulin dog meat festival under way despite outrage," BBC News, accessed November 2016, <http://www.bbc.com/news/world-asia-china-33220235>.

chickens may be good for food, it seems quite clear that other animals are much better suited for other purposes. We find the Yulin dog meat festival repulsive not because there is some inherent evil to eating meat, but because we think that dogs aren't intended for that purpose. We know they are good for companionship because of their acute relational capacities, and we find the frustration of that end, particularly because of the emotional benefit it is to us, repulsive. This is just one of the many ways an application of Thomas's teleological ethic demonstrates the theory's veracity and explanatory power.

### **Environmental Virtues**

Applying virtue semantics and concepts to environmental ethics has gained significant popularity over the past 10-20 years. While virtue language has been occasionally used since environmental ethics formed as a discipline in the 1970s, the first prominent full-fledged virtue approach to environmental ethics was Louke Van Wensveen's book *Dirty Virtues* released in 2000. More recently, Ronald Sandler's 2007 book *Character and Environment* has been hugely influential in contemporary discussions. While a detailed account of contemporary environmental virtue ethics cannot be supplied here, I hope to provide a brief account of the project's primary goals and then explore how Thomas's metaethic can meaningfully interact with the current discussion. According to Ronald Sandler, there are three fundamental approaches to environmental virtue ethics: the virtue theory approach, the environmental exemplar approach, and the extensionist approach.<sup>111</sup> These categories will structure our discussion as we examine our own Thomistic approach to environmental virtues.

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<sup>111</sup> Ronald L. Sandler, *Character and Environment*, (New York: Columbia University Press, 2007), 108.

*Environmental Exemplar Approach*- The environmental exemplar approach aims to identify environmental virtues based on firmly-held beliefs about who we consider to be virtuous with respect to their actions and attitudes toward the environment. While figures such as Aldo Leopold and Henry David Thoreau may come to mind for contemporary environmental ethicists, it is appropriate here to consider a lesser known environmental hero who happens to be a near-contemporary of Aquinas's, namely Saint Francis of Assisi. While Western Christianity is often cited as the principal cause of many of our environmental crisis, Saint Francis stands alone as a beacon of overwhelming Christian kindness toward animals, care for the environment, and respect for all facets of creation. His influence is perhaps best evidenced by the fact that Pope John Paul II declared Francis the Patron Saint of Ecology in 1979.<sup>112</sup> Francis was widely known for his care and compassion of animals, calling each creature "brother" or "sister" because of our shared origin as a creation of our heavenly father.<sup>113</sup> Thomas of Celano writes of Francis's great compassion even towards lower animals and insects: "Even towards little worms he glowed with exceeding love... Wherefore he used to pick them up in the way and put them in a safe place, that they might not be crushed by the feet of passers by."<sup>114</sup> If any person in the history of Christendom could be said to exhibit environmental virtues, without doubt, it would be Francis.

Is it possible, then, to abstract environmental virtues from a study of heroes such as Saint Francis? While I believe the answer is ultimately yes, it seems that a study of environmental exemplars alone is insufficient for determining an exhaustive list of virtues or adjudicating

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<sup>112</sup> John Paul II, "Inter Sanctos Proclaiming Saint Francis of Assisi as Patron of Ecology," November 29, 1979.

<sup>113</sup> Linzey, Andrew and Ara Barsam. "Saint Francis of Assisi." In *Fifty Key Thinkers on the Environment*, edited by Joy A. Palmer, 22-26. New York: Routledge, 2001, 24.

<sup>114</sup> Thomas of Celano, *The First Life of Saint Francis*, Chapter 29. Accessed at <http://www.indiana.edu/~dmdhist/francis.htm>.

between competing and conflicting accounts of virtue. Sandler also notes that some exemplars, while possessing an overall attitude toward the environment that is praiseworthy, may have distorted or narrow views in particularly areas that could cause us to mistake environmental vice for virtue (or vice versa).<sup>115</sup> Thus, while the environmental exemplar approach can be used to guide our discussion of virtues, ultimately another principle will be necessary.

