

ABSTRACT

“I never meant to write atheistically”:
Reevaluating Religion in the Writings of Charles Darwin

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This thesis will argue that although much has been written about Charles Darwin, his religion has often been misrepresented or oversimplified into a linear trend of secularization leading to atheism. Instead, I will argue here that the best classification for Charles Darwin's religion is as a theistic agnostic who experienced times of belief as well as times of doubt throughout his entire life. This work will focus primarily on Darwin's private correspondence and after arguing Darwin was a theistic agnostic, will examine how this theistic agnosticism affected his thoughts on the subjects of slavery, design in nature, and aesthetic beauty.

"I never meant to write atheistically":
Reevaluating Religion in the Writings of Charles Darwin

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TABLE OF CONTENTS

ACKNOWLEDGMENTS	v
DEDICATION	vii
CHAPTER ONE	1
Introduction: “The more I think the more bewildered I become”: The Bewildered Muddle of Charles Darwin’s Theistic Agnosticism	30
CHAPTER TWO	31
“Great God how I shd like to see that greatest curse on Earth Slavery abolished”: Charles Darwin as Abolitionist, Humanitarian, and Theistic Agnostic.....	55
CHAPTER THREE	56
“My mind is in simple muddle about ‘designed laws’ & ‘undesigned consequences’”: Charles Darwin and the Insufferable Problem of Design in Nature	83
CHAPTER FOUR.....	84
“I never saw anything so beautiful”: Sublime Wonder and Serene Appreciation, Charles Darwin on Beauty and Aestheticism	112
CHAPTER FIVE	113
Conclusion	116
BIBLIOGRAPHY	117

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DEDICATION

To my parents for their constant love and support. Without you I would not be the person and scholar I am today and this thesis would not be completed. All the love and thanks.

CHAPTER ONE

Introduction: “The More I Think the More Bewildered I Become”: The Bewildered Muddle of Charles Darwin’s Theistic Agnosticism

Charles Darwin is often thought of as the father of secularized science, the epitome of the crisis between modern science and religion. Timothy Larsen’s book *Crisis of Doubt*, for example, opens by noting that most discussions of religion in books on the nineteenth century crisis of faith, consist of emphasizing the overwhelming loss of faith and secularization occurring throughout the century. Larsen goes on to claim that the fastest way to access these discussions is to look up Charles Darwin.¹ Thomas Dixon makes a similar observation in his discussion of America’s specific issues in coming to terms with Darwinism. He argues that despite most Victorians being able to accept Darwinism within the nineteenth century, modern opinion polls continually find that almost half the population denies Darwin’s theory of natural selection, assuming that it negates any room for religious beliefs.² These are just two examples of a larger trend in which Darwin has been misremembered. Neither he, nor his seminal book *On the Origin of Species* are in danger of being forgotten, or of diminishing in importance, even over one hundred and fifty years after publication. However, Darwin’s religious beliefs and his relation to religion are in danger of being misremembered and oversimplified, despite ample sources and ample scholarship on the subject.

¹ Timothy Larsen, *Crisis of Doubt*, (New York: Oxford University Press, 2006): 4.

² Thomas Dixon, “America’s Difficulty with Darwin,” published in *History Today* (2009). Accessed through the Darwin Correspondence Project.

Darwin was a prolific writer, publishing a number of works before *Origins* as well as after, writing and publishing through to the last years of his life. His *Autobiography*, written later in his life, provides an even further glimpse into Darwin's scientific ideas, as well as his thoughts on religion and family. Perhaps of even greater importance, however, is the astounding number of private papers, consisting mostly of correspondence, left us by Darwin. The Darwin Correspondence Project, sponsored by Darwin's alma mater the University of Cambridge, can account for 15,000 letters exchanged by Darwin. As more letters are found, this number will only continue to increase. Of significance is that both letters sent to and received by Darwin are available, allowing historians to track changes in Darwin's own religious beliefs, as well as the response to his evolutionary ideas by those closest to him. Correspondence played a key role in the professional and personal lives of naturalists in the nineteenth century, allowing them to exchange ideas, connect to other experts, expand scientific collections and maintain relationships.³ These private writings provide an invaluable look into Darwin's thoughts on a great number of themes, not the least of which being his own thoughts on his personal struggles with religion, as well as the role of religion and belief in regards to his scientific findings in *Origins* especially.

As such, Darwin's private correspondence constitutes the majority of this thesis' research, though Darwin's published works as well as other published primary sources from the period will be included when relevant. As stated above, much has been written on Darwin. But a considerable amount of this scholarship is concerned with the reception

³ For more on the importance of correspondence in the lives of Darwin and other scientists like Asa Gray see the work of historian Janet Browne, specifically "Asa Gray and Charles Darwin: Corresponding Naturalists," *Harvard Papers in Botany* 15, no. 2 (2010): 210 and *Charles Darwin: The Power of Place*, (Princeton, New Jersey: Princeton University Press, 2002), 10-13.

of Darwin's ideas, the controversies surrounding them, and the effect his theory of natural selection especially had on Victorian Christianity as a whole. Scholarship concerning Darwin's own religious struggles are fewer in number, thus I will examine the work of Maurice Mandelbaum, who put forth in 1958 the thesis of the linear model of Darwin's belief moving from orthodox theism to complete atheism, as well as the work of historians like Frank Burch Brown, who note fluctuations within the model between theism and agnosticism throughout Darwin's life. This thesis will be neither revisionist in arguing Darwin's theory of natural selection had no negative effect on religion, nor will it follow the conflict model which eliminates any contextual space for those who followed the middle ground of accepting much of Darwin's theory while rejecting other aspects in order to maintain their religion. Even Darwin himself did not follow the conflict model in assuming that his science would inevitably destroy religion.⁴ What this work will attempt is to nuance and problematize both models, especially the conflict model which leaves no room for Darwin's own theism. In this way, Darwin's complex religious beliefs can be recovered and taken seriously. He was a man often preoccupied with religious issues, and who ultimately did not completely succumb to secularization, but retained much of his theism.

This introduction will establish that these beliefs are best classified as theistic agnosticism, varying throughout Darwin's entire life between times of firm theism, to times of doubt and agnostic skepticism. Some explanation of definitions and terminology

⁴ For discussions on religion and a belief in natural selection as completely contradictory beliefs, or the "conflict model" of understanding Darwin's theory and religion, see Janet Browne, *Charles Darwin: The Power of Place*, 176-177, Janet Browne, *Darwin's Origin of Species*, (New York: Grove Press, 2006): 139-153, David Quammen, *The Reluctant Mr. Darwin*, (New York, London: W.W. Norton & Company, 2006): 200-201, James G. Lennox, "The Darwin/Gray Correspondence 1857-1869: An Intelligent Discussion about Chance and Design," *Perspectives on Science* 18, no. 4 (2010): 475.

is necessary here. I use theism and agnosticism for multiple reasons, but specifically because these are the terms Darwin assigned himself in his *Autobiography*, and moreover because Darwin specifically avoided using or associating himself with the terms deist and atheist. I also use theism and agnosticism against the arguments of scholars, cited and discussed below, who maintain Darwin was an atheist despite his refusal of the term. Throughout this thesis, theism will be used to designate a belief in a deity as opposed to atheism, and specifically one deity as opposed to multiple deities. Darwin maintained a belief in one Creator God working above the secondary natural laws of the world.⁵ Separate from Deism, Darwin also maintained a belief that this God, though not specifically interfering, continued to oversee and care about man and the world.

Though very similar to theism in that its basic definition is belief in a Deity, Deism is distinguished from theism in the nineteenth century because of the attachment of the denial of revealed religion to this basic belief.⁶ Moreover, Deism emphasized natural religion over revealed religion and argues that all knowledge of religion must be based in rationalism. Though Darwin certainly valued rational thought, and denied special Divine interference, he was not so negatively assured as Deists were in that he did not deny completely the possibility or existence of revealed religion and in that he continued to struggle with his religious beliefs and doubts, rather than resigning himself to the argument that what can be known is only what is seen.⁷ During times of belief then

⁵ *Oxford English Dictionary Online*, s.v. “theism,” accessed June 2015, Oxford University Press, <http://www.oed.com/view/Entry/200296?rskey=eEe2G6&result=1> (accessed June 09, 2015).

⁶ Frank Burch Brown, “The Evolution of Darwin’s Theism,” *Journal of the History of Biology* 19, no.1 (Spring 1986): 5.

⁷ *Oxford English Dictionary Online*, s.v. “deism,” accessed June 2015, Oxford University Press, <http://www.oed.com/view/Entry/49205> (accessed June 09, 2015).

Darwin is best designated as a theist not a Deist, and during times of doubt he is best designated as an agnostic, one who believes the immaterial and the existence or nature of God cannot ever be fully or truly known, as opposed to an atheist who expressly denies the existence of a Deity.⁸

Of importance is the emphasis that these fluctuations continued throughout Darwin's life and did not end when he established and published his theory of natural selection. As such, this thesis takes the work set forth by Frank Burch Brown, as well as that of James Moore, both discussed in detail below, and expands upon it. Moore, for example, implies Darwin lost his faith at the time of his father's death in 1851, and Brown is unclear how much theism can be traced throughout Darwin's later life. The three chapters following the introduction do just that. Chapter Two consists of an examination of Darwin's beliefs regarding slavery, particularly Brazilian slavery which he witnessed as a young, traveling naturalist as well as during the American Civil War, which he tracked faithfully via news publications and private correspondence with Asa Gray. Gray, an American botanist at Harvard and a Presbyterian, was essential in disseminating Darwin's theory of natural selection in America and was also a close personal friend with whom Darwin often spoke at length about his theory as well as his religious struggles.

This first full chapter, entitled, "'Great God how I shd like to see that greatest curse on Earth Slavery abolished'; Charles Darwin as Abolitionist, Humanitarian, and Theistic Agnostic," discusses the ways in which Darwin's beliefs regarding the morality

⁸ *Oxford English Dictionary Online*, s.v. "agnostic," accessed June 2015, Oxford University Press, <http://www.oed.com/view/Entry/4073?redirectedFrom=agnostic> (accessed June 09, 2015).

of slavery affected his religion.⁹ The third chapter, closely related to the fourth in theme, discusses Darwin's struggle with the issue of design in nature and design as evidence of a Creator. In this third chapter, titled "'My mind is in simple muddle about 'designed laws' & 'undesigned consequences': Charles Darwin and the Insufferable Problem of Design,'" Darwin's thoughts on design shared with Asa Gray through private correspondence as well as his distinction between particular and general design will be emphasized.¹⁰ The final full chapter, "'I never saw anything so beautiful': Sublime Wonder and Serene Appreciation, Darwin on Beauty and Aesthetic Pleasure," is tied closely to Darwin's thoughts on design in that it illuminates his beliefs on beauty in nature and aesthetic pleasure.¹¹ The general belief that Darwin lost all appreciation for beauty and aesthetic pleasure as an older man will be somewhat challenged here, and the implications for this challenge on the progression of Darwin's religious beliefs will also be included. In relation, this chapter's sources allow for the best refutation of Darwin as Deist or pantheist. Similarly, they support the overall intention of the thesis that the best religious term for describing Darwin throughout his life is theistic agnostic. It is to the foundation of Darwin as such that this work now turns.

Despite the amount of scholarship on Darwin, his religious beliefs continue to be misrepresented, misremembered and oversimplified. This is not surprising, considering Darwin's own complicated, and often seemingly contradicting, religious thoughts. What is clear is that a simple designation of "theist," "atheist," or "agnostic," are insufficient

⁹ Charles Darwin, letter to Asa Gray, June 5, 1861, *Darwin Correspondence Database* entry no. 3176, <http://www.darwinproject.ac.uk/> (accessed August 12, 2014). *Darwin Correspondence Database* hereafter cited as *DCD*.

¹⁰ Charles Darwin, letter to Asa Gray, July 3, 1860, *DCD* entry no. 2855.

¹¹ Charles Darwin, letter to Asa Gray, September 5, 1867, *DCD* entry no. 2136.

descriptions of Darwin's religious beliefs. A linear description of Darwin's ever waning religious beliefs fading into growing agnosticism or undogmatic atheism throughout his life, held by some historians, is equally misleading. An examination of the extensive writings Darwin left on the subject of his own religious struggles, especially those surrounding the publishing of the controversial *Origins* containing his theory of natural selection, will demonstrate that Darwin's religious beliefs were more complicated and complex than previously supposed, and that despite his scientific findings, he continued to grapple with religious struggles throughout his life, at times content to call himself a theist, at others an agnostic. Evaluating the role of religion within the *Origins*, as well as the ability of other evolutionists, like Asa Gray, to remain devoutly Christian while agreeing with Darwin's evolutionary theories, will also portray that the relationship between science and religion is not as clearly antagonistic as assumed.

Misconceptions surrounding the contents of Darwin's *On the Origin of Species* often lead to greater misconceptions surrounding Darwin's personal religious beliefs, as the common assumption remains that his views on evolution through natural selection failed to leave any room for a Creator or for religion. As stated above, Thomas Dixon argues that religious believers had largely come to terms with Darwin's theories by the end of the nineteenth century. Perhaps simplifying religious struggles with the theory of evolution, Dixon does correctly note that issues regarding the reconciliation of science and religion have reached a greater intensity in modern times compared to the years of the latter nineteenth century, after the reception of Darwin's *Origins*, largely attributing this to failings within educational systems to portray Darwin fully and fairly.¹²

¹² Thomas Dixon, "America's Difficulty with Darwin," n.p.

An examination of the religious implications of Darwin's theory of natural selection then will illuminate the fact that Darwin was not irreligious, nor was he attempting to remove religion from the world through his scientific findings. Though Darwin became comparatively less devout in the latter years of his life, as will be shown, he was hardly irreligious when he defined the theory of natural selection and published it in the *Origins*, and this shows in the contents of the work. First it is necessary to state clearly that evolution and natural selection are distinct topics. Natural selection was the mechanism by which evolution occurred, according to Darwin, yet *Origins*, in its first edition at least, never once uses the word "evolution."¹³ The closest reference to evolution occurs in the final sentence of the 1859 edition when Darwin states:

There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.¹⁴

Though he would speculate on the topic later, at the time of the publication of *Origins*, Darwin was not speculating on the evolution of man from primordial ooze, thereby eliminating any role for a Divine Creator. Instead he argued that over time species will and indeed had changed through the independent mechanism of natural selection, rather than through any direct influence and independent creation of a Deity. As David Quammen argues so clearly, this is *not* evolution versus God, as "the *existence* of God- any sort of god, personal or abstract, immanent or distant- is not what Darwin's

¹³ An important distinction in that the word "evolution" holds modern connotations regarding the origins of man and creationism not discussed in *Origins* by Darwin (though the implications were certainly present). David Quammen, 182.

¹⁴ Charles Darwin, *On the origins of species by means of natural selection, or the preservation of favoured races in the struggle for life*, ed. 1st, (London: John Murray, 1859): ii.

evolutionary theory challenges.”¹⁵ Again, this is not to naively attempt a revisionist history in which Darwin and his theory of natural selection pose no threat to theist and religious beliefs. Darwin’s theory called into question the divinity of man and man’s soul, placing him on the same level as other animals in the no longer immutable Great Chain of Beings and presented a view of nature ruled by struggle and chance. What is important to remember when discussing Darwin’s theory of natural selection, is that all of this did not disallow room for God in the creation of man and the world.

Dixon notes that God is in the opening pages of *Origins* as well as at the close. *Origins* opens with a quote from Anglican clergyman William Whewell stating, “But with regard to the material world, we can at least go so far as this—we can perceive that events are brought about not by insulated interpositions of Divine power, exerted in each particular case, but by the establishment of general laws.”¹⁶ Whewell argued against independent or special creation of each and every species throughout time, arguing that God does not act through individual miracles. Darwin agreed, positing rather that nature was governed by independent and constant natural laws, including the mechanism of natural selection. In 1859 when *Origins* was published, Darwin was content to call himself a theist, and this is evident in the mapping out of his scientific theory. These fixed laws governed nature, not the interference of Divine Will. The Creator, or God, was still the ultimate source of these laws, thus leaving room for religion and science to be reconciled in the minds of many, including Darwin for much of his life and especially Asa Gray. Moreover, this Creator continued to oversee the affairs of the human world

¹⁵ David Quammen, *The Reluctant Mr. Darwin*, 209.

¹⁶ William Whewell from *Bridgewater Treatise*, quoted in Charles Darwin, *On the Origin of Species*, 1859, ii.

with interest and benevolence, even though He did not directly interfere. In fact, Darwin saw this model of creation and the ordering of the world as more dignified to God than one which required His direct interference constantly, claiming in the final pages of

Origins:

To my mind it accords better with what we know of the laws impressed on matter by the Creator, that the production and extinction of the past and present inhabitants of the world should have been due to secondary causes, like those determining the birth and death of the individual.¹⁷

In this way Darwin attempted to reconcile in his mind the issues of suffering and evil in the world, attributing these to secondary causes and not to the capricious nature and action of the Creator.

A more balanced view of Darwin's most famous scientific theory is necessary when discussing his religious beliefs and his relation to the conflict between religion and science, one which takes account of the religious struggles presented by the implications of Darwin's theory while also noting its ability to leave room for the role of a Creator in evolution. Moreover, arguing that Darwin included these references to a Creator simply as a way to appease religious readers and potential religious opposition is to fail to take Darwin's religious beliefs seriously. It is clear that Darwin hardly meant to answer questions of faith in his scientific work, nor was he attempting to refute religious beliefs. Rather, he sought to empirically demonstrate his theory of the transmutation of species over time. Darwin's own muddled thoughts on religion and the religious implications of this theory will clarify and support this fact.

One of the leading perspectives of Darwin's religious beliefs attempts to neatly explain them in a linear model in which Darwin moves from a theist, albeit an

¹⁷ Charles Darwin, *On the origins of species*, 1859, 488.

unorthodox one, to an agnostic, bordering on atheism. While it is true that Darwin was less theistic at his death than he had been in his early years as a naturalist on board the *Beagle*, oversimplifying this religious development into a gradual decline of faith and growing secularization that hardly affected Darwin is both misleading and false. Such misrepresentations of Darwin's loss of religion being part of an overwhelming trend of secularization in the nineteenth century contribute to Darwin continuing to be misremembered. For example, Michael Ruse, a leading scholar on Darwin and the Darwinian Revolution, implies that studies of Darwin's religious beliefs are fruitless and unnecessary when he claims "Darwin simply cared less about religion than many other men."¹⁸ The prevalence of the topic of religion within Darwin's personal papers, which have become more readily available in recent years, as well as the religious implications he notes in his scientific works, clearly refute such statements. This availability of sources alone justifies further study of Darwin's religious views, but the necessity to examine them in a way that is critical of oversimplified models of thought proves even more substantial in light of comments like that of Ruse quoted above.

Ruse is not alone in this belief either. In a recent article, scholar Matthew Day reiterates the previous arguments of David Kohn when he classifies Darwin's autobiographical reflections, particularly when "religion was the subject of conversation," as "willful misrepresentation."¹⁹ He goes on to agree with Kohn that "if

¹⁸ Michael Ruse, *The Darwinian Revolution* (Chicago: University of Chicago Press, 1979): 182. Ruse's more recent work is concerned with the ability to reconcile the theory of evolution with Christianity, and therefore takes Darwin's religious beliefs into account. Still he falls into the category of those historians following the thesis set forth by Maurice Mandelbaum in 1958 in her article in the *Journal of Historical Ideas* entitled "Darwin's Religious Views."