*Extensionist Approach-* The extensionist approach to environmental ethics attempts to apply traditional virtues and principals to environmental affairs. This attempt is perhaps initially more attractive given our Thomistic project, as Aquinas clearly delineates the four cardinal and three theological virtues, of which all other virtues are derivative. The extensionist approach merely asks how one ought to apply prudence, temperance, hope, love, etc. to other non-human animals and the environment.

It is worth noting, I think, that some of Aquinas's virtues do seem to extend easily and without modification to environmental/zoological matters. Thomas's notion of beneficence, for example, extends to non-human beings without difficulty. Aquinas even writes that "beneficence is an effect of love in so far as love moves the superior to watch over the inferior."<sup>116</sup> He also indicates that beneficence and charity are primarily a state of mind or attitude, emphasizing that "charity binds us, though not actually doing good to someone, to be prepared in mind to do good to anyone if we have time to spare."<sup>117</sup>

It seems quite reasonable to believe this disposition toward beneficence will naturally extend beyond treatment of humans to beneficence toward the non-human world. This is

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<sup>115</sup> Sandler, 10.

<sup>116</sup> *ST* II-II, question 31, article 2.

<sup>117</sup> *Ibid*

evidenced in Thomas's fear that the mistreatment of animals results in inclinations toward mistreating one's fellow man; if violence toward animals disposes one to violence against mankind, it seems, at least *prima facie*, that beneficence towards animals should spur one to beneficence towards mankind. This is a significant insight; even if one does not accept that it is intrinsically wrong to mistreat animals, Thomas gives us a sufficient reason to refrain from doing so; abusing animals, though not wrong by nature of the act itself, will incline you towards evil. One who abuses animals will not function properly according to Thomas. This principle has recently been clearly demonstrated empirically; according to the American Humane Association, pets were abused in 88% of households in which child abuse was present.<sup>118</sup> These sorts of statistics serve to validate Thomas's principle that virtuous behavior must be extended to animals, as their mistreatment cultivates the same sorts of vices as the mistreatment of other humans.

Sandler points out that translating such virtues from the context of interpersonal relationships to the context of the non-human (and even non-living) world is often difficult because in order for the virtues in question to remain virtues, the considerations that justify them as virtues must be present in both contexts.<sup>119</sup> For example, it seems fairly clear that any attempt to extend Aquinas's virtue of charity to non-living ecosystems will not be successful. Thomas even addresses such attempts directly in the *Summa Theologica*, stating that irrational entities cannot be the subject of charity because charity is a kind of friendship that involves a reciprocal

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<sup>118</sup> DeViney, E., Dickert, J., & Lockwood, R., "The care of pets within child abusing families," In R. Lockwood & F.R. Ascione, (Eds.), *Cruelty to animals and interpersonal violence*. West Lafayette, IN: Purdue University Press. (Reprinted from *International Journal for the Study of Animal Problems*, 4, (1983) 321-329.)

<sup>119</sup> Sandler, 11.

relationship and fellowship, something that is not possible with non-living beings.<sup>120</sup> This being said, if we desire to derive any environmental virtue by extension of more generic virtues, we must proceed with caution; while there may well be instances in which the relevant considerations are present in both traditional and environmental contexts as is the case with beneficence and animals, there will often be obstacles to a straightforward extension of *every* virtue.

*Virtue Theory Approach-* The virtue theory approach seeks to develop a new set of environmental virtues from an appeal to common principles that serve as what we will call “virtue-making properties,” which are essentially features of actions that contribute to some environmental good. In other words, this approach seeks to identify environmentally good states of affairs and makes virtues of the actions that contribute to the attainment of such goods. Thomas offers a very straightforward virtue-making property in his natural law theory, i.e., a virtue being a habit that inclines one towards the perfection of his nature.

While this approach may initially seem antithetical to the Thomistic project because it tries to establish *new* virtues based on perceived goods, it seems some synthesis is possible. While Thomas rigidly defines the four cardinal (prudence, justice, fortitude, temperance) and theological (faith, hope, charity) virtues, it is clear that more specific habits will arise through the exercise of these virtues. For example, it is not difficult to see how some conception of conservation as a virtue can be drawn from temperance. Much of our environmental crisis stems from an *overuse* of natural resources, i.e., an *excess*. Because temperance is an exercise of right reason regarding human passions and consumption, it seems that the notion of conservation may

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<sup>120</sup> *Summa Theologica*, Second Part of the Second Part, question 25, article 3.

be already entailed in the virtue of temperance. Thus, we arrive at a “new” environmental virtue in the sense that some specific habit is explicated based on its effect on the environment, however the newly explicated virtue is in some sense already contained in the cardinal virtues. This seems to be the most desirable Thomistic approach to environmental virtue ethics. When extension is possible, Thomas’s virtues should just be straightforwardly extended to the environment. When extension is not possible or unclear in application, a virtue theory approach should be employed, qualified by the principle that every derived virtue should be rooted in one of the cardinal or theological virtues.

### **Anthropocentrism and the Environment**

Now that we have seen how Thomas’s natural law theory and virtue ethic can be applied to contemporary environmental ethics, it is beneficial to remark on one of the perceived negative features of Thomas’s overarching moral system, namely his commitment to anthropocentrism. As previously noted, Thomas’s metaethic is undeniably and essentially anthropocentric; anthropocentrism is blatantly assumed in all of his treatments on ethics. This seems to follow necessarily from his hierarchical ontology that denotes human beings as the most valuable material organism. While anthropocentrism has been vilified in much of the contemporary literature regarding environmental ethics, one need not abandon it in order to spur one towards environmental responsibility. In his papal encyclical *Laudato Si’*, Pope Francis makes a distinction between “tyrannical anthropocentrism” and anthropocentrism properly understood.<sup>121</sup> The former is rightly vilified, as this form of anthropocentrism acknowledges human use the *only*

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<sup>121</sup> Pope Francis, *Laudato Si’: On Care for Our Common Home* [Encyclical], May 24, 2015.

end of all material things, including animals and the environment. Accepting the Thomistic tradition, Francis writes:

In our time, the Church does not simply state that other creatures are completely subordinated to the good of human beings, as if they have no worth in themselves and can be treated as we wish. The German bishops have taught that, where other creatures are concerned, “we can speak of the priority of being over that of being useful”. The Catechism clearly and forcefully criticizes a distorted anthropocentrism: “Each creature possesses its own particular goodness and perfection... Each of the various creatures, willed in its own being, reflects in its own way a ray of God’s infinite wisdom and goodness. Man must therefore respect the particular goodness of every creature, to avoid any disordered use of things”.<sup>122</sup>

Thomas’s influence on Pope Francis’s is clearly and beautifully manifested in this excerpt. It incorporates Thomas’s notion of being as an intrinsic good, his assertion that all beings are a reflection of the divine, and that all actions must be in accordance with “ordered” (ordained, teleological) use of things. This is the sort of anthropocentrism that should be embraced in a Thomistic environmental ethic. Though mankind maintains his role as penultimate and most valuable physical thing, he is not the *only* valuable thing. One can even meaningfully maintain that all lower beings “exist for the sake of man” as Thomas did without succumbing to a tyrannical anthropocentrism. For example, consider a mother and father who buys a puppy for their dog-loving child. While the parents are ultimately getting the puppy for the sake of the child rather than for the sake of the dog, this does not mean that the parents ignore the goods and needs proper to the dog. While the ultimate end of keeping dogs is for human happiness, the dogs themselves have natural ends that we are obligated to bring about. Thus, though the dog may be owned *for the sake of* humans, their own ends and value need not (and should not) be forfeited.