¹⁹ Matthew Day, "Godless Savages and Superstitious Dogs: Charles Darwin, Imperial Ethnography, and the Problem of Human Uniqueness," *Journal of the History of Ideas* 69, no. 1 (Jan., 2008): 49-70. See 55-56 especially.

we take seriously Darwin's vigilant habits of self-editing and the often contradicting philosophical impulses that are discernable in his writing—it might be the case that we cannot 'trust anything he wrote on metaphysical subjects.'"²⁰ Kohn does make the distinction in this argument between Darwin's private thoughts and published works. Still, his implication that Darwin's thoughts on religion cannot be trusted, were contradictory, or were merely for the benefit of his reading audience or family is dangerously misleading. In allowing for the fluctuations between theism and agnosticism, which Darwin held in tandem, and though with struggle, *without* contradiction, the research of this thesis presents a fuller and more accurate portrayal of Darwin's complex religious beliefs.

Furthermore, though additional scholarship on Darwin, such as the continued work of Janet Browne and James Moore, does take Darwin's religious struggles seriously, the topic does not usually encompass the focus of their work, providing an additional reason to extensively examine its presence in the private writings of Darwin. Also, though they do not go so far as to say religion did not matter to or concern Darwin after the discovery of his theory, in only examining Darwin's religious beliefs in passing, they present the implication of Darwin experiencing linear devolution of theism finally into non-belief, following the argument of Maurice Mandelbaum discussed below. For example, in her most recent biography, Janet Browne in a brief study of Darwin's discussion on design with Asa Gray writes that this discussion meant Darwin "ended up a nonbeliever," contradicting herself on the next page in noting Darwin was content to call

²⁰ Matthew Day, "Godless Savages," 55.

himself a theist at the time.²¹ She then asserts Darwin was in truth “profoundly conditioned to become the author of a doctrine inimical to religion.”²² No further discussion of Darwin’s religious beliefs is given here, leaving the implication Darwin lost all theism by publication of his theory in 1859, and certainly after discussing his doubts with Gray in the mid-1860s.

James Moore is much more supportive of my thesis in that he argues against the conflict model, or conflict myth as he terms it, between science and religion and between Darwin and religion particularly. He also notes, though only in passing, Darwin’s “lingering religious beliefs” and “residual theism.”²³ Still, since his focus is often biographical and not strictly on the topic of Darwin’s religion, he does not fully examine the complexities of Darwin’s fluctuations between theism and agnosticism. Rather, he references the same linear devolution, noting in passing like Browne that “his father’s and Annie’s death,” in 1848 and 1851 respectively, made “him shake off the last shreds” of his faith.²⁴ In an earlier article to that just quoted, Moore devotes himself completely to the topic Darwin’s faith.²⁵ But in focusing on Darwin’s loss of orthodox Christianity

²¹ Janet Browne, *Charles Darwin: The Power of Place*, 176-177.

²² *Ibid.*, 177.

²³ James Moore, “Charles Darwin,” in *The History of Science and Religion in the Western Tradition: An Encyclopedia*, ed. Gary B. Ferngren, Edward J. Larsen, Darrel W. Amundsen, and Anne-Marie E. Nakhla, (Baltimore: The Johns Hopkins University Press, 2002), 208.

²⁴ James Moore, “Charles Darwin,” 216.

²⁵ James Moore, “Of Love and Death: Why Darwin ‘gave up Christianity,’” in *History, Humanity, and Evolution: Essays for John C. Greene*, ed. James Moore, (New York: Cambridge University Press, 1989): 195-229. I don’t mean to overemphasize my disagreement with Moore here. He is sympathetic to Darwin retaining religious beliefs later in life, and he agrees with my argument that the issue is not a simple one, but rather complex and changing. Still, I would argue he overemphasized the dates of 1848 and 1851 as hard lines for changes in Darwin’s religion, and I would also add that my lens of theistic agnostic expands upon what he has merely hinted at elsewhere.

specifically, and in arguing this faded completely after 1851 without discussing any religious beliefs Darwin maintained afterwards, other than passing nods to his “residual theism,” Moore again leaves room for a further, more detailed analysis of the ebb and flow of Darwin’s theism and agnosticism as opposed to only a linear devolution of his Christianity.

Maurice Mandelbaum’s thesis regarding the linear devolution of Darwin’s personal religion, set forth in her 1958 article “Darwin’s Religious Views,” claims that over time Darwin moved from orthodox Theist to Agnostic or undogmatic Atheist (she uses the terms interchangeably, an incorrect oversimplification of Darwin’s beliefs and of the differences between agnosticism and atheism).²⁶ Despite being slightly dated it is largely representative of views of Darwin’s religious beliefs maintained by historians today. Following this model for example, Darwin scholar Sylvan Schweber claims Darwin ceased to be a theist and was “certainly an agnostic (and possibly an atheist)” by 1839, and scholars Howard Gruber, Michael Ghiselin, and Edward Manier agree with Schweber that it is impossible to call Darwin a theist passed the publication of his *Origin of Species* in 1859.²⁷

Mandelbaum’s thesis maintains that in his youth and whilst on board the *Beagle*, Darwin remained “thoroughly orthodox,” then growing less theistic throughout his academic life until the latter years of his life, by which all theism was lost and was

²⁶ Maurice Mandelbaum, “Darwin’s Religious Views,” *Journal of the History of Ideas* 19, no. 3 (June 1958): 363-378.

²⁷ Frank Burch Brown, “The Evolution of Darwin’s Theism,” 14-16. Sylvan S. Schweber, “The Origin of the *Origin* Revisited,” *Journal of the History of Biology* 10 (1977): 233. Howard E. Gruber in Howard E. Gruber and Paul H. Barrett, *Darwin on Man*, (New York: Dutton, 1974): 176.

replaced instead by an undogmatic atheism.²⁸ In some ways this argument is correct as few would argue that Darwin's faith grew stronger throughout his life as he continued to grapple with the religious struggles and doubts brought on his scientific studies and personal sufferings. The decline Mandelbaum notes is evident. However, as Frank Burch Brown notes in his article "The Evolution of Darwin's Theism," it fails to take vacillations and complexities into account, perpetuating an oversimplified view of Darwin which often assumes religion no longer concerned Darwin after he began work on his scientific theories.²⁹ Again, it is the goal of this thesis to take Brown's extremely useful model of what he calls "agnostic theism" and expand off of it by arguing that theistic agnostic is the most constructive and representative term when explaining Darwin's religious views, emphasizing especially the vacillations between times of theism and times of agnosticism that Darwin experienced throughout his entire life. Brown goes on to argue, "studies have erred in underestimating the degree to which a human being – especially a Victorian – can hold apparently incompatible beliefs and can vacillate time and again between them."³⁰

Mandelbaum and other scholars who subscribe to the neat, linear model of Darwin's "loss of faith" are unsuccessful in acknowledging these ambiguities throughout Darwin's religious life. Darwin's religious concerns were pervasive, complex, and characterized by "ambivalence at every stage of [their] evolution."³¹ Frank Burch

²⁸ Ibid., 363.

²⁹ Frank Burch Brown, "The Evolution of Darwin's Theism," *Journal of the History of Biology* 19, no.1 (Spring 1986): 1-45.

³⁰ Frank Burch Brown, "The Evolution of Darwin's Theism," 2.

³¹ Ibid., 2.

Brown's model of unorthodox theism to a "largely 'agnostic' theism" allows for these complexities, unlike Mandelbaum's orthodox theist to atheist model, which treats complexities as anomalies.³² Tracing Darwin's religious beliefs through his private writings, namely the unedited version of his *Autobiography* and the large number of letters composed by Darwin on the subject, while at the same time maintaining an emphasis on complexity and ambiguity allows the full scope of Darwin's religious beliefs to emerge.

Scholars like Mandelbaum maintain that Darwin began his scientific life, when a naturalist on board the *Beagle*, as a thoroughly orthodox man, being an avowed member of the Church of England and having studied to be a prospective clergyman at Cambridge. However, in Darwin's section of his *Autobiography* relating to the years 1828-1831, in which he was still considering a position as a "country clergyman," religious doubts had already manifested.³³ Darwin writes that he did not "in the least doubt the strict and literal truth of every word in the Bible" and that "whilst on board the *Beagle* I was quite orthodox, and I remember being heartily laughed at by several by the officers (though themselves orthodox) for quoting the Bible as an unanswerable authority on some point of morality." But he also notes that he "had scruples about declaring [his] belief in all the dogmas of the Church of England."³⁴ These doubts seem out of place if Darwin was truly orthodox at this point in his life, though he certainly was more theistic than he would be in his later years.

³² Ibid., 2. See Mandelbaum, 376.

³³ Charles Darwin, *The Autobiography of Charles Darwin, 1809-1882*, ed. Nora Barlow (New York: Harcourt, Brace, 1958): 57, 85. Hereafter *Autobiography*.

³⁴ Charles Darwin, *Autobiography*, 57.

As Brown illuminates, it is easily forgotten by historians “how unlikely it is that Darwin’s orthodoxy per se was deeply and securely rooted.”³⁵ Darwin’s hesitancy to become a clergyman should not be overlooked, and considering his family background may not come as much of a surprise. Charles’s grandfather Erasmus, for example, was an evolutionary deist, and his father Robert described his place within the Church of England as nominal at best. His wishes for Charles to join the clergy seem to be largely due to pragmatism, wanting to secure a reputable vocation for his son, as Darwin notes he was “vehement against my turning an idle sporting man, which then seemed my probable destination.”³⁶ In the end, Darwin had to “persuade” himself that the creeds of the Church “must be” fully accepted, implying he already grappled with doubts early on, further complicating the idea of Darwin as a satisfied and thoroughly orthodox man in his early life.³⁷ A letter from Charles’s older sister Caroline implies Darwin’s doubt as well when she writes,

dear Charles I hope you read the bible & not only because you think it wrong not to read it, but with the wish of learning there what is necessary to feel & do to go to heaven after you die. I am sure I gain more by praying over a few verses than by reading simply— many chapters— I suppose you do not feel prepared yet to take the sacrament—³⁸

Darwin replied, “thank you for your very nice and kind letter...I have tried to follow your advice about the Bible, what part of the Bible do you like best? I like the Gospels,”

³⁵ Frank Burch Brown, “The Evolution of Darwin’s Theism,” 5.

³⁶ Charles Darwin, *Autobiography*, 56.

³⁷ *Ibid.*, 57. See also Frank Burch Brown, “The Evolution of Darwin’s Theism,” 7.

³⁸ Caroline Sarah Darwin, letter to Charles Darwin, March 22, 1826, *Darwin Correspondence Database* entry no. 28, <http://www.darwinproject.ac.uk/> (accessed November 29, 2013). Darwin Correspondence Database hereafter cited as DCD.

failing to discuss his current opinions on taking the sacrament.³⁹ It is clear Darwin had given his family reason to doubt his orthodoxy as early as 1826 while studying at Cambridge, and these doubts which present themselves in Darwin's *Autobiography*. Similarly though, such doubts should not be overstated, since as late as the publication of *Origins* in 1859 Darwin maintained much of his theism. What should be emphasized is that Darwin's religious beliefs were complicated, complex and often fluctuated back and forth between times of theism and times of doubt even in his early life, proving a description of Darwin's beliefs as moving from orthodox to atheistic misleading. This pattern regarding how he considered and expressed his own beliefs continued throughout his life. Often unclear himself on where he stood religiously, Darwin was preoccupied with religion early on, refuting claims that he simply did not care for religion or failed to consider the topic until his later life. Furthermore, these early writings already prove that Darwin's religion is more complex than assumed.

Just as belief failed to overcome doubt in Darwin's early life, so too did doubt fail to overcome all belief. Some scholars assert that the process from theism to agnosticism occurred and was virtually complete while Darwin was still a naturalist on board the *Beagle*.⁴⁰ Such a thesis ignores what Darwin himself said of his religion at the time, focusing only on statements of doubt or assumptions that his refusal of a position with the clergy meant he was already irreligious. Within his *Autobiography*, Darwin commented that he had recorded in his journal "whilst standing in the midst of the grandeur of a

³⁹ Charles Darwin, letter to C.S. Darwin, April 8, 1826, *DCD* entry no. 30.

⁴⁰ Gruber argues Darwin was a committed secular scientist at the end of his voyage and Schweber has argued by 1839 Darwin was fully agnostic and possibly atheist. Sylvan S. Schweber, "The Origin of the *Origin* Revisited," 233. Howard E. Gruber in Howard E. Gruber and Paul H. Barrett, *Darwin on Man*, 176. See Frank Burch Brown, "The Evolution of Darwin's Theism," 9.

Brazilian forest, ‘it is not possible to give an adequate idea of the higher feelings of wonder, admiration, and devotion which fill and elevate the mind.’”⁴¹ Though Darwin would question the empirical validity of such inward (and thus not provable) sentiments later, during those years on the *Beagle*, 1831-1836, they gave rise to the “firm conviction of the existence of God, and of the immortality of the soul.”⁴²

This is not to assume, however, that Darwin’s scientific developments during this journey played no role in his religious evolution. By 1837, he was almost completely convinced of the mutability of species, which “led [him] to think much on religion.”⁴³ In 1838, the year he read Malthus and settled upon natural selection as the mechanism of these changes in species, he noted a similar entry in his *Journal*, writing, “All September read a good deal on many subjects: thought much upon religion. Beginning of October ditto.”⁴⁴ As John Hedley Brooke argues, “A radical thesis would be to argue that Darwin’s loss of faith had little or nothing to do with his science,” a thesis that goes too far into revisionist history to be accurate.⁴⁵

Coupled with his reading of Hume and Comte, Darwin’s scientific findings were beginning to cause him to question his theism, and “Darwin emphatically did make connections between scientific...reasons for his religious doubts.”⁴⁶ Namely these

⁴¹ Charles Darwin, *Autobiography*, 91.

⁴² *Ibid.*, 91.

⁴³ Charles Darwin, *Autobiography*, 85.

⁴⁴ Charles Darwin, *Darwin’s Journal*, ed. Gavin de Beer, *Bulletin of the British Museum (Natural History)* Historical Series no.2 (1959), 8.

⁴⁵ John Hedley Brooke, “Darwin and Victorian Christianity,” in *The Cambridge Companion to Darwin*, ed. Jonathan Hodge and Gregory Radick, (Cambridge: Cambridge University Press, 2003), 200.

⁴⁶ *Ibid.*, pg. 200. See also Frank Burch Brown, “The Evolution of Darwin’s Theism,” 12.

included the extension of natural law making miracles less credible, suffering calling into question the idea of a benevolent God, and randomness held within variations of species competing with the idea of design or divine order. Such issues were what Darwin's wife Emma had feared for Charles when she wrote to him in 1838:

When I am with you I think all melancholy thoughts keep out of my head but since you are gone some sad ones have forced themselves in, of fear that our opinions on the most important subject should differ widely. My reason tells me that honest & conscientious doubts cannot be a sin, but I feel it would be a painful void between us. I thank you from my heart for your openness with me & I should dread the feeling that you were concealing your opinions from the fear of giving me pain. It is perhaps foolish of me to say this much but my own dear Charley we now do belong to each other & I cannot help being open with you. Will you do me a favour? yes I am sure you will, it is to read our Saviours farewell discourse to his disciples which begins at the end of the 13th Chap of John. It is so full of love to them & devotion & every beautiful feeling. It is the part of the New Testament I love best.⁴⁷

Written in 1838, just before their marriage, it is clear that Emma was aware, and wary, of science creating religious doubts within Darwin's mind at this time, leading her to fear their being separated eternally. She confessed similar anxieties a year later when she wrote to Charles:

The state of mind that I wish to preserve with respect to you, is to feel that while you are acting conscientiously & sincerely wishing, & trying to learn the truth, you cannot be wrong; but there are some reasons that force themselves upon me & prevent my being always to give myself this comfort....May not the habit in scientific pursuits of believing nothing till it is proved, influence your mind too much in other things which cannot be proved in the same way, & which if true are likely to be above out comprehension.⁴⁸

This second passage is especially interesting, in that Emma seems to assume Darwin pushed thoughts of religion out of his mind as being tangential to his scientific theories, which clearly was not the case. Still, she definitively refutes the thesis that Darwin's

⁴⁷ Emma Wedgwood, letter to Charles Darwin, November 21-22, 1838, *DCD* entry no. 441.

⁴⁸ Emma Darwin, letter to Charles Darwin, February 1839, *DCD* entry no. 471.

religious doubts were not attributable to his scientific findings, as his scientific work caused her to doubt her husband's religious faith most strongly, writing him two letters on the subject when her anxieties were most severe.⁴⁹ Such fears resurfaced when Emma closed this second letter by saying, "Everything that concerns you concerns me and I should be most unhappy if I thought we did not belong to each other forever."⁵⁰ These issues also affected Darwin as he responded by writing at the bottom, "When I am dead, know that many times, I have kissed and cried over this," keeping the letter among his private papers to look back upon.⁵¹

Though, as noted before, the presence of these doubts in Darwin's early writings, and the writings of those closest to him, do not prove conclusively that Darwin had at this point lost all religious beliefs. Frank Burch Brown argues that it is easy to see "why scholars such as Michael Ghiselen, Edward Manier, Howard Gruber, and Sylvan Schweber have concluded that by or during this time Darwin ceased to be a theist," with Schweber confidently asserting that by 1839 Darwin was agnostic, possibly atheist, and Gruber concluding Darwin was a confirmed agnostic.⁵² Brown goes on to assert that "plainly we cannot accept without serious qualification the recurrently popular theory that Darwin remained a committed theist (or 'evolutionary deist') throughout all the years

⁴⁹ See John Hedley Brooke, "Darwin and Victorian Christianity," *The Cambridge Companion to Darwin*, 200.

⁵⁰ Emma Darwin, letter to Charles Darwin, February 1839, *DCD* entry no. 471.

⁵¹ Charles Darwin, *Autobiography*, pg. 237. See also David Quammen, *The Reluctant Mr. Darwin*, 242.

⁵² Frank Burch Brown, "The Evolution of Darwin's Theism," 15. An otherwise immensely useful article in evaluating the fluctuations in Darwin's belief, Brown seems to agree with other historians here that Darwin's theism cannot be easily traced through until the publication of *Origins*, questioning the validity of Darwin's theological statements contained in the work and complicating his own arguments on Darwin's continued interest in religious debates with friends like Charles Lyell and Asa Gray well into the 1870's.

prior to the publication in 1859 of the *Origin of Species*.”⁵³ Certainly it is going too far to argue that Darwin’s theism had not been shaken by the publication of *Origins*. At the same time, Darwin had hardly given up theism completely as early as 1839, if his own writings are taken into account. Theological statements within *Origins* have already been presented, and to argue that as early as 1839 (20 years before the publication of the 1st edition), Darwin was contentedly agnostic is to argue that such statements were disingenuous, “merely a sop to his critics.”⁵⁴ James Moore posits that such categorization “is to show a callous disregard for the depth and affliction of [Darwin’s] metaphysical perplexity,” especially since hints of theism continued “long after it had become evident that his theory would receive a sympathetic hearing.”⁵⁵

Darwin himself wrote that he did not abandon his faith until he was forty years of age, in 1849, even then writing, “But I was very unwilling to give up my belief,” though “disbelief crept over me at a very slow rate.”⁵⁶ This unwillingness to give up theism completely can be seen in the recurrence of religion in letters dating far beyond 1849. For example, Darwin wrote to the American botanist Asa Gray as late as 1860:

I own that I cannot see, as plainly as others do, & as I sh^d wish to do, evidence of design & beneficence on all sides of us. On the other hand I cannot anyhow be contented to view this wonderful universe & especially the nature of man, & to

⁵³ Ibid., 15.