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<sup>122</sup> Ibid, 51.

## The Thomistic Ethic Applied

Now that we have seen how a Thomistic ethic can be situated in an environmentally responsible framework, I will conclude by demonstrating the theory's functionality via its application to contemporary environmental and animal treatment issues.

*Conservation of Endangered Species-* A Thomist ought to be concerned about the possible extinction of endangered species and work to prevent such a realization. Most species that are critically endangered are (1) endangered solely due to human exploitation and (2) are higher-order mammals.<sup>123</sup> We have established that these animals have an ontological status only relatively slightly less than humans and thus possess a higher degree of intrinsic value than most other created beings because of their more perfect natures. We, in turn, are obligated to prevent the frustration of their basic goods if possible. Moreover, the principle of plenitude dictates that a wide array of beings is necessary to fittingly reflect the divine essence. Every instance of extinction permanently removes a being from the spectrum, diminishing the reflection of the divine in our world. By causing extinctions, humans are snuffing out rays of the divine light that will never be recovered, leading to mitigated revelation of God's goodness.

*Climate Change-* This Thomistic ethic provides numerous reasons to be concerned about human-induced global warming. If the current scientific consensus regarding the seriousness of climate change is accurate, we ought to do everything in our power to prevent it in order to preserve things that serve basic human goods. By failing to reduce climate change, we are indirectly frustrating the common goods that are derivative of a properly functioning ecosystem.

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<sup>123</sup> "Species Directory," World Wildlife Foundation, accessed November 2015. [https://www.worldwildlife.org/species/directory?direction=desc&sort=extinction\\_status](https://www.worldwildlife.org/species/directory?direction=desc&sort=extinction_status).

Moreover, Climate change will likely be responsible for the extinction of a wide array of animal species and ecosystems, destroying entities that have intrinsic, instrumental, and aesthetic value.

*Animal captivity for human amusement-* There has recently been a great deal of controversy surrounding the ethics of captive animals in circuses, marine amusement parks, and zoos. Such behavior is possibly permitted on a Thomistic ethic if done properly. Keeping animals captive for amusement is permitted if none of the animal's basic goods are being frustrated. If an animal has access to socialization, a good quality of life, and reproduction, there is nothing wrong in a Thomistic sense with keeping animals in captivity. The deprivation of any of these goods caused by captivity is prohibited without sufficient reason (it is permissible to sterilize captive animals if doing so achieves a common good, i.e. preventing overpopulation, for reasons outlined in the previous chapter).

*Hunting for Sport-* In July 2015, the killing of Cecil the lion sparked outrage across the West, leading to condemnations from several prominent political figures in Europe and the US. The lion was slain by a big game hunter who had been traveling to Zimbabwe to hunt wildlife for sport. Our Thomistic ethic is well suited explain such strong sentiments; hunting for sport is not permitted on this ethic unless it is for the attainment of the common good (to prevent overpopulation, for example). One is not permitted to to end a life or frustrate some intrinsic good of an animal without sufficient reason, as was the case with Cecil. The ending of the life of a higher-order animals for amusement irrationally frustrates goodness and would be condemned on the ethic we have outlined here.

## Conclusion

As we have seen, while Thomas himself advocated some ideas that are antagonistic to the environmental project, one need not discard his philosophical system in order to preserve environmental responsibility. On the contrary, Thomas's graded ontology provides the groundwork for a theory of value that puts mankind as the penultimate creation while still maintaining various degrees of intrinsic value in the animal kingdom. Thomas's conception of the principle of plenitude provides a theological reason for wildlife conservation and emphasizes the importance of non-human species, as they themselves are a part of God's revelation. Thomas's explication of the nature animals and his theory of soul highlights the similarities we share with animals in a manner that spurs us toward environmental responsibility. Finally, Thomistic virtue ethics can and should be easily extended to the non-human world, such that our treatment of animals will instill virtues and foster kindness toward our fellow man. Thus, while Thomas may have made troubling remarks about mankind's relationship to the non-human world, these errors are merely indicative of a limited scientific understanding of the animal world rather than a fatal error in his philosophical system.