⁵⁴ James Moore, *The Post-Darwinian Controversies*, (Cambridge: Cambridge University Press, 1979): 347.

⁵⁵ Ibid., 347. Again, Moore is clearly sympathetic to my argument and aware of the complexities of Darwin’s religion. However, by only noting Darwin’s residual theism or “hints of theism” in passing, he leaves the implication that doubt was outweighing his theism after a certain point rather than my argument that theism and agnosticism were in constant, dynamic fluctuation throughout Darwin’s entire life, neither outweighing the other. Moreover, Moore has not studied the extension of Darwin’s theism past 1851 or 1859, therefore I expand here upon his foundation of “residual theism” to examine the continued religious struggles and maintenance of theistic beliefs past these dates in Darwin’s private writings especially.

⁵⁶ Charles Darwin, *Autobiography*, 86-87.

conclude that everything is the result of brute force...I feel most deeply that the whole subject is too profound for the human intellect...Let each man hope & believe what he can...I can see no reason, why a man, or other animal, may not have been aboriginally produced by other laws; & that all these laws may have been expressly designed by an omniscient Creator, who foresaw every future event & consequence. But the more I think the more bewildered I become; as indeed I have probably shown by this letter.⁵⁷

These thoughts accord well with Darwin's early theism and with the theological statements within *Origins*. Darwin was strongly opposed to divine intervention and special creation, maintaining throughout his career that natural selection was an independent mechanism. But in this letter to Gray, as in his published scientific works, Darwin allowed these laws to be originally designed and worked out by a Creator, leaving only the details to chance. Moreover, these thoughts of Darwin's, penned in 1860, hardly allow for any unqualified thesis of Darwin as a contented agnostic no longer concerned with theism. He continued to be perplexed by religious ideas in 1870 when he wrote to another friend, botanist Joseph Dalton Hooker:

Your conclusion that all speculation about preordination is idle waste of time is the only wise one: but how difficult it is not to speculate. My theology is a simple muddle: I cannot look at the Universe as the result of blind chance, yet I can see no evidence of beneficent design, or indeed of design of any kind in the details.⁵⁸

Twenty years after claiming to lose all religious belief, questions surrounding religion and theism continued to put Darwin in a bewildered muddle.

Unsatisfied by an inability to prove religious sentiments and convictions through empirical data, he was equally unsatisfied by the thought that the world must be the result of blind chance. Six years after this letter to J.D. Hooker, Darwin began to compile his *Autobiography*, in which he similarly noted:

⁵⁷ Charles Darwin, letter to Asa Gray, May 22, 1860, *DCD* entry no. 2814.

⁵⁸ Charles Darwin, letter to Joseph Dalton Hooker, July 12, 1870, *DCD* entry no. 7273.

Another source of conviction in the existence of God, connected with the reason and not with the feelings, impresses me as having much more weight. This follows from the extreme difficulty *or rather impossibility* of conceiving this immense and wonderful universe...as the result of blind chance or necessity. When thus reflecting I feel compelled to look to a First Cause having an intelligent mind in some degree analogous to that of man; and I deserve to be called a Theist.⁵⁹

Going further here than he does even in the above letter to J.D. Hooker, Darwin emphatically states that blind chance can hardly explain first origins satisfactorily, returning to his previous conviction of an intelligent Creator who designed such laws and set them in motion. Furthermore, as late as 1876, Darwin applies the present tense to call himself a Theist, though this latter theism was tempered by continued skepticism and agnosticism, as Darwin notes, “this conclusion was strong in my mind about the time...when I wrote the *Origin of Species*; and it is since that time that it has *very gradually with many fluctuations become weaker*.”⁶⁰ John Hedley Brooke rightly takes these fluctuations of belief into account when he notes, “it has become less clear that Darwin can be pigeon-holed at each stage of his intellectual development... [and] it would be surprising if the man who showed us that we cannot pigeon-hole pigeons could be pigeon-holed himself.”⁶¹ Perhaps playing with such nuances between theistic agnostic or agnostic theist seems to belabor the point. Yet Darwin himself allowed for fluctuations within his belief and historians should afford him the same consideration. Moreover, it is the view of this thesis and the emphasis of this work to allow complexities within Darwin’s religious beliefs and to question attempts at definitive and oversimplified

⁵⁹ Charles Darwin, *Autobiography*, 92-93. Italics mine.

⁶⁰ *Ibid.*, 93. Italics mine.

⁶¹ John Hedley Brooke, “Darwin and Victorian Christianity,” *The Cambridge Companion to Darwin*, 199.

categorizations of Darwin's religion throughout his life. If as late as 1876 Darwin continued to view himself in many ways as a Theist, then a linear model moving from theist to deist to agnostic or atheist can hardly be deemed useful. In addition, the models noting some continued theism set forth by scholars Frank Burch Brown and James Moore can thus be expanded upon, through an extensive study of Darwin's letters especially, to move past traditional end dates for Darwin's theism like 1851 or 1859.⁶²

What is even clearer is that scholars like Mandelbaum and Schweber are presumptuous in assigning the term "atheist" to Darwin, even as they qualify it as undogmatic atheism, since the term is something he vehemently avoided. Writing to Asa Gray in response to reactions to the first edition of *Origins* in 1860 Darwin states:

With respect to the theological view of the question; this is always painful to me.—I am bewildered. — I had no intention to write atheistically....Certainly I agree with you that my views are not at all necessarily atheistical.⁶³

As most definitions of atheism stress a denial of the existence of a Deity, the term seems to be an unfair representation of Darwin, given the prevalence of his theistic beliefs throughout his life as well as his reluctance to answer conclusively and finally any questions he did not have ample evidence for. He encouraged other scientists to take the same moderate stance on matters of religion, as when he advised Ernst Haeckel:

I can call to mind distinct instances in which severity produced directly the opposite effect to what was intended. I feel sure that our good friend Huxley, though he has much influence, wd have far more if he had been more moderate & less frequent in his attacks....I am convinced that this power does no good, only causes pain. I may add that as we daily see men arriving at opposite conclusions from the same premises it seems to me doubtful policy to speak too positively on

⁶² See my discussion of Moore's arguments on page 12 of this chapter and of Frank Burch Brown's model of agnostic theism on page 20.

⁶³ Charles Darwin, letter to Asa Gray, May 22, 1860, *DCD* entry no. 2814.

any complex subject however much a man may feel convinced of the truth of his own convictions.

As Darwin had previously stated, he preferred to remain separated from personal matters open to opinion, namely religion, and it often pained him to be associated with direct attacks on religion.⁶⁴

Scholars like Mandelbaum cite such statements as evidence of an undogmatic, by which they mean non-committal and nonaggressive, atheism in Darwin's beliefs.⁶⁵ Not only is this to confuse definitions between atheism and agnosticism, more importantly it is to prescribe classifications to Darwin which he expressly avoided. Furthermore, identifying Darwin as an atheist is too definite a category, one which fails to allow for the fluctuations between theism and ambivalence that Darwin often experienced. In May of 1879, forty years after previous scholars argued Darwin was contentedly agnostic, and bordering on atheistic, he wrote in a brief letter to John Fordyce:

It seems to me absurd that a man may not be an ardent Theist & an evolutionist....What my own views may be is a question of no consequence to any one except myself.—But since you ask, I may state that my judgment often fluctuates. Moreover whether a man deserves to be called a theist depends on the definition of the term: which is much too large a subject for a note. In my most extreme fluctuations I have never been an atheist in the sense of denying the existence of a God.—I think that generally (& more and more so as I grow older) but not always, that an agnostic would be the most correct description of my state of mind.⁶⁶

⁶⁴ See note 501 in letter to Asa Gray, May 22, 1860, in which Darwin writes of Robert Owen's review of *Origins*, "He speaks of my 'clamouring against' all who believe in creation: & this seems to me an unjust accusation." Such accusations confused and troubled Darwin, who never meant to write atheistically.

⁶⁵ Maurice Mandelbaum, "Darwin's Religious Views," 376-378, Howard E. Gruber, *Darwin on Man*, 176, Frank Burch Brown, "The Evolution of Darwin's Theism," 9.

⁶⁶ Charles Darwin, letter to John Fordyce, May 7, 1879, *DCD* entry no. 12041.

Darwin again wrote of fluctuating in his belief, never comfortable speculating on religious matters which bewildered him, and never content to categorize his religious beliefs in any conclusive way until someone asked him, at which point he would state that Agnostic was the best term. Fordyce, an author on skepticism, agreed when he noted in his reply to Darwin, “I am glad to hear you speak so decidedly about the *absurdity* of Theism – and Evolution not been compatible.”⁶⁷ Also of importance is Fordyce’s remark that, “I felt sure from a study of the works to which I referred that Atheism was not Your position.”⁶⁸

He never completely lost all theistic beliefs, at least not enough to be able to definitively refer to himself as atheistic; in fact he again and again denied it. This refusal to be regarded as an atheist was repeated when Darwin declined the radical social philosopher Edward Aveling’s request to dedicate his book to Darwin. Darwin declined as the “atheistic portions took his views ‘to a greater length than seems to me safe,” answering Aveling’s question of whether or not he was an atheist that he preferred the word “agnostic.”⁶⁹

Not only did Darwin refuse to be called an atheist, even in his most extreme fluctuations in belief, he also noted that he did not at all times consider himself agnostic, allowing for the implication that theistic beliefs lasted well beyond the presupposed loss of faith in 1839 or 1849. His emphasis on the importance of definitions regarding such religious identifiers is equally important. In the concluding paragraphs of the sections

⁶⁷ John Fordyce, letter to Charles Darwin, May 8, 1879, *DCD* entry no. 12040.

⁶⁸ *Ibid.*

⁶⁹ Charles Darwin, quoted in Janet Browne, *Charles Darwin: The Power of Place*, 2002, 484.

entitled “Religious Beliefs” within Darwin’s *Autobiography*, Darwin writes, “I cannot pretend to throw the least light on such abstruse problems...and I for one must be content to remain an Agnostic.”⁷⁰ Darwin goes on to define an agnostic as one “who has no assured and ever present belief in the existence of a personal God.”⁷¹ This definition of agnostic indicates an agnostic might believe in God at times, but that this belief would not be constant and might grow or diminish in strength. Similarly, if the belief regarding the existence of a personal God is not assured, then the possibility of Darwin being atheistic is highly unlikely, considering he preferred not to argue things he could not expressly be assured of. Hence, Darwin “never adopted a stance that was totally unsympathetic toward theism, let alone staunchly atheistic.”⁷² Scholars then should be content to call Darwin what he preferred to call himself, as multiple times he denied the term atheist. Moreover, they should distinguish clearly that this agnosticism is far from being equivalent to a nonaggressive atheism.

Darwin clearly took his own religion, and moreover the religious beliefs of his friends and family seriously, and historians should afford Darwin the same courtesy in regards to their treatment of his own religious beliefs. Though neat categorical designations of theist, atheist or agnostic and linear models of ever increasing doubt are appealing in attempting to explain Darwin’s religious life, neither do justice to the vacillations and complexities Darwin himself recognized. The linear devolution from theist to agnostic may seem harmless enough in that Darwin did state he ended his life less devout and less sure theistically than he had been as a young man. But an overly

⁷⁰ Charles Darwin, *Autobiography*, 94.

⁷¹ *Ibid.*, 94.

⁷² Frank Burch Brown, “The Evolution of Darwin’s Theism,” 26.

simple model is not efficacious in portraying the complexities of Darwin's religious beliefs, and oversimplified models can be misleading in portraying Darwin as apathetic towards religion.

The ample amount of sources available, from Darwin himself no less, should preclude such oversimplified classifications and focus instead on the more nuanced, and often bewildering, fluctuations in Darwin's theism. As has been demonstrated, Darwin was hardly apathetic or unconcerned regarding religion, rather he was often perplexed on metaphysical matters, seeking to reconcile an empirical, scientific mind with notions of faith. Similarly, he was rarely irreligious, respecting the views of friends and family who differed from his own theological views, preferring to remain silent on such matters which he could not definitively prove to be true or untrue, and believing religion to be a personal question that ought to be left to each man to muddle out himself.

Allowing for these complexities in Darwin's religious beliefs creates a proper contextual space for religious believers like Asa Gray and Charles Lyell, who were able to agree with Darwin on most scientific points of natural selection whilst remaining religious, and these complexities should also be considered in conversations regarding the relationship of science and religion, as well as Darwin's place in these discussions.⁷³

Ever the polite apologist, Darwin wrote in 1866 on this very issue stating, "I am grieved that my views should incidentally have caused trouble to your mind but I thank you for your Judgment & honour you for it, that theology & science should each run its own

⁷³ Lyell disagreed that natural selection could be applied to the development of the human mind and Asa Gray and Darwin had fascinating conversations on whether the Creator's design and order were evident in nature, Gray maintaining they were whilst Darwin could see no such proof of Divinity in nature's details. Chapter Three of this thesis will discuss this exchange with Gray in depth, and will also include a discussion of Lyell's thoughts on design.

course & that for the present case I am not responsible if their meeting point should still be far off.”⁷⁴

⁷⁴ Charles Darwin, letter to M. E. Boole, December 14, 1866, *DCD* entry no. 5307.

CHAPTER TWO

“Great God how I shd like to see that greatest curse on Earth Slavery abolished”: Charles Darwin as Abolitionist, Humanitarian, and Theistic Agnostic

Writing to his close friend Asa Gray, an American botanist at Harvard, in June of 1861, Charles Darwin commented on the outbreak of hostilities in the United States that would soon mark the start of the American Civil War, “Some few, & I am one, *even wish to God*, though at the loss of millions of lives, that the North would proclaim *a crusade against Slavery*. In the long run, a million horrid deaths would be amply repaid in the cause of humanity....*Great God* how I shd like to see that *greatest curse on Earth Slavery abolished*.”¹ This was strong rhetoric for Darwin. In her most recent biography, Janet Browne describes Darwin by writing, “His voice was apologetic, humble, accepting at face value his own and others’ motives, unquestioning, even-tempered, and conversational, an unfolding of the pleasantly unassuming persona” that came to characterize him.² Darwin scholars Adrian Desmond and James Moore put it similarly when they note, “Darwin was the most gentlemanly gentleman anyone had ever met,” a diffident man “afraid to ruffle feathers” who was content to live a quiet life secluded with

¹ Charles Darwin, letter to Asa Gray, June 5, 1861, *Darwin Correspondence Database* entry no. 3176, <http://www.darwinproject.ac.uk/> (accessed August 12, 2014). *Darwin Correspondence Database* hereafter cited as DCD. Italics mine.

² Janet Browne, *Charles Darwin: The Power of Place*, (Princeton, New Jersey: Princeton University Press, 2002): 428.

his family in Down, avoiding controversy and confrontation as a rule, preferring to leave these matters to trusted friends like Thomas Henry Huxley and Joseph Dalton Hooker.³

Even then, Darwin never failed to reprimand friends for being too cruel or firm to those of opposing opinions, and constantly sought affirmation and consolation of his own ideas from this same inner circle. Take for example his words to Ernst Haeckel expressing typical sentiments for Darwin, “I feel sure that our good friend Huxley, though he has much influence, wd have far more *if he had been more moderate & less frequent in his attacks...* *I am convinced that this power does no good, only causes pain.*”⁴ When Darwin died in April of 1882 he was described similarly. The *Church Times* called him a man of “patience, ingenuity, calmness, industry [and] moderation.”⁵ The *Saturday Review* noted that Darwin was marked by a “sweet and gentle nature” that had “blossomed into perfection” through the years of his quiet, domestic life at Down.⁶

Yet the quiet and hesitant Darwin afraid of offending and constantly circling the subject indirectly was a far cry from the morally ignited and indignant Darwin who appeared when discussing what he felt was indeed the “greatest curse on Earth,” an illogical, man-made curse to make things even worse. The change is clear in his published thoughts on slavery, which he observed first hand while touring South America as part of the voyage of the *Beagle*. What he experienced there horrified him and made

³ Adrian Desmond and James Moore, *Darwin's Sacred Cause: Race, Slavery, and the Quest for Human Origins*, (Chicago: The University of Chicago Press, 2009): xvi.

⁴ Charles Darwin, letter to Ernst Haeckel, April 12, 1867, *DCD*, entry no. 5500. Italics mine.

⁵ Adrian Desmond and James Moore, *Darwin: The Life of a Tormented Evolutionist*, (New York, London: W.W. Norton & Company, 1991): 675.

⁶ Adrian Desmond and James Moore, *Darwin*, pg. 676, quoting the *Saturday Review* of April 22, 1882. Darwin died on Wednesday April 19th.

him a dedicated and lifelong opponent of slavery, a Garrisonian abolitionist from a young age. These writings and publications are worth examining. However, his correspondence and private papers, which continue to increase in number and availability to the benefit of Darwin scholars, and especially his correspondence around the time of the American Civil War, is also valuable in illuminating Darwin's views on slavery and why he felt so strongly about it when he was content to avoid taking a hard stance on other matters. The debates over slavery in America that became central to the Civil War only re-fired the anger Darwin had felt over Brazilian slavery and Britain's previous participation in the African slave trade.

This facet of Darwin is best understood in regards to his religious beliefs. As argued in the Introduction, Darwin is best viewed as a theistic agnostic, with religious beliefs constantly fluctuating between theism and agnosticism throughout his life, neither completely overtaking the other. Darwin's comments on slavery, especially those on slavery in America and the events of the Civil War found in his private letters, further illuminates Darwin's religious beliefs. The date of the letters firmly establishes that Darwin's theism was indeed present past the publication of *Origins*, and that theistic beliefs never truly left Darwin, though his skepticism and agnosticism may have weighed on him at certain times more than others. As this chapter will demonstrate, it was Darwin's position as a theistic agnostic that led him to argue so strongly against slavery and the arguments of scientists like Louis Agassiz that the white and black races were created separately, a moral stance that in turn affected his work on natural selection which he is best remembered for.

For, James Moore has noted, when discussing slavery the moderate and non-confrontational Darwin became Darwin on the attack, “Garrisonian Darwin in full cry, earnest and evangelical,” never again “so expressly theological.”⁷ While Moore is speaking of Darwin’s early publications, the same is true for Darwin during the American Civil War. Never was Darwin so morally against something and so theological and theistic in his rhetoric than when discussing what he viewed as the great evil of slavery. Some stock phrases of the Victorian era did continue to make their way into Darwin’s writings through his life, irrespective of his religious beliefs at the time, especially “thank Heaven” and “God willing.” But when speaking about slavery, Darwin moved beyond this. Other than when discussing expressly religious topics, Darwin was nowhere else so explicit in his use of religious language and religious argumentation as he was when he denounced the continued existence of institutionalized slavery or manmade slavery in the world.

Moore emphasizes Darwin’s abolitionism and moral arguments against slavery as the basis for Darwin’s scientific work and the development of his theory of natural selection, seeking an alternative especially to Louis Agassiz’s arguments for polygenism, or separate origins/creations for different races that provided scientific support for racism. Darwin, with the help and support of Agassiz’s colleague at Harvard Asa Gray, instead sought to prove his belief “in the common descent or ‘brotherhood’ of the human races.”

⁸ While Darwin’s views on slavery are essential to understanding his theory of natural selection and his scientific beliefs and methods in general, Darwin’s thoughts, published

⁷ James Moore, “Darwin’s Progress and the Problem of Slavery,” 566.

⁸ James Moore, “Darwin’s Progress and the Problem of Slavery,” 558.

and private, on slavery throughout his life are also revealing and informative concerning his religious beliefs, providing further support against defining Darwin as an atheist (especially after the publication of *Origins* in 1859) and for classifying Darwin religiously as a theistic agnostic.

Phillip R. Sloan, for example, has written on Darwin's religion to address the legitimate question of what Darwin's religion in the end was and if scholars can argue it is more than just general metaphysical thoughts towards nature in "substitute for traditional theism."⁹ Sloan's arguments are relevant overall to classifying Darwin's religion, but especially to this chapter, in that he goes on to note we indeed can see an "enduring affirmation of a possible larger purposiveness in the universe in his writings."¹⁰ Sloan also rightly explains that nature to Darwin was "neither the passive repository of laws ordained by a creator-God, the material order sustained by God's immediate creative action, nor the deistic nature that fulfills divine purposes through the action of natural laws."¹¹ Sloan reiterates my argument then that Darwin is best termed a theistic agnostic, as Darwin said of himself, in that he retained a role for a Creator God presiding over secondary natural laws that worked independently of Divine interference, though they could be ultimately under His plan. Darwin maintained his theism even though he experienced times of doubt, and his view of nature explained above also shows he was not a true Deist. The Creator God of his mind was not apathetic to the world or man just because He did not directly interfere, nor did Nature become an independent

⁹ Phillip R. Sloan, "'The Sense of Sublimity': Darwin on Nature and Divinity," *Osiris* 16, Science in Theistic Contexts: Cognitive Dimensions (2001): 269.

¹⁰ Phillip R. Sloan, "Darwin on Nature and Divinity," 269.

¹¹ *Ibid.*, 269.

Deity working for its own teleology. More importantly in regards to Darwin's thoughts on slavery, this perspective of nature heavily influenced Darwin's beliefs on morality and ethics. Sloan argues nature became a "source of moral order for Darwin" in that it was "a lawful system on which one could rely for ethical norms, serving as the source and foundation for life."¹² The distinction between what fell under natural secondary laws and unnatural sin, as well as the independence of the Creator heavily influenced his ideas on morality, and thus similarly influenced his arguments against slavery.

As will be shown here, and similarly with Darwin's thoughts on design in Chapter Three, this distinction between unnatural manmade sin in institutional slavery and natural suffering, was extremely important to Darwin. Since the presence of suffering caused him the most trouble when attempting to reconcile his theism and his theory of natural selection, this is no surprise. By emphasizing this distinction, Darwin was able to maintain his theism by continuing to believe a Benevolent Creator God was overseeing the workings of the world through secondary natural laws. These laws and the Creator above them were *not* responsible for the sin of slavery, as it was manmade institutional slavery which man, in his sin, continued to perpetuate.

Darwin came from a background of abolitionists, with "generations of Darwins and Wedgwoods" working towards an end to England's participation in the slave trade.¹³ Many family members, including both grandfathers and his sisters were "avid supporters of the cause."¹⁴ When the Slavery Abolition Act passed Parliament on August 1, 1833,

¹² Ibid., 269.

¹³ Ibid., 559.

¹⁴ Joseph L. Yannielli, "A Yahgan for the Killing: Murder, Memory and Charles Darwin." *British Journal for the History of Science* 46, no. 3 (Sept 2013): 435.

both families celebrated. Though Darwin was not an active participant in major reform organizations like some of his relatives were, his ideas on slavery “rank him among the more radical international abolitionists.”¹⁵ Raised to hate the practice in theory, Darwin’s experiences as a young man only cemented his intense opposition to slavery. For example, as Joseph Yannielli observes, while studying medicine at Edinburgh, Darwin “met and befriended” John Edmonstone, a former Guianese slave, “whose taxidermic skill, thoughtful conversation, and tales of South American ecology” left a strong and lasting positive impression.¹⁶ Darwin’s stance against slavery was then heightened by what he experienced as a naturalist on board the *Beagle* a few years later.

Writing to his sister Emily Catherine in 1833 on what he observed in Brazil

Darwin noted:

I have watched how steadily the general feeling, as shown at elections, has been rising against Slavery.— What a proud thing for England, if she is the first Europæan nation which utterly abolishes it.— I was told before leaving England, that after living in Slave countries: all my opinions would be altered; the only alteration I am aware of is forming a much higher estimate of the Negros character.— it is impossible to see a negro & not feel kindly towards him.¹⁷

Even before he had experienced the worst of Brazilian slavery then here is evidence of the “grounded form of empathy [that] distinguished Darwin from the aristocratic aloofness...of many of his contemporaries.”¹⁸ But Darwin’s rhetoric became even more inflamed throughout his time in Brazil, or as Darwin described it “a land of slavery, and

¹⁵ Joseph L. Yannielli, “A Yahgan for the Killing,” 436.

¹⁶ Ibid., 435.

¹⁷ Charles Darwin, letter to Emily Catherine Darwin, May 22- July 14, 1833, *DCD*, entry no. 206.

¹⁸ Joseph L. Yannielli, “A Yahgan for the Killing,” 434.

therefore of moral debasement.”¹⁹ By 1838, perhaps from the influence of the young journalist Harriet Martineau, who had witnessed slavery in the American South, Darwin and soon-to-be wife Emma Wedgwood became supporters of William Lloyd Garrison, an American preacher and abolitionist known for his uncompromising call for the immediate emancipation of slaves without reimbursement to their owners.²⁰ Recalling his first-hand observations of slavery in his *Journal of researches* from his time aboard the *Beagle* published in 1845, Darwin’s passionate and religious language, which he would use again during the American Civil War, makes his abhorrence for the practice clear and is worth quoting at length:

On the 19th of August we finally left the shores of Brazil. *I thank God*, I shall never again visit a slave-country. To this day, if I hear a distant scream, it recalls with painful vividness my feelings, when passing a house near Pernambuco, I heard the most pitiable moans, and could not but suspect that some poor slave was being tortured, yet knew that I was as powerless as a child even to remonstrate....I was present when a kind-hearted man was on the point of separating for ever the men, women, and little children of a large number of families who had long lived together. I will not even allude to the many heart-sickening atrocities which I authentically heard of;—nor would I have mentioned the above revolting details, had I not met with several people, so blinded by the constitutional gaiety of the negro, *as to speak of slavery as a tolerable evil*. Such people have generally visited at the houses of the upper classes, where the domestic slaves are usually well treated; *and they have not, like myself, lived amongst the lower classes*. Such enquirers will ask slaves about their condition; they forget that the slave must indeed be dull, who does not calculate on the chance of his answer reaching his master's ears...²¹

Darwin’s empathy for the human beings he saw sold into chattel slavery, especially for those separated from family members and denied even basic domestic comforts, is

¹⁹ Charles Darwin, *Journal of researches into the natural history and geology of the countries visited during the voyage of H.M.S. Beagle round the world, under the Command of Capt. Fitz Roy, R.N.*, 2nd edition, (London: John Murray, 1845): 498.

²⁰ See James Moore, “Darwin’s Progress and the Problem of Slavery,” 561.

²¹ Charles Darwin, *Journal of researches*, pgs. 499-500. *Italics mine*.

evident, as is his self-conscious separation from those men who would view slavery as a “tolerable evil.” Darwin could not tolerate it and maintain his theism, which often hinged in his mind on the idea of a Benevolent Creator. His God would not allow such suffering, hence his distinction between natural suffering attributable to secondary natural laws over which He presided, and man’s unnatural sin of institutional slavery.

For Darwin the practice was hardly tolerable, in fact his sense of racial justice prompted him to call for “immediate action to end the nefarious institution once and for all,” even if through a “revolutionary overthrow of slavery” as had occurred in Haiti.²²

Darwin went on to write in his journal:

It is often attempted to palliate slavery by comparing the state of slaves with our poorer countrymen: *if the misery of our poor be caused not by the laws of nature, but by our institutions, great is our sin; but how this bears on slavery, I cannot see; . . .* Those who look tenderly at the slave-owner, and with a cold heart at the slave, never seem to put themselves into the position of the latter;—what a cheerless prospect, with not even a hope of change! picture to yourself the chance, ever hanging over you, of your wife and your little children—those objects which nature urges even the slave to call his own—being torn from you and sold like beasts to the first bidder! *And these deeds are done and palliated by men, who profess to love their neighbours as themselves, who believe in God, and pray that his Will be done on earth! It makes one's blood boil, yet heart tremble, to think that we Englishmen and our American descendants, with their boastful cry of liberty, have been and are so guilty: but it is a consolation to reflect, that we at least have made a greater sacrifice, than ever made by any nation, to expiate our sin.*²³

Abolitionist Darwin was a Darwin of strong religious rhetoric and moral fire. England and America have been “guilty” of the greatest “sin” by allowing slavery to continue, wrongly condoning their actions by claiming it is God’s will and the natural way of the world. Though Darwin often spoke of “higher” and “lower” races and used the Victorian

²² Joseph L. Yannielli, “A Yahgan for the Killing,” 434, 438, see also Charles Darwin, letter to E.C. Darwin quoted above.

²³ Charles Darwin, *Journal of researches*, 500. Italics mine.

language of paternalism and colonialism when describing less modernized civilizations, his theistic beliefs meant that attributing *man's sin*, '*our sin*,' to the laws through which his Creator-God worked was an infuriating impossibility.²⁴

This is clear in Darwin's comparison of black slaves held in institutional slavery to the British lower classes suffering under industrial poverty. A believer in free-trade economics and Malthusian political economy, Darwin viewed poverty caused by industrialism as a natural occurrence. Conversely, in his opinion it was "utterly, contemptibly unthinkable" to condone institutional slavery and racism as part of God's laws in the same way.²⁵ His fervent, religious language when discussing slavery makes it clear how the comparison indeed made his "blood boil." Darwin's emphasis is also enlightening. Rather than viewing slavery as natural suffering or cause for religious doubt, or viewing certain races as separately created by God to be lower in the tradition of Agassiz, he was instead able to retain his theism and avoid bouts of agnosticism caused by the issue of slavery because it was not a natural evil but a manmade sin. The Benevolent Creator of Darwin's mind did not create or condone such sin, and thus Darwin was able to argue so strongly for immediate action to end slavery without its existence sending him into doubts of the existence of such a Creator.

Darwin's firm moral stance against slavery also created conflicts with colleagues and friends, whom Darwin deferred to on other issues in order to avoid conflict. In his *Autobiography*, Darwin described Captain Fitz-Roy as having a "most unfortunate" temper, and went on to note that after returning home he saw little of Fitz-Roy as he was

²⁴ See Charles Darwin, letter to Charles Kingsley, February 6, 1862, *DCD*, entry no. 3439.

²⁵ James Moore, "Darwin's Progress and the Problem of Slavery," 566-567.

“always afraid of unintentionally offending him.”²⁶ However, Darwin refused to back down on the issue of slavery simply to prevent confrontation. He describes the exchange between himself and Fitz-Roy on the topic thus:

...early in the voyage at Bahia in Brazil he defended and praised slavery, *which I abominated*, and told me that he had just visited a great slave-owner, who had called up many of his slaves and asked them whether they were happy, and whether they wished to be free, and all answered ‘No.’ I then asked him, *perhaps with a sneer*, whether he thought that the answers of slaves in the presence of their master was worth anything. This made him excessively angry, and he said that as I doubted his word, we could not live any longer together. I thought that I should have been compelled to leave the ship...²⁷

Normally marked by a moderate and tempered personality, Darwin’s objections to slavery made him argumentative even to the point of risking being booted from the ship! A similar disagreement took place between Darwin and his dear friend the geologist Charles Lyell when Lyell published a travelogue of his time in America, which condoned the separation of slave members from their families and expressed his distress at some “‘Whites not having prospered.’”²⁸ These words had at least partially caused Darwin’s fiery language at the end of the second edition of his *Beagle* journal directed at such Christian hypocrisy (quoted above.)

While slightly more hesitant to anger Lyell than he had been with Fitz-Roy, Darwin is still compelled to broach the topic in his letter to Lyell in August of 1845, in which he writes:

I was delighted with your letter, in which you touch on slavery; I wish the same feelings had been apparent in your published discussion.— But I will not write on this subject; I shd perhaps annoy you & most certainly myself.— I have exhaled

²⁶ Charles Darwin, *The Autobiography of Charles Darwin, 1809-1882*, ed. Nora Barlow (New York: Harcourt, Brace, 1958): 62, 64. Hereafter *Autobiography*.

²⁷ Charles Darwin, *Autobiography*, 62. Italics mine.

²⁸ Charles Lyell, *Travels in North America*, 1845, quoted in James Moore, “Darwin’s Progress and the Problem of Slavery,” 566.

myself with a paragraph or two in my Journal on the sin of Brazilian slavery: you perhaps will think that it is in answer to you; but such is not the case, I have remarked on nothing, which I did not hear on the coast of S. America. *My few sentences, however, are merely an explosion of feeling. How could you relate so placidly that atrocious sentiment about separating children from their parents; & in the next page, speak of being distressed at the Whites not having prospered; I assure you the contrast made me exclaim out.* — But I have broken my intention, & so no more on *this odious deadly subject*.²⁹

Darwin not only respected Lyell as a scientist, having read his *Principles of Geology* while on board the *Beagle*, he was also a close friend, one of the few Darwin shared his theory of natural selection with before publishing it, and mentor, with Darwin deferring to Lyell's opinion and professionalism when Alfred Russel Wallace sought to set forth similar ideas to Darwin before the publication of *Origins*. Even when disagreeing on religious issues, their letters are normally marked by gentlemanly and friendly words. No other subject but slavery caused the typically hesitant, reluctant, polite Darwin to "exclaim out" and experience such "an explosion of feeling," certainly not with his "dear Lyell." For Lyell, a Christian man, to seemingly condone or at least not argue fervently and explicitly against such unnatural suffering immensely irritated Darwin. Such sentiments would be repeated in his correspondence with another valued friend Asa Gray, during the two scientists running debate on the events of the American Civil War and slavery from 1861 to 1865.

Darwin scholar and biographer Janet Browne has affectionately termed Darwin's inner circle of professionals and friends as the "Four Musketeers," with Charles Lyell handling questions on fossil records and geology, Joseph Hooker covering the botanical world, and Huxley taking on the role of "Darwin's bulldog," using his "fire-and-

²⁹ Charles Darwin, letter to Charles Lyell, August 25, 1845, *DCD*, entry no. 905.

brimstone” approach to argue for “possible ape ancestry for humans.”³⁰ The attention these three scientists attracted during the nineteenth century, however, has meant that Asa Gray’s, the fourth and equally important musketeer, “role in the reception of evolution by natural selection has been somewhat obscured” in continued historical scholarship on Darwin.³¹ As “the gatekeeper” for the reception of Darwin’s theory in North America, Gray was essential in the process of publishing an American edition of *Origins*, and before that had been a key sounding board for Darwin’s ideas and questions on botanical specimens. In fact, Darwin’s letter to Gray in 1857, which had included an abstract of his theory, was used by Lyell and Hooker as the greatest evidence of Darwin’s precedence to Wallace’s discovery of a similar evolutionary theory.³²

This professional community was established through correspondence. But Darwin and Gray also developed a strong personal friendship through their letters. Even when discussing religious questions that the two had little hope of agreeing on, the issue of design in nature as evidence of a Creator will be discussed in Chapter Three for example, Gray and Darwin’s letters are marked by Darwin’s typically congenial way of writing. As had been the case with Lyell in 1845 though, their friendship was tried when they “nearly argued over politics” at the outbreak of Civil War in America in 1861.³³ The two discussed the unfolding events of the Civil War in almost every letter they exchanged between 1861 and 1865, and some are certainly tenser than letters concerning any other

³⁰ Janet Browne, “Asa Gray and Charles Darwin: Corresponding Naturalists,” *Harvard Papers in Botany* 15, no.2 (2010): 210-211. See also Janet Browne, *Charles Darwin: The Power of Place*, 126.

³¹ Janet Browne, “Corresponding Naturalists,” 211.

³² *Ibid.*, 212.

³³ *Ibid.*, 215.

subject. As Browne notes, this is unsurprising since “Darwin’s feelings ran high-far higher than commonly thought” on the issue of slavery, but she contradicts herself by noting Gray cared far more about the Union than he did slavery while also claiming Gray’s “passions matched Darwin’s word for word.”³⁴ This is hardly true. Gray was clearly invested in the struggle, more so than Darwin as an American witnessing events unfold in his own country. But Gray’s letters are marked by a fierce determinism to preserve the Union and by a confident and self-assured, often bordering on bragging, attitude that the strength of America would see the deed done quickly and with little lasting damage. Conversely, Darwin’s letters focus on slavery and are more often than not despairing and hopeless on what the outcome of the struggle would be. The total and immediate end to slavery in the Southern states, and not any preservation of the Union, was the only justification for and necessary outcome of conflict for Darwin.

Darwin himself noticed the difference in their attitudes, remarking to Gray in his letter of July 1862, “I have managed to skim the news-paper, but had not the heart to read all the bloody details. *Good God what will the end be; perhaps we are too despondent here; but I must think you are too hopeful on your side of the water,*” and again in August when he expressed a similar sentiment writing, “Affairs seem to be getting with you more & more terrible. *What will the end be. It seems to us here far more fearful, than it apparently does to you.*”³⁵ Despite their general agreements in supporting the war and supporting the North, Gray and Darwin differed in emphasis, and Darwin’s language throughout the chain of letters is much more morally charged and passionate than Gray’s

³⁴ Ibid., 215.

³⁵ Charles Darwin, letter to Asa Gray, July 23-24, 1862, *DCD*, entry no. 3662 and Charles Darwin, letter to Asa Gray, August 21, 1862, *DCD*, entry no. 3692. Italics mine.

in regards to the struggle in general and slavery especially. To be fair, Darwin was secluded and safe at Down, only keeping up with the progress of the war indirectly through Gray's reports and the reports in *The Times*, while Gray himself endured a more "complex political and personal turmoil."³⁶ Still, the differences in tone in the two men's letters are striking, and portray a humanitarian Darwin inflamed by moral issues and using theistic language as late as the 1860s, far beyond the date many scholars peg as Darwin's turn to atheism.

Darwin brought the subject up in their correspondence first, remarking just weeks after the fall of Fort Sumter on April 14, 1861 to Gray that he "never knew the newspapers so profoundly interesting" and was already invested in the cause of the North, hoping they would "proclaim a crusade against Slavery," the "greatest curse on Earth."³⁷ Darwin had used similarly religious language in an 1859 letter to Richard Hill, the first man of color to serve as a magistrate in Jamaica, and fellow naturalist who helped Philip Henry Gosse with questions on Jamaican ornithology especially. Congratulating him on his work supporting the anti-slavery movement, Darwin remarked that he was "quite delighted" to hear of Hill's support for "the *sacred cause* of humanity."³⁸ In his next letter to Gray in 1861, Darwin attempted to emphasize Slavery over Union writing:

I cannot believe that the South would ever have fellow-feeling enough with the North to allow of government in common....The whole affair is a great misfortune in the progress of the World; but I shd not regret it so much, if I could

³⁶ Janet Browne, "Corresponding Naturalists," 216.

³⁷ Charles Darwin, letter to Asa Gray, June 5, 1861, *DCD*, entry no. 3176.