To conclude, I shall summarize by concisely summarizing my argument premise by premise:

1. According to Thomas, there exists a graded plurality of beings with each species being similar in mode of existence to the species above and below it.
2. All beings have some degree of intrinsic value by virtue of Thomas's conception that being and goodness are convertible; the degree to which a thing is valued corresponds to the degree to which its nature is perfected.
3. Thomas's metaphysic necessitates that all beings have their own natural ends and goods.

4. Therefore, a Thomistic ethic mandates that we ought to only use animals and the environment in accordance with their own ends, being careful not to unduly frustrate any good; the synderesis principle mandates that goods are to be strived for and evils are to be avoided.
5. Environmental virtues are obtained through cultivating habits that achieve relevant goods and frustrate evils.
6. The proper understanding and application of this ethic results in an environmentally and zoologically responsible system.

In the final analysis, the pillars of Thomistic thought (a perfectionist theory of value, Aristotelian metaphysics, virtue-oriented approach to ethics, and a commitment to Christian theism) contribute to a robust and compelling environmental ethic, satisfying all of the sufficiency conditions set forth in chapter one. Though Thomas himself may not have realized it, he provides us a means of seeing the non-human world as rays of divine light, spurring us to value the non-human world as God's creation and our common home. As is written in the Book of Wisdom, "For from the greatness and the beauty of created things their original author, by analogy, is seen."<sup>124</sup>

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<sup>124</sup> Wis. 13:5.

## Bibliography

- Alexander of Aphrodisias. *Supplement to On the Soul*. Translated by R. W. Sharples. London: Duckworth, 2004.
- Aquinas, Thomas. *Commentary on Aristotle's De Anima*. Translated by Kenelm Foster and Sylvester Humphries. New Haven: Yale University Press, 1951.
- \_\_\_\_\_. *Commentary on the Posterior Analytics of Aristotle*. Translated by Fabian R. Larcher. Accessed at <http://dhspriority.org/thomas/PostAnalytica.htm#220>.
- \_\_\_\_\_. *Commentary on Aristotle's Metaphysics*. Translated by John P. Rowan. Chicago, 1961. Accessed at <http://dhspriority.org/thomas/Metaphysics.htm>.
- \_\_\_\_\_. *Quaestiones Disputatae De Anima*. Translated by John Patrick Rowan. London: B. Herder Book Co., 1949.
- \_\_\_\_\_. *Quaestio Disputata de Spiritualibus Creaturis*. Translated by Colin Robert Goodwin. Melbourne: Australian Catholic University, 2002.
- \_\_\_\_\_. *Questiones Disputatae de Veritate*. Translated by Robert W. Schmidt. Henry Regnery Company, 1954. Accessed at <http://dhspriority.org/thomas/QDdeVer.htm>.
- \_\_\_\_\_. *Summa Contra Gentiles*. Edited by Joseph Kenny. New York: Hannover House, 1955. <http://dhspriority.org/thomas/ContraGentiles.htm>
- \_\_\_\_\_. *Summa Theologica*. Edited for New Advent by Kevin Knight. Translated by Fathers of the English Dominican Province. <http://www.newadvent.org/summa/>
- Aristotle. *Politics*. Translated by H. Rackham. Harvard University Press, 1932.
- Barad, Judith. "Aquinas's Inconsistency on the Nature and Treatment of Animals." *Between the Species* 4, (1988): 102-111.
- Benozi, Francisco. "Thomas Aquinas and Environmental Ethics: A Reconsideration of Providence and Salvation." *Journal of Religion* 85, no. 3 (July 2005): 446-476.
- Brembs, Bjorn. "Towards a scientific concept of free will as a biological trait: spontaneous actions and decision-making in invertebrates." *Proceedings of the Royal Society B*, 278 (2011): 930-939.
- Brown, Christopher. Review of *Ecological Ethics and the Human Soul: Aquinas, Whitehead, and the Metaphysics of Value*, authored by Francisco J. Benzoni. *Notre Dame Philosophical*