³⁸ Charles Darwin, letter to Richard Hill, August 8, 1859, *DCD*, entry no. 2479A.

persuade myself that Slavery would be annihilated. But your president does not even mention the word in his Address.³⁹

In December of the same year and in response to what came to be called the Trent affair, Darwin lamented the growing tensions between America and England, “like two angry & silly men, taking so opposite a view of the same transaction,” and went on to declare to Gray “what a wretched thing it will be, if we fight on side of slavery.”⁴⁰ Darwin’s preoccupation with slavery and his despair over events in America were slightly alleviated when President Lincoln received approval for compensation for the voluntary emancipation of slaves in April of 1862, exclaiming to Gray, “*thank God* there is distinct ground broken on the Slavery question.”⁴¹ But in general as the war continued Darwin’s language became more hopeless and more firmly against the immoral and unnatural sin of slavery, especially in comparison to Gray’s letters.

By June of 1862 it was clear the war would not end quickly and Darwin again shared his despair with Gray stating, “I daily look at the Times with almost as much interest as an American could do. When will peace come: it is dreadful to think of the desolation of large parts of your magnificent country; & all the speechless misery suffered by many....It is an awful subject to reflect on.”⁴² His feelings led to a recurrence of his fiery rhetoric from his years as a young abolitionist writing against Brazilian slavery, as seen in his October 1862 letter to Gray:

Our verdict was, that the N. was fully justified in going to war with the S.; but that as soon as it was plain that there was no majority in the S. for ReUnion, you

³⁹ Charles Darwin, letter to Asa Gray, July 21, 1861, *DCD*, entry no. 3216.

⁴⁰ Charles Darwin, letter to Asa Gray, December 11, 1861, *DCD*, entry no. 3342.

⁴¹ Charles Darwin, letter to Asa Gray, April 21, 1862, *DCD*, entry no. 3513.

⁴² Charles Darwin, letter to Asa Gray, June 10-20, 1862, *DCD*, entry no. 3595.

ought, after your victories in Kentucky & Tennessee, to have made peace & agreed to a divorce. How curious it is that you all seem to believe that you can annex the South; whilst on this side of the Atlantic, it is the almost universal opinion that this is utterly impossible. If I could believe that your Presidents proclamation would have any effect, it would make a great alteration in my wishes....*But slavery seems to me to grow a more hopeless curse. How detestably the special correspondent of the Times writes on the subject; the man has not a shade of feeling against slavery. This war of yours, however it may end, is a fearful evil to the whole world; & its evil effect will, I must think, be felt for years.*⁴³

Typically keen on avoiding subjects that caused tension, Darwin instead continually denounced Gray's emphasis on union with the Southern states, stressing the need for direct action to end the man-made and institutional slavery still present in the Southern states instead. Here the differences in the two men's religious beliefs became apparent. As stated above Darwin's theism meant Darwin believed in a remote Creator-God who ruled indirectly through His laws, anything else, namely anything more direct and interfering, "was demeaning to God."⁴⁴ Gray, despite his support of theistic evolution, was a devout Presbyterian and believed in Providence, writing on the war to an English vicar in 1863, "the end is in the hands of Providence, and we humbly wait for it."⁴⁵ Such sentiments infuriated Darwin privately; waiting for God to interfere and end slavery was folly as it was "*our sin,*" man's sin, and immediate action was necessary to end this great "curse." Writing to Joseph Hooker in 1863 Darwin fumed near the opening of the letter, "It is marvellous to see Asa Gray so cock-sure about the *doom* of Slavery."⁴⁶

⁴³ Charles Darwin, letter to Asa Gray, October 16, 1862, *DCD*, entry no. 3766. Italics mine.

⁴⁴ Adrian Desmond & James Moore, *Darwin*, 218.

⁴⁵ Jane Loring Gray ed., *The Letters of Asa Gray*, (Gray, 1893), 2: 518. See James Moore, "Darwin's Progress and the Problem of Slavery," 572-573.

⁴⁶ Charles Darwin, letter to Joseph Dalton Hooker, January 13, 1863, *DCD*, entry no. 3913.

Even the Emancipation Proclamation, the crowning moment for Gray's celebrated and respected Lincoln, did little to temper Darwin's hopelessness on the continued evil of slavery in America. Writing just a few weeks after it became effective on January 1, 1863, Darwin's anguish was still very much present:

Well, your President has issued his fiat against Slavery—*God grant it may have some effect...I sometimes cannot help taking most gloomy view about your future....*In short anarchy & then the South & Slavery will be triumphant. But I hope my dismal prophecies will be as utterly wrong as most of my other prophecies have been. But everyone's prophecies have been wrong; those of your Government as wrong as any.—*It is a cruel evil to the whole world*; I hope that you may prove right & good come out of it.⁴⁷

Darwin became even more irritated at the state of events a few weeks later in February, lamenting the American government's intent to make England "eat dirt" over boundary lines with Canada and the "right to search" ships for slaves. He made the almost obligatory negative remark about Gray's obsession with Union and then again focused on slavery, writing:

...but I never so well understood your horror of Disunion. It is very natural that you shd. dread becoming split up like Germany; but to us it does not seem quite so horrible....*But I do, most truly think it dreadful that the South, with its accursed Slavery, shd. triumph, & spread the evil....* The Times is getting more detestable,—but that is too weak a word,—than ever. My good wife wishes to give it up; but I tell her that is a pitch of heroism, to which only a woman is equal to.. To give up the "Bloody Old Times" as Cobbett used to call it, would be to give up meat drink & air.⁴⁸

Darwin's moral fire continued to burn and it showed in his rhetoric and his inability to end the discussion with Gray, despite growing tensions.

⁴⁷ Charles Darwin, letter to Asa Gray, January 19, 1863, *DCD*, entry no. 3927. Italics mine.

⁴⁸ Charles Darwin, letter to Asa Gray, February 23, 1863, *DCD*, entry no. 4006. Italics mine. Emma did in fact cancel their subscription to *The Times* later in the year, preferring the *Daily News*, (which Darwin hated after a comparison made between his own work Robert Chambers's *Vestiges*), after *The Times* switched American war correspondents from Russel to Mackay in 1862, and especially after mid-1863 when the paper leaned heavily towards the cause of the Southern states.

Gray, again as an orthodox Presbyterian was, though certainly against slavery morally, able to leave the argument in the end to being the result of Providence as a result of his firm belief in God's plan. As a theist, a theist who also experienced times of doubting agnosticism, Charles Darwin's response to the evil and "accursed sin" of slavery was rather different. If secondary laws and the sins of man were responsible for slavery, then a Benevolent God observing its continuance could hardly condone men allowing such sin to continue unchecked. Though slavery did not serve to send Darwin into doubts of any God or Creator presiding over the world, since it was unnatural and manmade and thus not attributable directly to God, he still lacked Gray's faith in Providence, as well as Gray's overall optimism. Slavery also so morally repelled Darwin that anything less than total abhorrence and the call for an immediate and total end to it institutionally dissatisfied him.

A brief examination of Gray's letters from 1863 to the end of the war makes Darwin's language even more striking in comparison, as his letters lack the evident and urgent anguish Darwin experienced in seeing slavery continue in America even as thousands lost their lives fighting. The carnage of war seemed much more miserable and much less justified to Darwin if it did not end with the abolishment of Slavery, and for Darwin the end to this "accursed evil" was certainly not inevitable in 1863. Gray, with his preoccupation on the Union as opposed to Darwin's with slavery, remained more optimistic and assured of the need for war, which he believed would end in inevitable victory. His tone was strained, his own patriotism starting to clash more directly with Darwin's, but his letters are still marked by an open confidence in Providence quite unlike Darwin's hopeless gloom. As late as April 1863, Gray wrote to Darwin, "You

have long seen, I suppose, that I was right in saying there was but one possible end to the war,” going on to express his confidence that the worthwhile war would soon be over, “so I hasten to rejoice with you over the beginning of the end.”⁴⁹ Darwin was less than convinced by Gray’s attitude, debating dropping the topic from their correspondence for the first time when he wrote, “We must keep to science, I fear, for we both seem to be getting to think each other’s country conduct worse & worse.”⁵⁰

Gray, for his part, had long commented that he disdained England’s opinion of America, ending his discussion of the war with J.D. Hooker, and noting to Darwin, “You are the only Britisher I ever write to on this subject, and, in fact, for whose opinions about our country I care at all.”⁵¹ He repeated this opinion a few months later in July of 1863:

Oh foolish people! When will you see that there is only one end to all this: —and that the North never dreams of any other,—the complete putting down of the rebellion. *And since 1863 began, it was clear that it would be attended with the annihilation of slavery.* Time was when we should have highly valued English appreciation of the right cause.—We have now long ceased to care or think about it.⁵²

The sure “annihilation of slavery” was less clear to Darwin and he was certainly more passionate in his letters about its continuance than Gray. His moral indignation at institutional slavery in the southern states and man’s continued sin drifted into a fear that it would never end and that the world should never progress, writing to Gray in August:

How profoundly interesting American new[s] is....I declare no man could have tried to wish more sincerely for the north that I have done.— *My reason tells me that perhaps it would be best, —of course it would be best if it would end Slavery but I cannot pump up enthusiasm.* The boasting of your newspapers...& the abuse

⁴⁹ Asa Gray, letter to Charles Darwin, April 11, 1863, *DCD*, entry no. 4006.

⁵⁰ Charles Darwin, letter to Asa Gray, April 20, 1863, *DCD*, entry no. 4110.

⁵¹ Asa Gray, letter to Charles Darwin, April 11, 1863, *DCD*, entry no. 4006.

⁵² Asa Gray, letter to Charles Darwin, July 21, 1863, *DCD*, entry no. 4248.

of England, and the treatment of the free coloured population, and *the not freeing Maryland slaves stops all my enthusiasm.*⁵³

Darwin again lamented that the Emancipation Proclamation did not completely and immediately eradicate the evil of slavery, while Gray remained assured and determined writing, “the confidence that every month’s prolongation of the contest *makes the destruction of slavery surer*, quite reconciles to the cost, the loss of life even, and even to the blunders and shortcomings,” and attempting to console and advise Darwin with these words, “In patience possess your soul, and *take these things easy, as we do*. I like to know what you think....But beyond that, like the Country generally, have ceased to take any interest in British opinions of us and our doings. In time it will all be seen aright, and we can wait.”⁵⁴ Woeful Darwin continued to wonder, “What will the end be,” while Gray viewed the matter as a “settled case” and pushed Darwin, questioning, “Do you not begin to believe that we shall put down the rebellion, restore the Union, and do away with Slavery?”⁵⁵ Gray remained almost stubbornly positive in his faith in the strength and determination of the North, and again placed Union above the need to end Slavery which Darwin felt acutely.

For his part, Darwin’s anguish was only alleviated later in 1865, when news reached him in April of the fall of Richmond and the surrender of General Lee at Appomattox. Gray pressed him in July to concede writing, “You see slavery is *dead*,

⁵³ Charles Darwin, letter to Asa Gray, August 4, 1863, *DCD*, entry no. 4262. Italics mine. The Emancipation Proclamation only applied to slaves in states that had rebelled against the Union, of which Maryland was not one.

⁵⁴ Asa Gray, letter to Charles Darwin, November 23, 1863, *DCD*, entry no. 4346. Asa Gray, letter to Charles Darwin, October 3, 1864, *DCD*, entry no. 4625. Italics mine.

⁵⁵ Charles Darwin, letter to Asa Gray, May 28, 1864, *DCD*, entry no. 4511. Asa Gray, letter to Charles Darwin, December 5, 1864, *DCD*, entry no. 4699. Asa Gray, letter to Charles Darwin, January 17, 1865, *DCD*, entry no. 4747.

dead,—an absolute unanimity as to this.”⁵⁶ Darwin responded in August that the English had indeed been “egregiously wrong” for doubting the North could hold the Southern states in union even after so many years of war.⁵⁷ And though his tone had finally lightened from the hopelessness of his early letters to Gray, he could not resist letting the last word on the subject be his own emphasis on the horrors Slavery in America had caused him as a theist and humanitarian, exclaiming to Gray, “How well I remember thinking that Slavery would flourish for centuries in your Southern States!”⁵⁸ When Darwin went to publish *The descent of man, and selection in relation to sex* in 1871, he finally allowed himself to be optimistic that “virtue [would] be triumphant” in regards to the complete annihilation of “the great sin of Slavery” as mankind progressed forward.⁵⁹

Tracing the two naturalists’ correspondence through the years of the American Civil war is worthwhile. It was extensive, and other than the ever present exchanges of scientific observations and requests for specimens, the subject of the war took up the most space in their letters from these years. The moral rhetoric from Darwin’s days as a young abolitionist witnessing slavery firsthand for the first time in Brazil while on board the *Beagle* returned with a vengeance, with Lyell and then more extensively with Gray. Typically a moderate man, hesitant to offend and quick to avoid outright confrontation, Darwin held little back in regards to the subject of what he repeatedly called man’s greatest sin and the curse of humanity, bringing the topic up again and again with Gray even as the American attempted to emphasize the Union over the need for an immediate

⁵⁶ Asa Gray, letter to Charles Darwin, July 24, 1865, *DCD*, entry no. 4877. Emphasis Gray’s.

⁵⁷ Charles Darwin, letter to Asa Gray, August 15, 1865, *DCD*, entry no. 4882.

⁵⁸ *Ibid.*

⁵⁹ Charles Darwin, *The descent of man, and selection in relation to sex*, 1st ed., (London: John Murray, 1871): 94, 104. See also James Moore, “Darwin’s Progress and the Problem of Slavery,” 557.

abolition of slavery in all states, and even as discussions between the two men grew tense.

Though Darwin is one of the most studied scientists in history, scholars continue to miss the extent of the complexities within Darwin's personal beliefs. Those following the model of linear secularization set forth by Mandelbaum leave no room for Darwin's continued theism, and scholars like Frank Burch Brown and James Moore, who do note continuances of theism in Darwin, have only traced it to the 1850s and not much farther. By comparing Darwin's published works to his letters, I have extended this model to allow for continued fluctuations in Darwin's religion between theism and agnosticism throughout his entire life. This is certainly true of Darwin's religion, but also of his thoughts on race and slavery.

Moreover, the two subjects are connected. Darwin's fierce abolitionism and the anguish he felt at witnessing slavery firsthand and then watching it continue in a country as progressive and civilized as America is a lesser known facet of the naturalist. While his view of nature may have seemed cruel to many polite Victorian readers, the man behind the theory was gentler and more reserved. However, Darwin was also a humanitarian, and though his views on lower and higher races can be misleading, he was never more devoted to a social cause than he was to that seeking the abolition of slavery. As shown, this was cultivated in him early on, with active abolitionists on both sides of the family, and was only cemented by his experiences in Brazil. These experiences led to tense disagreements with friends like Charles Lyell, and later with Asa Gray over the issue of American slavery in the Southern states.

What is most striking about this is Darwin's rhetoric within the private letters he exchanged on the subject, language similar to that expressed in his early publications. The moderate Darwin, eager to please and fearful to offend, was long gone once slavery had been mentioned. Darwin was firmly and completely against the practice of institutional or chattel slavery, and in expressing this opinion he was never again so moral and theistic in his language. Slavery was a "curse" and a "sin," a "cruel evil," and Darwin repeatedly expressed that he hoped to God he would see it ended, going beyond Victorian religious stock phrases. Relying on Providence was folly in his opinion, and immediate action to end slavery was necessary. As a theistic agnostic, Darwin lacked the assurance and personal faith in Providence that Lyell and especially Gray fell back upon when faced with riddles such as the evil of slavery. But, slavery hardly caused Darwin to lose all theistic beliefs. Instead, his determination to retain his theism allowed him to maintain belief in a Benevolent God, even with the existence of slavery because of his distinction between the First Causes of the Creator and secondary, independent, natural laws. This God worked through indirect laws, to which man's unnatural sin of institutional slavery was not attributable. The unnatural evil of institutionalized slavery could not be part of his Creator's will and should be immediately ended, not left to, in Darwin's mind, the overly optimistic notion of Providence held by Gray.

Such sentiments are worth studying in their own right, as they present a lesser known side to Darwin, inflamed on religious and humanitarian matters and openly engaging in tense debates rather than deferring as he otherwise often did. But Darwin's thoughts on slavery, stretching as they do through his letters on the American Civil War into the late 1860s and even to 1871 with the publication of *The descent of man*, are also

enlightening in regards to Darwin's religious beliefs, proving that Darwin continued to think and express himself theistically, more so than ever before and long after he had developed and published his theory of evolution by natural selection. Darwin's opinions on and struggles with the issue of design in nature and its role as evidence of a Creator is something, like slavery, which he also discussed extensively with Lyell and Gray, and is the subject of the next chapter.

CHAPTER THREE

“My mind is in simple muddle about ‘designed laws’ and ‘undesigned consequences’”:
Charles Darwin and the Insufferable Problem of Design in Nature

As a young man, while still a naturalist onboard the *Beagle*, Charles Darwin wrote to his sister of his journey and closed his otherwise ordinary letter to her thus, “My spirits about the voyage are like the tide, which runs one way & that is in favor of it, but it does so by a number of little waves, which may represent all the doubts & hopes that are continually changing in my mind. After such a wonderful high wrought simile I will write no more.”¹ Though speaking directly of the voyage, Darwin was also speaking of his entire mindset, continually changing as his time on the ship continued. Darwin’s “wonderful high wrought simile” is also immensely useful as a lens through which to view his religious beliefs throughout his life, for if slavery was the issue that Darwin was most morally and religiously assured of, then design and the evidence of design in nature as proof of a Creator was the religious issue that caused him the most internal turmoil. This topic left him muddled, confused, bewildered, and ultimately without a definite answer. Despite all this, however, and contrary to the claims of other scholars, the issue of design in nature did not cause Darwin to abandon his theism completely.² Darwin’s

¹ Charles Darwin, letter to Susan Elizabeth Darwin, September 14, 1831, *Darwin Correspondence Database* entry no. 126, <http://www.darwinproject.ac.uk/> (accessed March 23, 2015). Darwin Correspondence Database hereafter cited as *DCD*.

² Janet Browne, *Charles Darwin: The Power of Place*, (Princeton, New Jersey: Princeton University Press, 2002): 176-177. Browne does treat Darwin’s religious struggles seriously and sympathetically, but, even in viewing the letters, maintains that Darwin was unable to retain any theistic belief throughout/by the end of his discussion of design in nature as evidence of a Creator with Lyell and Gray. See also David Quammen’s discussion of this in *The Reluctant Mr. Darwin*, (New York, London: W.W. Norton & Company, 2006): 197.

remarks on design demonstrate, as did his comments on slavery and abolitionism, in his published works and most especially in his extensive private letters, that the best categorization for his religious beliefs continues to be theistic agnostic, even considering his doubts and confusion.

In fact, the doubts Darwin felt when discussing design with his close friends in private letters, and in his thoughts expressed in his published works, particularly the *Origin of Species* (1859) and the *Fertilization of Orchids* (1862), prove to be one of the best examples of Darwin's fluctuations between theism and agnosticism, between the belief that there must be some higher Creator overlooking, but never interfering with, his beloved natural laws and the much less satisfying belief that man's faculties, since they were descended from lesser animals, could not be trusted on the topic and that religion was rather a construct of culture.

As will be shown, the latter, darker thoughts left Darwin unfulfilled, and the former troubled him as well since they could not be proven empirically like his scientific mind instinctively strove to do. Even so, the ever changing ebb and flow of Darwin's beliefs from theism to agnosticism, even when discussing the issue of design as evidence of a Creator, never led Darwin into atheism or even complete agnosticism. He retained a belief that a Creator, though he had no spiritual or internal relationship with said Creator, likely did exist since a universe created by blind chance or "brute force" was highly unsatisfactory. Conversely, the evidence of suffering in nature, of which Darwin was most aware, left him unsure that such a Creator was worth believing in at all if He was not benevolent but rather capricious. All this to say, an examination of Darwin's thoughts on design in nature and the evidence in nature of a Creator, though they were confusing

to himself, though fluctuating back and forth between the camps of theism and agnosticism, though ultimately without a clean and simple resolution, continue to support the argument that theistic agnostic remains the most appropriate label for Charles Darwin's complicated and nuanced religious beliefs.

The chapter will open with a discussion of Darwin's foundation in natural theology, especially that coming out of Cambridge. Though his theory of natural selection would lead him to view nature in a differing way from this tradition, it continued to influence his thoughts on nature and religion. Next, an extended examination of Darwin's thoughts on design in nature as evidence of a Creator, as well as the role of suffering in nature will follow. Here it will be emphasized that Darwin's distinction of First and Second causes, as well as his distinction between particular and general design, allowed him to retain his theism even in times of doubt and skepticism. His thoughts on these subjects are illuminated best in comparison to and within his discussions with Charles Lyell and Asa Gray. Finally, this chapter will also include an extensive examination of Darwin's thoughts on the role of chance in nature, in his theory of natural selection, and in his religious beliefs.

While Darwin's theory of natural selection and his opinions on design in nature, both in his published works and private letters, would ultimately go against the established natural theology of William Paley and other scholars, this was not as sudden or as easy a break as may be ultimately assumed. As a Cambridge student himself, Darwin's academic career, intimately tied with his religious beliefs since his degree was in theology, greatly affected his scientific studies later on and meant that he would continue to be deeply invested in harmonizing science and religion. For example,

William E. Phipps notes Darwin's views were heavily influenced by what he would have read of Francis Bacon, Augustine of Hippo, Thomas Aquinas, and perhaps most importantly for his religious beliefs on a Creator and the role of the Creator in nature, Isaac Newton. Darwin opens *Origins* with these words from William Whewell, "Events are brought about not by insulated interpositions of Divine power, exerted in each particular case, but by the establishment of general laws." Similarly, he closes the first edition by noting, "To my mind, it accords better with what we know of the laws impressed by the Creator, that the production and extinction of the past and present inhabitants of the world should have been due to secondary causes."³ He also quotes Francis Bacon along with Whewell to open the first edition.

All of these thoughts find their foundation in those of Augustine of Hippo as well, who wrote, "Everything in nature proceeds uniformly in accordance with natural laws," and also argued that "the omnipotence of God rests upon his wisdom and goodness and not upon blind power."⁴ Thomas Aquinas went further in establishing the difference between first and second causes and criticized those who, "made the mistake of attributing all action exclusively to God...denying that natural things perform by their proper powers, as though fire did not heat, but that God creates heat."⁵ Darwin would repeat this same reasoning repeatedly in letters to Gray on whether or not one could say certain or particular circumstances were preordained or designed. The writings of Isaac

³ Charles Darwin, *On the origins of species by means of natural selection, or the preservation of favoured races in the struggle for life*, ed. 1st, (London: John Murray, 1859): ii, 488.

⁴ Augustine of Hippo, *On the Trinity* (419). William E. Phipps, "Darwin and Cambridge Natural Theology," *Bios* 54, no. 4 (Dec., 1983): 218-227. See pages 220-221 especially.

⁵ Thomas Aquinas, *Summa contra Gentiles*, (1264). See William E. Phipps, "Darwin and Cambridge Natural Theology," 221.

Newton, also a student and later a professor at Cambridge, similarly resonated with Darwin as he developed his theory and religious beliefs.

Phipps notes that “through reading a biography of Newton Darwin first realized that science [was] explained by secondary, not ultimate causes.”⁶ Newton’s words on his astronomical discoveries, that “this most beautiful system...could only proceed from the counsel and dominion of an intelligent and powerful Being,” and moreover that “This Being governs all things, not as the soul of the world, but as Lord over all,” would be mirrored continually in Darwin’s own publications and letters.⁷ Darwin often compared his views to those of Newton in letters to Charles Lyell, and he argued a similar viewpoint in the notebook he kept in 1837, after his return from his voyage with the *Beagle*, when he stated, “Before the attraction of gravity was discovered, astronomers might have said God ordered each planet to move in its particular destiny. In the same manner God orders each animal created with certain forms in certain countries. But how much more simple and sublime to let attraction act according to certain laws.”⁸

Having read all of these as a student of Cambridge, Darwin was easily able to harmonize science with religion later on by placing God as the primary or First cause, followed by natural or secondary laws created by Him. This Creator then, following the writings of Thomas Aquinas and Newton especially, did not interfere in the everyday working of these secondary laws once put in place. Where Darwin’s theism was threatened was when questions of design and teleology were introduced. For example,

⁶ William E. Phipps, “Darwin and Cambridge Natural Theology,” 221.

⁷ Isaac Newton, *Mathematical Principles of Natural Theology*, (1687) in William E. Phipps, “Darwin and Cambridge Natural Theology,” 221.

⁸ Francis Darwin, *The Life and Letters of Charles Darwin, including an Autobiographical Chapter*, (London: Murray, 1887): 9.

though Paley believed like Darwin that theology and evolution were not inherently or necessarily in conflict, he did view nature and specific organs, especially the eye, as direct evidence of God's craftsmanship and overall design and purpose. Despite his otherwise agreement with Paley, and his foundations in Cambridge natural theology, Darwin only saw the working of secondary laws in nature, not the evidence of an overall Divine power or plan. Still, Darwin continued to maintain a belief in a First Cause, or an Intelligent Creator working and presiding over these secondary laws, and is again best explained as a theistic agnostic, or as Phipps has argued, a "reverent agnostic."⁹ An examination of Darwin's thoughts on design, chance, and suffering in nature are then in order. Though he did speak of these in his published works briefly, they are best viewed within the letters he exchanged with his friend, the Harvard botanist, Asa Gray.

While Darwin did discuss theology in conjunction with his scientific theories with colleagues and friends, especially Lyell, T.H. Huxley and J.D. Hooker, it was in letters to Asa Gray in which he spoke most personally and extensively. Darwin's words to Hooker in 1861 also imply that Gray was the most willing to indulge Darwin in lengthy arguments regarding religion, as when he writes, "I had a long letter about a week ago from Asa Gray, but I did not send it, thinking you would not care for it, as it almost wholly is on Design & quasi theological."¹⁰ Darwin also repeatedly told Lyell that though he was interested in his religious opinions, he should not trouble himself with extensive replies to religious matters should he not want to. Although it should be said, these polite sentiments from Darwin were often included in his letters to close friends and could also

⁹ William E. Phipps, "Darwin and Cambridge Natural Theology," 224.

¹⁰ Charles Darwin, letter to J.D. Hooker, February 4, 1861, *DCD* entry no. 3057.

be attributed to the fact that he was less likely to agree with Lyell on such issues. Compared to his comment in passing to Hooker, and the few letters he exchanged with Lyell, Darwin and Gray exchanged over fifteen letters on the subject in the years surrounding the publication of the first edition of *Origins*. Similarly, many of these letters are wholly or mostly devoted to the subject of design in nature and the role of chance. As James G. Lennox has argued, “it is through [this] long and intense correspondence, the results of which occasionally spill over into published books and reviews, that both Charles Darwin and Harvard botanist Asa Gray develop and sharpen their understanding of ‘chance,’ ‘natural selection,’ and ‘design.’”¹¹

What then did Darwin believe regarding chance and design? Francisco J. Ayala has recently claimed Darwin’s greatest discovery and accomplishment was in his ability to show that, “the complex organization and functionality of living beings can be explained as the result of a natural process—natural selection—without any need to resort to a Creator or other external agent.”¹² This of course directly contradicts William Paley’s claim that there could be no design without designer, and that throughout nature evidence of design and the Creator’s grand plan were visible. Similarly, Ayala makes the arguments that “the design of organisms as they exist in nature...is not ‘intelligent design,’ imposed by God as a Supreme Engineer or by humans; rather it is the result of a natural process of selection, promoting the adaption of organisms to their environment,” as well as that, “natural selection does not operate according to some preordained

¹¹ James G. Lennox, “The Darwin/Gray Correspondence 1857-1869: An Intelligent Discussion about Chance and Design,” *Perspectives on Science* 18, no. 4 (2010): 457.

¹² Francis J. Ayala, “Darwin’s Greatest Discovery: Design without Designer,” *Proceedings of the National Academy of Sciences of the United States of America* 104, In the Light of Evolution I: Adaptation and Complex Design (May 15, 2007): 8567-8573. See page 8567.

plan...does not have foresight; it does not anticipate the environments of the future.”¹³

Much of what Ayala states is true; Darwin did believe natural selection to be an independent law working in nature, free from interference, whether that interference be the theory of special creation or particular design. Believing in his theory of natural selection as fully as he did, it is not surprising that Darwin would balk at the idea that particular variations were designed rather than simply the effects of the workings of selection.

But Ayala’s arguments also oversimplify Darwin’s beliefs, which were not always so clean and clear cut. For example, Stephen J. Alter rightly notes the influence of David Hume on Darwin as he honed his thoughts on design and chance. Alter explains that Darwin read Hume’s *Dialogues concerning Natural Religion*, published in 1779, while on board the *Beagle*. Significantly this work did not reject theism, though it did critique the prevailing theories of natural theology. Hume questioned the idea that apparent design must ultimately come from a Supreme craftsman, implying as Darwin would later that attributing each and every thing, including negatives and evidences of suffering could be insulting to the Creator, and also importantly laid out the idea that nature could be explained ““through a long succession of ages, after multiplied trials, mistakes, corrections, deliberations, and controversies, [and] had been gradually improving.””¹⁴ While this is an important distinction, it is equally important to note that

¹³ Francis J. Ayala, “Darwin’s Greatest Discovery: Design Without Designer,” 8570, 8572.

¹⁴ Stephen G. Alter, “Mandeville’s Ship: Theistic Design and Philosophical History in Charles Darwin’s Vision of Natural Selection,” *Journal of the History of Ideas* 69, no. 3 (July 2008): 441-465. See pages 454-455 especially.

this did *not* necessarily signify a rejection of theism or equate to a universe without a Creator for Darwin, or for Hume.

Gray understood this distinction immediately, and was thus able to retain firm religious beliefs while also rejecting his previous belief in the immutability of species in favor of Darwin's theory of natural selection. Gray noted in his review of *Origins*, for example, "Darwin's hypothesis concerns the order and not the cause, the how and not the why of the phenomena." Since Darwin was discussing and focusing on secondary laws, and affirmed that "God is the primary cause of the universe and that natural law is 'the human conception of continued and orderly divine action.'"¹⁵ Phipps notes that it was because of this that Gray was able to support Darwin so fully while retaining his own religious beliefs, since Darwin's view of nature was theistic and since "Darwin's theism was distinguished from both pantheism, which identifies God with evolutionary force, and from atheism, which rejects an intelligent First Cause."¹⁶ The two mainly disagreed theologically "on the extent of design in nature," and it is through their correspondence on the topic that Darwin's often muddled theistic agnosticism becomes most clear.¹⁷

Early in their correspondence, Darwin outlined his theological beliefs and opinions on design and chance at length, "expressing his own puzzlement" and confusion and entreating Gray to expand upon his thoughts on the subject.¹⁸ In May of 1860,

¹⁵ Asa Gray, *Darwiniana*, (Cambridge, 1963): 122. See also William E. Phipps, "Asa Gray's Theology of Nature," *American Presbyterians* 66, no. 3 (Fall 1988): 167-175.

¹⁶ William E. Phipps, "Asa Gray's Theology of Nature," 170.

¹⁷ Ibid.

¹⁸ James G. Lennox, "The Darwin/Gray Correspondence," 464.

Darwin opens his letter to Gray with a few botanical questions, and then spends the majority of the rest of the letter attempting to explain his muddled thoughts. He writes:

I am bewildered... I own that I cannot see, as plainly as others do, & as I sh^d wish to do, evidence of design & beneficence on all sides of us. There seems to me too much misery in the world. I cannot persuade myself that a beneficent & omnipotent God would have designedly created the Ichneumonidæ with the express intention of their feeding within the living bodies of caterpillars, or that a cat should play with mice. Not believing this, I see no necessity in the belief that the eye was expressly designed. On the other hand I cannot anyhow be contented to view this wonderful universe & especially the nature of man, & to conclude that everything is the result of brute force.¹⁹

Darwin's scientific observations as a naturalist meant where previously he had assumed harmony and order in nature, he now saw suffering, misery, and chance variations. By dividing the role of the Creator as a First Cause from the secondary cause and workings of general natural laws like natural selection and gravity, Darwin was able to reconcile this. Both positive and negative effects in nature were left to the workings of these laws, and as such Darwin saw no need to reference the Creator in *specific cases of design*. It was not the existence of a Creator he questioned, but rather the notion that a Creator would interfere or preordain every adaptation or change in nature, since this would in turn interfere with his independent theory of natural selection. In the same letter Darwin expresses these thoughts saying:

I am inclined to look at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may call chance. Not that this notion *at all* satisfies me. I feel most deeply that the whole subject is too profound for the human intellect. A dog might as well speculate on the mind of Newton.— Let each man hope & believe what he can.—

Certainly I agree with you that my views are not at all necessarily atheistical. The lightning kills a man, whether a good one or bad one, owing to the excessively complex action of natural laws,—a child (who may turn out an idiot) is born by action of even more complex laws,—and I can see no reason, why a man, or other

¹⁹ Charles Darwin, letter to Asa Gray, May 22, 1860, *DCD* entry no. 2814.

animal, may not have been aboriginally produced by other laws; & *that all these laws may have been expressly designed by an omniscient Creator, who foresaw every future event & consequence.*²⁰

Though Darwin is clearly expressing confusion on the subject, admitting his thoughts are muddled and that this theological subject is “too profound” to comprehend, he is also clearly expressing a theistic foundation. Darwin makes a distinction between particular and general design, questioning whether particular design can be seen as evidence of the Creator. The concept of general design, however, hardly gives him pause. He closes the letter to Gray by writing he “can see no reason” why we may not believe these general laws, but not their particular consequences, can be deemed the creation and foreseen plan of the Creator.

Darwin would later comment to Lyell that though he accepted a Creator was above these general laws, and could have preordained all, it seemed unnecessary to refer to the Creator in scientific discussions and particular events. Darwin also affirms that he could never be considered an atheist since he is not content or satisfied to view the entire universe as the work of blind chance or brute force. Though general laws may produce particular instances of chance occurrences and variations, to argue that those same general laws and all of creation were not designed but the result of chance as well never suited Darwin. Darwin repeats similar thoughts in a letter of July that same year. Gray’s replying letter has not been found, but one assumes he was expressing similar thoughts on the subject as he did in the reviews he was preparing for *Origins* that same year. Darwin responds by writing, “I have just reread your letter: in truth I am myself quite conscious that my mind is in simple muddle about ‘designed laws’ & ‘undesigned

²⁰ Ibid. Italics mine.

consequences'.—Does not Kant say there are several subjects on which directly opposite conclusions can be proven true?!²¹ Darwin was responding to Gray's questions on the role of chance in variations of nature if Darwin did believe that general laws were created and preordained by the Creator. If he did believe such, Gray maintained, then questioning the purpose and overall beneficial nature of particular examples of design was insignificant. Gray in his review of Darwin's theory in the *Atlantic* warned Darwin that he could not accept this distinction that was so important to Darwin, arguing, "Wherefore, if we believe that the species were designed, and that natural propagation was designed, how can we say that the actual varieties of the species were not equally designed?"²²

While Darwin attempted to have his cake and eat it too, Gray continued to argue that specific cases of chance did not coincide with the belief that all of nature was designed according to God's plan. Gray went further when he noted, "...at least while the physical cause of variation is utterly unknown and mysterious, we should advise Mr. Darwin to assume, in the philosophy of his hypothesis, that variation has been led along certain beneficial lines."²³ In an 1863 letter, continuing the discussion of the topic with Darwin, Gray made an even clearer statement when he wrote, "Of course we believers in *real design*, make the most of your frank and natural terms, 'contrivance, purpose', &c'—and pooh-pooh your endeavors to resolve such contrivances into necessary results

²¹ Charles Darwin, letter to Asa Gray, July 3, 1860, *DCD* entry no. 2855.

²² Asa Gray, "Review of Charles Darwin, *On the Origin of Species*," *Atlantic Monthly* 6 (1860b): 406-425. Quote from page 414. See James G. Lennox, "The Darwin/Gray Correspondence," 463.

²³ *Ibid.*

of certain physical processes.”²⁴ Retaining some of the language of natural theology in his theory and allowing for design only on general terms was not satisfying to Gray as it was for Darwin.

Similarly, the argument that design could not be proven was equally unwelcome, as the alternative that nothing but the largest and most general laws could be viewed as evidence of Intelligent design was also not empirically provable. In Gray’s *Darwiniana*, a collection of his thoughts on Darwin and natural selection published in 1876, he concluded it with a chapter on design in nature, confirming Darwin’s theory “coincides well with the theistic view of Nature,” but warning again that “...it seems clear that design must in some way, and in some sense, pervade the system, or be wholly absent from it...The failure of a finite being to compass the designs of an infinite mind should not invalidate its conclusions respecting proximate ends which he can understand.”²⁵ He personally wrote to Darwin again on the topic and argued “there is design in nature or there is not.” The distinctions between particular and general or overall design were not enough for Gray. He continues, “...the implication of a designing mind must with it a strong implication of design in matters where we could not directly prove it. If you grant an intelligent designer anywhere in Nature, you may be confident that he has had something to do with the ‘contrivances’ in your Orchids.”²⁶ As Lennox notes, for Gray the language of chance had no place if one accepts any design, and furthermore that “it is

²⁴ Asa Gray, letter to Charles Darwin, March 22-30, 1863, *DCD* entry no. 4056. Italics Gray’s.

²⁵ Asa Gray, *Darwiniana*, (Cambridge, 1963): 311-313. See also William E. Phipps, “Asa Gray’s Theology of Nature,” 172.

²⁶ Asa Gray, letter to Charles Darwin, July 2, 1862, *DCD* entry no. 3637.

either chance or design—on Gray’s premises, there is no way to see them as playing complimentary roles in natural selection.”²⁷

But not allowing any place for chance in nature irked Darwin. He could accept general design over natural laws, and even that laws and the universe as a whole were evidence of a Creator, thus retaining his theism. Particular design and interference continued to puzzle him though, as seen in his comments to Gray in the same letter of July of 1860:

One word more on “designed laws” & “undesigned results”. I see a bird which I want for food, take my gun & kill it, I do this *designedly*.— An innocent & good man stands under tree & is killed by flash of lightning. Do you believe (& I really shd like to hear) that God *designedly* killed this man? Many or most persons do believe this; I can’t & don’t.— If you believe so, do you believe that when a swallow snaps up a gnat that God designed that that particular swallow shd. snap up that particular gnat at that particular instant? I believe that the man & the gnat are in same predicament.— If the death of neither man or gnat are designed, I see no good reason to believe that their *first* birth or production shd. be necessarily designed. Yet, as I said before, I cannot persuade myself that electricity acts, that the tree grows, that man aspires to loftiest conceptions all from blind, brute force.²⁸

Particular design seemed to leave no room for his theory and could not be scientifically and empirically proven to Darwin’s satisfaction. Chance variations over a long period of time were an essential part of natural selection. However, no Creator and no belief in design and overall purpose left Darwin with “blind, brute force” and atheism, and Darwin agreed with Gray that this was a similarly dissatisfactory way of viewing the world. As John C. Greene has noted, thus “so it went, around and around, in Darwin’s head—law

²⁷ James G. Lennox, “The Darwin/Gray Correspondence,” 467.