- Reviews* (July 30, 2008). Accessed July 17, 2015. <https://ndpr.nd.edu/news/23664-ecological-ethics-and-the-human-soul-aquinas-whitehead-and-the-metaphysics-of-value/>
- Brown, Montague. "Natural Law and the Environment." *Proceedings of the American Catholic Philosophical Association* 63, no. 14 (1990): 221-234.
- Caldecott, Startford. "Creation as a Call to Holiness." *Communio* 30, no. 1 (Spring 2003): 161-167.
- Callicott, Baird. *Beyond the Land Ethic: More Essays in Environmental Philosophy*. New York: State University of New York Press, 1999.
- \_\_\_\_\_. *In Defense of the Land Ethic: Essays in Environmental Philosophy*. New York: State University of New York Press, 1989.
- Change.org. Shut Down the Yulin Dog Meat Festival in GuangXi China. Accessed July 19, 2015.
- Davidson, Scott A. "A Natural Law Based Environmental Ethic." *Ethics and the Environment* 14, no. 1 (Spring, 2009): 1-13.
- Deely, John. "Animal Intelligence and Concept Formation." *The Thomist* 35, no. 1 (January, 1971): 61-68.
- DeViney, E., Dickert, J., & Lockwood, R. "The care of pets within child abusing families." In R. Lockwood & F.R. Ascione, (Eds.), *Cruelty to animals and interpersonal violence*. West Lafayette, IN: Purdue University Press. (Reprinted from *International Journal for the Study of Animal Problems*, 4, (1983) 321-329.
- Drum, Peter. "Aquinas and the Moral Status of Animals." *American Catholic Philosophical Quarterly* 66, no. 4 (1992): 283-488.
- Dugan, Andrew. "Conservative Republicans Alone on Global Warming's Timing." Gallup, (April 22, 2015).
- Francis, Pope. *Laudato Si': On Care for Our Common Home* [Encyclical]. May 24, 2015.
- Fredericks, Rachel. "Courage as an Environmental Virtue." *Environmental Ethics* 36, no. 3 (Fall 2014): 339-355.
- Frege, Gottlob. "Sense and Reference." *Philosophical Review* 57, no. 3 (May 1938): 209-230.
- Halligan, Patrick. "The Environmental Policy of Saint Thomas Aquinas." *Environmental Law* 19, no. 4 (June 1989): 767-778.

- Hannis, Mike. "The Virtues of Acknowledged Ecological Dependence: Sustainability, Autonomy and Human Flourishing." *Environmental Values* 24, no. 2 (April 2015): 145-164.
- Hill, Thomas E. "Ideals of Human Excellence and Preserving Natural Environments." *Environmental Ethics* 5, (Fall 1983): 211-224.
- Jenkins, Willis. "Biodiversity and Salvation: Thomistic Roots for Environmental Ethics." *The Journal of Religion* 83, no. 3 (July 2003): 401-420.
- \_\_\_\_\_. *Ecologies of Grace: Environmental Ethics and Christian Theology*. New York: Oxford University Press, 2008.
- Krebs, Angelika. *Ethics of Nature (Perspectives in Analytic Philosophy, Book 22)*. Berlin: De Gruyter, 1999.
- Leopold, Aldo. *A Sand County Almanac*. New York: Oxford University Press, 1949.
- Linzey, Andrew and Ara Barsam. "Saint Francis of Assisi." In *Fifty Key Thinkers on the Environment*, edited by Joy A. Palmer, 22-26. New York: Routledge, 2001.
- \_\_\_\_\_. *Animal Rights: A Christian Assessment of Man's Treatment of Animals*. New York: SCM Press, 1976.
- Lisska, Anthony J. "Human Rights Theory Rooted in the Writings of Thomas Aquinas." *Diametros* 38 (2013): 134-152.
- Macdonald, George. *Annals of a Quiet Neighborhood*. New York: Harper & Bros, 1895. Chapter 28. Accessed February 10, 2016.  
<http://www.gutenberg.org/files/5773/5773-h/5773-h.htm>.
- McLaughlin, Ryan Patrick. *Christian Theology and the Status of Animals*. London: Palgrave Macmillan, 2014.
- Miller, Daniel K. *Animal Ethics and Theology: The Lens of the Good Samaritan*. New York: Routledge, 2012.
- Mizzoni, John. "Environmental Ethics: A Catholic View." *Environmental Ethics* 36, no. 4 (Winter 2014): 405-419.
- Naess, Arne. "The Shallow, Deep, and Long-Range Ecology Movement: A Summary." *Inquiry* 16, no. 1 (August 2008): 95-100.