²⁸ Charles Darwin, letter to Asa Gray, July 3, 1860, *DCD* entry no. 2855.

and chance, chance and law.”²⁹ Equally, so it went, around and around, firm theism to doubt and agnosticism and back again. Darwin continued to be a confused muddle of opinions and he continued to wade through this muddle in his letters with Gray. In November of 1860, he repeated these sentiments and reluctantly came to the conclusion that he and Gray would not come to an easy understanding on the topic. Darwin writes:

But I grieve to say that I cannot honestly go as far as you do about Design. I am conscious that I am in an utterly hopeless muddle. I cannot think that the world, as we see it, is the result of chance; & yet I cannot look at each separate thing as the result of Design...you lead me to infer...“that variation has been led along certain beneficial lines”.—I cannot believe this....Again as I say I am, & shall ever remain, in a hopeless muddle.³⁰

Without room for the workings of natural selection by undesigned variations left to the workings of chance, Darwin felt his theory of natural selection became irrelevant and superfluous. Was it not enough to say that since particular cases of design could not be proven, they should be left as the result of natural selection without reference to a Creator? Though that Creator maintained his role as overseeing all workings of the world in accordance with his preordained design? Darwin pressed Gray again on these continually troublesome theological questions as late as 1868, when he expressed, “...I am aware that I am travelling beyond my proper province. An omniscient Creator must have foreseen every consequence which results from the laws imposed by Him. But can it be reasonably maintained that the Creator intentionally ordered...that certain fragments of rock should assume certain shapes so that the builder might erect his edifice?”³¹

²⁹ John C. Greene, “Darwin and Religion,” *Proceedings of the American Philosophical Society* 103, no. 5 (Oct. 15, 1959): 716-725. See page 720.

³⁰ Charles Darwin, letter to Asa Gray, November 26, 1860, *DCD* entry no. 2998.

³¹ Charles Darwin to Asa Gray, 1868, in F. Burkhardt, et. Al. (eds.), *The Correspondence of Charles Darwin*, 1985—. (Cambridge: Cambridge University Press): Volume 2, 431. See also James G. Lennox, “The Darwin/Gray Correspondence,” 472.

Thomas Henry Huxley, ever Darwin's bulldog, agreed with Darwin that particular cases of chance variations could be harmonious with an overall theistic belief in a Creator and beneficial design acted out through general laws. He noted that Darwin always referred these chance variations to "definite laws" and that "Darwin had in no way destroyed the teleological view of nature, since the element of design was simply transferred from the present structures of nature to the hidden system of laws, elements, and forces which had produced them."³² Darwin's confusion then is unsurprising; he saw no real cases of purpose in nature and argued design could not be proven, but maintained that natural selection and his own theistic agnosticism was consistent with a belief in overall design and a Creator's preordained purpose.

Gray remained resolute in his belief that such distinctions were insufficient. Within their correspondence Gray "eventually conceded the point...and no longer wrote of beneficial variations that have been providentially designed" at length.³³ For example, his letters to Darwin from 1862 on are marked by a reluctance to argue any further on the topic as there was little chance of agreement. In September of 1862 he wrote that he should be glad to remark on his opinions on Darwin's "Orchid book" but for the fact that it "opens up a knotty sort of question about *accident* or *design*, which one does not care to meddle with much until one can feel his way further than I can."³⁴ A year later he repeated similar sentiments when he declared, "I see afar trouble enough ahead quoad design in nature but have managed to keep off the chilliness by giving the knotty

³² John C. Greene, "Darwin and Religion," 720.

³³ William E. Phipps, "Asa Gray's Theology of Nature," 170-171.

³⁴ Asa Gray, letter to Charles Darwin, September 22, 1862, *DCD* entry no. 3736.

questions a rather wide birth. If I rather avoid, I cannot ignore the difficulties—ahead. But if I adopt your view bodily...can you promise me any less difficulties?”³⁵ Finally in 1868, he effectively closed any further lengthy discussions on design with Darwin by maintaining that “the notion of design must after all rest mostly on faith;” a notion that Darwin’s wife Emma had known would not sit well with Charles’ mechanical and scientific mind fifty years earlier.³⁶ Gray, having come to the same conclusion, notes that though he understands and feels the “weight” of Darwin’s continued arguments on the topic, “all I could do was to find a vulnerable spot in the shaping of it, fire my little shot, and run away in the smoke.”³⁷

These same letters are also indicative of Darwin’s views of suffering in nature, and the importance chance played in Darwin’s acceptance of theism and general or overall design. Compared to Gray, “Darwin took a much less cheerful view of the theological consequences of his theory,” and where natural theology was marked by harmony and design, Darwin often could not see past struggle and chance variations.³⁸ Lennox, while maintaining elsewhere that Darwin was teleological and theistic in his study of Gray and Darwin’s correspondence, seems to imply that Darwin’s continued opinion that chance played some part in variation and in the universe at large, made it harder for him to accept the rather negative outlook he had regarding the existence of

³⁵ Asa Gray, letter to Charles Darwin, September 1, 1863, *DCD* entry no. 4288.

³⁶ See Emma Darwin, letter to Charles Darwin, February 1839, *DCD* entry no. 471.

³⁷ Asa Gray, letter to Charles Darwin, May 25, 1868, *DCD* entry no. 6206.

³⁸ John C. Greene, “Darwin and Religion,” 719.

suffering and misery in nature, and as such “was almost certainly one of the most important factors driving Darwin towards agnosticism.”³⁹ I argue rather the opposite.

Certainly Lennox is correct in noting “the natural laws Darwin invokes depend on the presence of a great deal of ‘fluctuating’ variation that is mostly injurious, and overpopulation leading to pain and death on a massive scale.”⁴⁰ But he goes on to argue that Darwin pushed Gray to decide between a benevolent God and natural selection and that to Darwin the two concepts were mutually exclusive. Again, this topic could lead Darwin to “gloomy thoughts” of agnosticism at times.⁴¹ Later in life as he was writing his *Autobiography*, in a bout of such dark agnosticism and doubt, Darwin would claim:

A being so powerful and so full of knowledge as a God who could create the universe, is to our finite minds omnipotent and omniscient, and it revolts our understanding to suppose that his benevolence is not unbounded, for what advantage can there be in the sufferings of millions of the lower animals throughout almost endless time? This very old argument from the existence of suffering against the existence of an intelligent first cause seems to me a strong one; whereas, as just remarked, the presence of much suffering agrees well with the view that all organic beings have been developed through variation and natural selection.⁴²

Suffering did lead Darwin into times of doubt, and he often fluctuated between theism and agnosticism. But suffering did not obliterate his theism. Even on the next page of his *Autobiography*, Darwin confirms religious beliefs he had expressed to Gray, cited above, when he reiterated, “...I feel compelled to look to a First Cause having an intelligent

³⁹ James G. Lennox, “The Darwin/Gray Correspondence,” 475.

⁴⁰ *Ibid.*, 474.

⁴¹ John C. Greene, “Darwin and Religion,” 724.

⁴² Charles Darwin, Charles Darwin, *The Autobiography of Charles Darwin, 1809-1882*, ed. Nora Barlow (New York, London: W&W Norton & Company, 1958): 75. Hereafter *Autobiography*.

mind in some degree analogous to that of man; and I deserve to be called a Theist.”⁴³

Moreover, in regards to his discussions with Gray on design and chance, it is especially important to remember that the distinction between particular and general design meant Darwin could attribute suffering to chance.

Darwin expressed similar doubts and questions briefly with Charles Lyell as well. Darwin remarked to Lyell on their “quasi-theological” discussions in an 1860 letter.⁴⁴ His opening remarks on design and the role of the Creator again show how the argument of *particular* design gave him pause. He writes, “In the sense that an omnipotent & omniscient Deity must order & know everything, this must be admitted; yet in honest truth I can hardly admit it.”⁴⁵ Before it is argued that he left no room for a Creator ordering and overseeing his independent, secondary, natural laws, it is important to continue through to Darwin’s reasoning of why he finds it difficult to believe fully what he knows “must be admitted.”⁴⁶ He elaborates to Lyell:

It seems preposterous that a maker of Universes shd care about the crop of a Pigeon solely to please men's silly fancies. But if you agree with me in thinking such an interposition of the Deity uncalled for, I can see no reason whatever for believing in such interpositions in the case of natural beings, in which strange & admirable peculiarities have been naturally selected for the creature's own benefit.⁴⁷

Again it is clear that the particulars caused Darwin to hesitate in going as far as Gray and Lyell theologically when it came to design in nature. God being over the larger plan and

⁴³ Charles Darwin, *Autobiography*, 77.

⁴⁴ Charles Darwin, letter to Charles Lyell, April 15, 1860, *DCD* entry no. 2761.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

First causes did not trouble him, and thus he was content for his life to be called a Theist, tempered by times of Agnosticism. But the thought that God should interfere with, specially or independently create, or design the specifics of any natural organisms and phenomena was impossible for Darwin as the naturalist and mind behind natural selection to accept. Moreover, by attributing these examples in nature that others like Gray and Lyell took as evidence of God's design to his theory of natural selection and the changing of structures and species over time through "gradations," Darwin repeatedly argued that such theological language or consideration was superfluous to the topic at hand.⁴⁸ This is, however, not to argue that he did not pause to consider the theological implications for himself and potential readers, he clearly did. Nor can this be seen as evidence that he lost all Theism.

In continually making the distinction between particular and general design as evidence of a Creator, Darwin could maintain a balance, although precarious, between his doubts and his theism. In this way, the Creator of the world's natural laws, which through chance could lead to suffering, could continue to be the benevolent Creator of the natural theology championed by Paley and the positive Providence of Gray. As Phipps has argued, "the introduction of secondary causation as a substitution for the special creation doctrine...made the problem of suffering less burdensome" for Darwin.⁴⁹ I would add to this that the distinction between particular cases of design in nature as evidence of a Creator versus an overall preordained or designed plan, as well as leaving room for some chance, played an equal role in Darwin's ability to accept suffering and maintain his

⁴⁸ Ibid.

⁴⁹ William E. Phipps, "Darwin and Cambridge Natural Theology," 226.

theism. If God did not kill this *particular* man, or cause this *particular* earthquake, or kill these *particular* crops, for example, but rather they were viewed as chance variations of His secondary laws, then all things, even those negative ones that gave Darwin pause, could be attributed to His overall design and preordained plan of benevolence.

Unfortunately for friends like Lyell and Gray, this same logic meant Darwin was equally opposed to the idea that God created any *particular* variations in positive or beautiful natural examples like orchids or hummingbirds. These, like the negatives, were results of fixed laws alone, and the chance variations those laws led to. This necessary distinction kept Darwin from agreeing completely on the issue of design as evidence of a Creator with his colleagues Asa Gray and Charles Lyell. He concluded the letter to Lyell cited above, for example, by conceding that they would probably never fully agree noting, “The conclusion to which I have come, as I have told Asa Gray, is that such question...is beyond the human intellect, like ‘predestination & free will’ or ‘the origin of evil.’”⁵⁰ Part of Lyell and Darwin’s inability to agree completely on this religious issue can be understood through an examination of Charles Lyell’s conception of the spiritual as well as design, as compared to Darwin’s.

For example, a study of Charles Lyell’s most famous and influential work *Principles of Geology*, published in three volumes from 1830-1833, alongside the equally known poem *In Memoriam* by Tennyson, argues that it was Lyell’s ability to create a “stark, defensive rupture between the body and spirit,” or between the natural outer world, and spiritual inner one, that allowed him to accept natural selection alongside

⁵⁰ Ibid.

design as evidence of the Creator.⁵¹ Without creating such a divide, which his wife Emma had entreated him to do early on, it is hardly shocking that where Lyell was willing to leave certain aspects of nature and their connection to God on faith, Darwin was not. Michael Tomko goes on to note that though Lyell's work is normally described as the reasons for the religious doubt present in Tennyson's poem, since it is "often read as a source of overwhelming anxiety...[and] a baldly atheistic list of theories or a dreadful set of facts," a more appropriate way of viewing Lyell and his work is "as a complex, culturally aware, religiously astute text" and as a "'massive double treatise' that disrupts Judeo-Christian cosmogony founded on Biblical literalism but that reorients belief into a spiritualism in accord with a scientific ideology."⁵² In this way, Lyell was able to reconcile, with difficulty and not always completely it should be noted, his own natural and scientific discoveries with his inward religious convictions regarding the spirit of man and of God. For instance, as a geologist, Lyell was most troubled by reconciling his previous notions regarding the age of the earth and Biblical stories of creation with the evidence he viewed in the earth's layers regarding time.

Tomko argues that Lyell was able to overcome this by accepting that the "earth is limitless, infinitely complex, and inconceivably vast," while still revolving around a plan. For Lyell, "rather than a neat, comprehensible Earth from which one can extrapolate a neat, comprehensible maker, [his] God is unapproachably transcendent, beyond embodiment in language or thought."⁵³ Lyell himself remarks in the final volume of

⁵¹ Michael Tomko, "Varieties of Geological Experience: Religion, Body, and Spirit in Tennyson's *In Memoriam* and Lyell's *Principles of Geology*," *Victorian Poetry* 42, no. 2 (Summer, 2004): 113-134. See page 113.

⁵² Michael Tomko, "Varieties of Geological Experience," 114.

⁵³ Michael Tomko, "Varieties of Geological Experience," 120.

Principles, “To assume that the evidence of the beginning or end of so vast a scheme lies within the reach of our philosophic inquiries, or even of our speculations, appears to us inconsistent with a just estimate of the relations which subsist between the finite powers of man and the attributes of an Infinite and Eternal Being.”⁵⁴ Lyell was able to accept the limits of science and empirical knowledge and methods in regards to understanding religion and the existence of God. Tomko explains Lyell’s ability to divide and maintain a reconciliation between these potentially contradicting sides thus by noting, “Lyell exalt[ed] the moral nature of humanity as a spiritual entity roaming throughout the universe” and viewed the body as “a finite, confining shell that merely restricts flights of geological and spiritual quest.”⁵⁵ This division, or as Tomko calls it this “bifurcation,” paralleled for Lyell the “division between transcendent God and material universe and allow[ed] a consolation free from scientific disruption.”⁵⁶ In this way new scientific discoveries could be accepted by Lyell without harm to his sense of the spiritual or his designated role for God or the Creator in the workings of nature.

In other words, after a certain level of debate, Lyell’s questions about time, the age of the earth and design as evidence of the existence of God could be left open and taken on faith. Once they crossed from one side of this divide he kept, he viewed them in different ways and was thus able to maintain confidence in both his religious beliefs and his scientific theories and observations. Darwin, despite his efforts, never achieved such confidence in this as he failed to recognize the split between the physical and spiritual,

⁵⁴ Charles Lyell, *Principles of Geology*, 3 vols, 1830-1833, (Chicago: University of Chicago Press, 1991). See volume 3 pages 384-385.

⁵⁵ Michael Tomko, “Varieties of Geological Experience,” 121.

⁵⁶ Ibid.

looking at matters of the spirit in the same way he viewed natural questions of science and never accepting that something which exists and is worth believing in could not be proven.

This same perspective, of accepting the necessary and finite divide between the natural and supernatural, also obviously affected Lyell's views on design in nature within the letters he and Darwin exchanged. Though Darwin did not discuss theological issues with Lyell as much as he did with Gray, there are still a few letters which are noteworthy on the topic. For example, scholars like Michael Bartholomew have taken the fact that Darwin and Lyell approached the topic of design in nature, and more importantly its use as evidence of an Intelligent Designer or Creator, outlined above, as evidence that the issue meant less to Darwin than Lyell, or that Darwin did not and would not care about the theological implications of his theory and its effect on Lyell. This is highly unfair. Bartholomew in his study of Lyell's religion and reaction to evolutionary theories, for instance, writes, "such spiritual problems rarely troubled Darwin, and in the exchange of letters that followed the publication of the *Origin* there was no real engagement over the issues that troubled Lyell."⁵⁷ Bartholomew goes on to claim that "from Lyell's side came metaphysical questions that do not seem to have much interested Darwin," and that Darwin "offered Lyell neither comfort nor understanding."⁵⁸

Certainly Darwin could be persistent, and even ruthless, in pushing Lyell to believe in natural selection as whole heartedly as he did himself. He dismissed Lyell's

⁵⁷ Matthew Bartholomew, "Lyell and Evolution: An Account of Lyell's Response to the Prospect of an Evolutionary Ancestry for Man," *The British Journal for the History of Science* 6, no. 3 (June 1973): 261-303, see page 295 especially.

⁵⁸ Matthew Bartholomew, "Lyell and Evolution," 295.

fears that he was overstating the effect of or deifying his theory claiming, “I do **not** agree with your remark that I make N. Selection do too much work. –You will perhaps reply, that every man rides his Hobby-horse to death; & that I am in this galloping state.”⁵⁹

Years later, continuing to discuss Darwin’s theory and religion, Lyell in turn explained his opinion writing, “I cannot go Huxley’s length in thinking that natural selection and variation account for so much, and not so far as you, if I take some passages of your book separately.”⁶⁰ But Darwin was also always willing to discuss the issue in detail with his friend Lyell, and to imply that he did not take the religious implications the theory would have for Lyell to heart is misleading. Again, it has been shown above that the two men did approach the topic from different perspectives, Lyell more willing to embrace the spiritual and the unknown than Darwin, where Darwin sought to look at the scientific side, of the evidence and proof over any sort of personal spiritualism. Still, any difference of opinion did not come as the result of antagonism on Darwin’s part towards Lyell’s religious beliefs or towards religion overall.

Two letters Darwin wrote to Lyell on design in nature and its meaning are especially worth analyzing at length. In 1860, Darwin addressed the claims Lyell had made that he deified his theory, writing:

One more word upon the ‘Deification’ of Natural Selection. Attributing so much weight to it, does not exclude still more general laws i.e. the ordering of the whole universe. I have said that nat. selection is to the structure of organized beings, what the human architect is to a building. The very existence of the human architect shows the existence of more general laws; but no one in giving credit for a building to the human architect, thinks it necessary to refer to the laws by which man has appeared. No astronomer in showing how movements of Planets are due to gravity, thinks it necessary to say that the law of gravity was designed that the

⁵⁹ Charles Darwin, letter to Charles Lyell, October 3, 1860, *DCD* entry no. 2935.

⁶⁰ Charles Lyell, letter to Charles Darwin, March 11, 1863, *DCD* entry no. 4035.

planets shd. pursue the courses which they pursue.— I cannot believe that there is a bit more interference by the Creator in the construction of each species, than in the course of the planets.— It is only owing to Paley & Co, as I believe, that this more special interference is thought necessary with living bodies.⁶¹

Darwin's distinction here is important. The existence of a Creator and all the rationality of all theistic belief is not what he is debating with Lyell, and he expressly notes he is not suggesting Nature or his theory acted in the place of a Creator God as a Deity. It is rather the argument of particular design, and events in nature which Darwin believed were attributable to natural selection being claimed as evidence for the existence of such a Creator. Here Darwin argues that equating design with the preordained plan of the Creator implies interference with his theory of natural selection. Just as Newton was able to establish the law of gravity and astronomers the movement of the planets without reference to the workings of a Creator, so too did Darwin want to let natural selection and the working of variations and adaptations in nature stand alone.