- Newport, Frank and Andrew Dugan. "College-Educated Republicans Most Skeptical of Global Warming." Gallup, (March 26, 2015).
- Paul, John II. "Inter Sanctos Proclaiming Saint Francis of Assisi as Patron of Ecology." November 29, 1979.
- Painter, Corinne. "Aristotle and the Moral Status of Animals." *Philosophy in the Contemporary World* 13, no. 2 (2006): 45-57.
- Pope Francis. Addressing the Pontifical Academy of Sciences. Vatican City, Oct 27, 2014.
- Plato. *Timaeus*. Translated by W. R. M. Lamb. Cambridge, MA: Harvard University Press, 1925.
- Rolston, Holmes. *Conserving Natural Value*. New York: Columbia University Press, 1994.
- \_\_\_\_\_. *Philosophy Gone Wild*. New York: Prometheus Books, 1989.
- Russel, Patrick. "Environmental Virtue Ethics and Thinking with the Body." *Dialogue: Journal of Phi Sigma Tau* 54 no. 2-3 (April 2012): 210-217.
- Sandler, Ronald L. *Character and Environment: A Virtue-Oriented Approach to Environmental Ethics*. New York: Columbia University Press, 2007.
- Schaefer, James. *Theological Foundations for Environmental Ethics: Reconstructing Patristic and Medieval Concepts*. Washington D.C.: Georgetown University Press, 2009.
- Singer, Peter. "Ethics and the New Animal Liberation Movement." In *In Defense of Animals*, edited by Peter Singer, 1-10. New York: Basil Blackwell, 1985.
- Strutt, Joseph. *The Sports and Pastimes of the People of England*. London, Methuen & co., 1903. Accessed at <http://www.sacred-texts.com/neu/eng/spe/index.htm>.
- Stump, Eleonore. *Aquinas*. New York: Routledge, 2003.
- Teske, Roland. "Augustine's Theory of Soul." In *Cambridge Companion to Augustine*, eds. Eleonore Stump and Norman Kretzmann. New York: Cambridge University Press, 2001.
- Thomas of Celano. *The First Life of Saint Francis*. Accessed July 23, 2015. <http://www.indiana.edu/~dmdhist/francis.htm>
- Timmons, Mark. *Moral Theory*. Maryland: Rowman & Littlefield Publishers, 2013.
- Traer, Robert. *Doing Environmental Ethics*. Boulder, CO: Westview Press, 2009.

- World Wildlife Foundation. "Species Directory." Accessed November 2015.  
[https://www.worldwildlife.org/species/directory?direction=desc&sort=extinction\\_status](https://www.worldwildlife.org/species/directory?direction=desc&sort=extinction_status).
- White, Lynn. "Historical Routes of our Ecological Crisis." *Science* 155, no. 3767 (March 1967):  
1203-1207.