While the existence of the Creator did not trouble Darwin, any interference with general laws or further explanation for them was deemed unnecessary, just as he said it was unnecessary to go beyond the architect of a building or beyond the law of gravity. Such religious and ultimately unempirical speculation had no place within Darwin's scientific perspective. Especially when discussing the issue with Lyell, the problem was not as some scholars have claimed, that Darwin was irreligious himself or insensitive to religious questions regarding the role of natural selection in nature, it was rather that in discussions of design Darwin failed to see nature as evidence of a God or a Divine plan. Darwin expands upon these thoughts in a letter to Lyell just one year later, claiming:

I have just said that I cannot agree with 'which variations are the effects of an unknown law, ordained & guided without doubt by an intelligent cause on a

⁶¹ Charles Darwin, letter to Charles Lyell, June 17, 1860, *DCD* entry no. 2833.

preconceived & definite plan'....If you say that God *ordained* that at some time & place a dozen slight variations should arise, & that one of them alone should be preserved in the struggle for life, & that the other eleven should perish in the first, or few first, generations; then the saying seems to me mere verbiage.— It comes to merely saying that everything that is, is ordained....Why should you or I speak of variation as having been ordained & guided more than does an astronomer in discussing the fall of a meteoric stone. He would simply say that it was drawn to our earth by the attraction of gravity, having been displaced in its course by the action of some quite unknown laws.— Would you have him say that its fall at some particular place & time was 'ordained & guided without doubt by an intelligent cause on a preconceived & definite plan'? Would you not call this theological pedantry or display? ⁶²

To be blunt, Lyell's opinion was that "everything that is, is ordained," a perspective which, since it could not be proven in specific cases, seemed irrelevant to Darwin. Where Lyell saw "a God who has complete foreknowledge of events in the inorganic world, but who seems to exercise no immediate control over those events," and maintained that both the inorganic and organic worlds were ultimately "in the long term directed providentially," Darwin saw no place for this language in the discussion of natural selection. ⁶³

Still, these distinctions often lead scholars into arguments that Darwin and his theory of natural selection left no room for a Creator and thus obliterated all of Darwin's theistic beliefs, leading him further into agnosticism and finally atheism. ⁶⁴ Certainly the topic caused Darwin to doubt more than any other, as seen in his closing words to Lyell in the same letter when he notes, "The conclusion which I always come to after thinking of such questions is that they are beyond the human intellect; & the less one thinks on them the better. You may say, then why trouble me? But I shd. very much like to know

⁶² Charles Darwin, letter to Charles Lyell, August 21, 1861, *DCD* entry no. 3235.

⁶³ Michael Bartholomew, "Lyell and Evolution," 287.

⁶⁴ Janet Browne, *Charles Darwin: The Power of Place*, 176. James G. Lennox, "The Darwin/Gray Correspondence," 475.

clearly what you think..”⁶⁵ Though these sentiments portray Darwin’s doubts on design as being evidence of the existence of a Creator, they also prove that he was invested in the religious implications of the topic and moreover the personal ramifications it would have for the feelings and beliefs of his friend Lyell, contrary to continued arguments that Darwin did not care for religion and was insensitive to the effects of accepting his theory. More importantly, these opinions must be taken together with Darwin’s further and more detailed discussion of design in nature with his American friend Asa Gray. In these letters, Darwin expanded upon the difference between particular and general design, and the role of blind chance in the universe. These sentiments prove that Darwin, though expressing doubts, did not lose all theistic belief, but rather wavered between theism and agnosticism, ending in the rather confused muddle of theistic agnosticism in which he began. Darwin’s thoughts on aesthetic pleasure and beauty in nature similarly strengthen this argument, and is the subject to which this thesis now turns.

⁶⁵ Charles Darwin, letter to Charles Lyell, August 21, 1861, *DCD* entry no. 3235.

CHAPTER FOUR

“I never saw anything so beautiful”: Sublime Wonder and Serene Appreciation, Darwin on Beauty and Aestheticism

Writing to his wife Emma, Charles Darwin once remarked, “The weather is quite delicious. Yesterday after writing to you I strolled a little beyond the glade for an hour & half & enjoyed myself –the fresh yet dark green of the grand Scotch Firs...& a fringe of distant greens from the larches, made an excessively pretty view.”¹ Darwin went on to set the scene at Moor Park where he was receiving hydropathic treatments for Emma: “At last I fell fast asleep on the grass & awoke with a chorus of birds singing around me, & squirrels running up the trees & some Woodpeckers laughing, & it was as pleasant a rural scene as ever I saw, & I did not care one penny how any of the beasts or birds had been formed.”² Though the scene is hardly the type of awe inspiring one Darwin experienced in the rainforests of Brazil, or in his readings of Humboldt’s *Tenerife Sea*, the enjoyment he takes from nature is clear, as is his appreciation for natural beauty and for the simple pleasures of the “ordinary” in nature.

Just a year before he would publish his theory of natural selection, this letter is indicative of the types of thoughts on beauty, in nature and art, which continued throughout Darwin’s entire life. His discussion of his mechanical mind within his *Autobiography*, and his explanation of the way he could focus on and take pleasure from

¹ Charles Darwin, letter to Emma Darwin, April 28, 1858, *Darwin Correspondence Database* entry no. 2261, <http://www.darwinproject.ac.uk/> (accessed April 1, 2015). Darwin Correspondence Database hereafter cited as *DCD*.

² Ibid.

nothing but science in his later years, has led many scholars to put forth misleading arguments that Darwin lost all higher feeling, all ability to appreciate art or beauty by the time he had established and published his famous theory of natural selection. As is the case with many subjects in Darwin's life, it is hardly as simple as that. While I will never argue that Darwin's words cannot be trusted, his extensive writings over his long life and the different mediums in which he presented himself mean that scholars must be wary of single comments before suggesting they are representative of Darwin's whole opinions on a subject. He is not contradictory, but subjects that confused or perplexed him, like religion, require a further analysis of what he said in his biographical writings, as compared to his private letters and published works.

Taking this perspective into account, this chapter will argue that Darwin hardly lost all aestheticism over time, and certainly not as early as the late 1830's when he was returning from his *Beagle* voyage or even in 1859 when the first edition of *On the origin of species* was published. This argument is especially important to the overall goal of this work to argue that Darwin is best viewed as a theistic agnostic, because his loss of elevated feelings is cited as evidence of his loss of all theism or religious belief by the same time in his life.³ While Fleming's work is a bit dated, it is especially important to address since he ties Darwin's loss of aesthetic pleasure and appreciation directly to his "loss" of all religious belief or theism. For Fleming, the loss is complete and total and is

³ Donald Fleming, "Charles Darwin, the Anaesthetic Man," *Victorian Studies* 4, no. 3 (Mar., 1961): 219-236. Fleming's work will be discussed at length but see also George Levine, "By Knowledge Possessed: Darwin, Nature, and Victorian Narrative," *New Literary History* 24, no. 2 (Spring, 1993): 363-391, also Gertrude Himmelfarb, *Darwin and the Darwinian Revolution*, (Garden City, New York: Doubleday, 1959): 42, A. Dwight Culler, "The Darwinian Revolution and Literary Form," in *The Art of Victorian Prose*, ed. George Levine and William Madden (New York: Oxford University Press, 1968): 232, Jonathan Smith, *Charles Darwin and Victorian Visual Culture*, (Cambridge: Cambridge University Press, 2006). See also L. Robert Stevens' discussion of these scholars in "Darwin's Humane Reading: The Anaesthetic Man Reconsidered," *Victorian Studies* 26, no. 1 (Autumn, 1982): 52.

thus evidence of a complete loss of theism for Darwin early on and certainly by the time *Origins* was first published, adding to the misconception that Darwin's religion was on a constant linear decline which ended in atheism. I completely disagree. The work of Jonathan Smith will also be discussed in this chapter. Though Smith does not argue much about Darwin's religious beliefs directly, he too assumes that all aestheticism was lost by Darwin at an early age, and thus implies that Darwin also lost his concern towards feeling much of anything beyond his interest in science. Like the work of George Levine, also discussed below, Smith's work is indicative of the continued belief in Darwin's affective decline set forth by Fleming.

In accessing and studying Darwin's private letters alongside his published remarks on beauty in nature and his own aestheticism, I will argue that Darwin experienced fluctuations in his aestheticism throughout his life much as he did between theism and agnosticism. Extending on the arguments set forth by L. Robert Stevens and Joseph A. Campbell, this chapter will establish that Darwin moved from moments of sublime wonder and awe in his early years to equally valid moments of serene calm, interest, and appreciation for the beauties of nature as an older naturalist focusing solely on scientific matters for decades at a time.⁴ His appreciation for art similarly continued, though it would switch mediums from poetry to the novel and music, and his early foundations within the movement of Romanticism can also be seen within his works and private writings through to the end of his life. The discussion of these topics which follows further bolsters the argument of this thesis that Darwin's religious beliefs

⁴ L. Robert Stevens, "Darwin's Humane Reading: The Anaesthetic Man Reconsidered," *Victorian Studies* 26, no. 1 (Autumn, 1987): 51-63. John A. Campbell, "Nature, Religion and Emotional Response: A Reconsideration of Darwin's Affective Decline," *Victorian Studies* 18, no. 2 (Dec., 1974): 159-174.

continued through to the end of his life as well, despite dark times of skepticism and doubt.

Darwin's loss of higher aesthetic appreciations is often connected in scholarship to his religious beliefs and their fluctuations, especially in his later life. Darwin himself commented on his loss of appreciation for aesthetic beauty and the inability of nature to move him to feeling later as an older man in his *Autobiography*, calling it his "curious and lamentable loss of the higher aesthetic tastes."⁵ He continues to note that music, poetry, and even, though to a lesser extent, the fine scenery of nature failed to move him as an older man, writing,

My mind seems to have become a kind of machine for grinding general laws out of large collections of facts, but why this should have caused the atrophy of that part of the brain alone, on which the higher tastes depend, I cannot conceive...and if I had to live my life again I would have made a rule to read some poetry and listen to some music at least once every week; for perhaps the parts of my brain now atrophied could thus have been kept active through use. The loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature.⁶

Earlier Darwin had remarked that he read Shakespeare with an "intense delight" and that the poetry of "Milton, Gray, Byron, Wordsworth, Coleridge, and Shelley gave him "great pleasure."⁷ If these are the only writings taken from Darwin's later life, than loss of much or all aestheticism is a tempting argument to make. As a young man seeing the world for the first time as a naturalist on board the *H.M.S. Beagle*, he had much open approval and admiration for the beauties of nature. For example, while sailing through

⁵ Charles Darwin, *Autobiography*, 112.

⁶ Ibid.

⁷ Charles Darwin, *Autobiography*, 111.

Botofogo Bay near Rio de Janeiro, Darwin commented in a letter to his former tutor at Cambridge, as well as friend and fellow naturalist, W.D. Fox:

My life when at sea, is so quiet, that to a person who can employ himself, nothing can be pleasanter. —the beauty of the sky & brilliancy of the ocean together make a picture.—But when on shore, & wandering in the sublime forests, surrounded by views more gorgeous than even Claude ever imagined, I enjoy a delight which none but those who have experienced it can understand.⁸

Darwin's words here show that nature and beauty indeed did move him to feeling as a young man, and that he took delight in the scenes he saw. Even as Darwin began to develop his theory of natural selection in these early years, his appreciation for aesthetic beauty and the beauty of the natural world continued as a source of pleasure. That same year Darwin wrote to his friend John M. Herbert of his "delightful" weeks in the tropics, noting, "I shall never forget the sublime impression, the first view of Teneriffe made on my mind."⁹ Darwin had written to his sister Susan a year earlier claiming, "I never will be easy till I see the peak of Teneriffe and the great Dragon tree; sandy, dazzling, plains, and gloomy silent forest are alternately uppermost in my mind."¹⁰ If his letter to Herbert is anything to go by, the tropics clearly lived up to Darwin's high hopes.

Six years later in 1838, Darwin echoed similar feelings in a letter to his friend Charles Lyell. Darwin was relaying his adventures on what he called his "Scotch expedition" to Lyell, hoping to discuss in person and at length the scientific notes and discoveries he had made whilst in "the most remarkable area I ever examined." He wrote that he "wandered over the mountains in all directions & examined that most

⁸ Charles Darwin, letter to W.D. Fox, May 1832, *DCD* entry no. 168.

⁹ Charles Darwin, letter to J.M. Herbert, June 1-6, 1832, *DCD* entry no. 172.

¹⁰ Charles Darwin, letter to Susan Elizabeth Darwin, April 28, 1831, *DCD* entry no. 98.

extraordinary district,” where he “enjoyed five days of the most beautiful weather, with gorgeous sunsets, & all nature looking as happy as I felt.”¹¹ Darwin’s exclamations that the area was “gorgeous” and “remarkable” and that he enjoyed his time there are indicative of the way he described nature and its ability to move him to extreme pleasure and elevated feeling, especially as a younger man, even going so far as to personify nature as “happy.”

Taken together, these examples of Darwin’s early appreciation for the beauties of nature as well as nature’s ability to elevate his feelings, also prove Gillian Beer’s argument that scholars cannot argue Darwin “never had a strong aesthetic sense.”¹² His early aestheticism is quite clear in both his private letters and later in his *Autobiography*. Beer rightly notes, for example, that throughout Darwin’s retelling of his early experiences with nature in the *Autobiography*, he favored words like “delight” and “intense pleasure” and “exquisite” to express the feelings natural beauty gave him, whereas his acknowledgement in his decrease in pleasure when viewing natural beauty was marked by “rueful amusement” all the way to “deep regret.”¹³ His aestheticism was also influenced by his readings in the Romantic tradition. For example, a passage from Darwin’s *Voyage of the Beagle*, in which Darwin recounts his feelings whilst climbing mountains in Chile, shows the “emotional responsiveness” of Darwin when encountering “the sublime in landscape,” and as Beer goes on to argue, is reminiscent of many

¹¹ Charles Darwin, letter to Charles Lyell, August 9, 1838, *DCD* entry no. 424.

¹² Gillian Beer, “Darwin and Romanticism,” *The Wordsworth Circle* 41, no. 1 (Winter, 2010): 3-9. See page 6 especially.

¹³ Gillian Beer, “Darwin and Romanticism,” 6.

Romantic writers in portraying the sublime as “natural, un-peopled, with a hint of the sacred,” described by a “solitary and only spectator, alone in a romantic landscape.”¹⁴

In similar fashion to the private letters cited above, Darwin portrays the scene thus, “When we reached the crest and looked backwards, a glorious view was presented...the sky an intense blue; the profound valleys;...the bright-coloured rocks contrasted with the quiet mountains of snow; all these together produced a scene no one could have imagined.”¹⁵ Darwin’s adjectives allude to the “intense” and “profound” feelings that this natural beauty excited in him. And his connection of the sublime in nature to more religious or theistic feelings is more evident when he continues, “I felt glad that I was alone; it was like...hearing in full orchestra a chorus of the *Messiah*.”¹⁶

These letters and excerpts from *Voyages* not only show just a few examples of Darwin’s early admiration for the beauty of nature, but are also reminiscent of Darwin’s descriptions in his *Autobiography* of what he felt while exploring the rainforests of Brazil during his time with the *H.M.S. Beagle*. Contained within the section of the *Autobiography* entitled “Religious Belief,” Darwin reminisces that, “In my Journal I wrote that whilst standing in the midst of the grandeur of a Brazilian forest, ‘it is not possible to give an adequate idea of the higher feelings of wonder, admiration, and devotion which fill and elevate the mind.’ I well remember my conviction that there is

¹⁴ Ibid., 3.

¹⁵ Charles Darwin, *Narrative of the surveying voyages of His Majesty's Ships Adventure and Beagle between the years 1826 and 1836, describing their examination of the southern shores of South America, and the Beagle's circumnavigation of the globe. Journal and remarks. 1832-1836*. 1st ed. (London: Henry Colburn, 1839): 394. Hereafter cited as *Voyages*.

¹⁶ Charles Darwin, *Voyages*, 394.

more in man than the mere breath of his body.”¹⁷ Darwin’s wonder and admiration noted in his Journal and again in the *Autobiography* mirror the delight he expressed in letters to close friends like those to Charles Lyell and W.D. Fox quoted above. These words are also high praise for Darwin, who though “quite orthodox whilst onboard the *Beagle*,” goes on in the same passage to lament that though “formerly led by feelings such as those just referred to,” both in regards to his religious beliefs and higher aesthetic tastes, “now the grandest scenes would not cause any such convictions and feelings to rise in my mind.”¹⁸ Clearly Beer is right to note that an argument that the sense of the aesthetic or the ability to take pleasure from natural beauty was never firmly established in Darwin is correct. But other scholars have also posited that these early examples faded into anaesthesia by the time Darwin returned home and certainly by the time he developed and published his theory of natural selection.

Scholars like Fleming who argue within this tradition cite Darwin’s gradual loss of appreciation and wonder when viewing such grand scenes of nature, and their subsequent inability to move him internally, from his thoughts on the subject in his *Autobiography*. Within the same section that includes Darwin’s early memories of wonder when viewing nature, he goes on to note:

Therefore I cannot see that such inward convictions and feelings are of any weight as evidence of what really exists. The state of mind which grand scenes formerly excited in me, and which was intimately connected with a belief in God, did not essentially differ from that which is often called the sense of sublimity; and however difficult it may be to explain the genesis of this sense, it can hardly be advanced as an argument for the existence of God, any more than the powerful though vague and similar feelings excited by music.¹⁹

¹⁷ Charles Darwin, *Autobiography*, 76.

¹⁸ Ibid.

¹⁹ Ibid.

These seemingly apathetic feelings in regards to nature and the arts, due to his loss of higher aesthetic tastes, were certainly a far cry from the joyous and delighted tones of Darwin's earlier letters as he observed nature in Brazil especially. Fleming takes such sentiments of Darwin's memories written out in the *Autobiography* when he describes Darwin as someone who knows they "cannot feel" and is "afraid to feel," and thus becomes "joyless, parched, and worn-out."²⁰ Fleming goes on to argue two things as certain, one being Darwin's "progression from naïve faith to abandonment of religion," what he calls one of the "ground-notes of [Darwin's] private experiences," and second the related "estrangement from the arts."²¹

Darwin's continued enjoyment of novels is trivialized, and Fleming goes on to note that as he lost his appreciation of art and poetry, Darwin experienced a "loss of power to feel intensely."²² Science also affected his view of the beauties of nature, because he had in discovering and learning natural laws taken away the mystery and was thus just parroting back what he read of the Romantic poets as a young man. The analysis of Darwin's letters, continuing throughout his later years as well, proves rather the opposite. Darwin continued to be awed by nature, even the ordinary facets of nature he viewed at Down as opposed to his treks in the Andes. Moreover, Fleming contradicts his earlier arguments when he writes Darwin was conscious of his natural inclination towards the same intense feelings Fleming argues he lost. Darwin, he writes, sought novels for

²⁰ Donald Fleming, "Charles Darwin, the Anaesthetic Man," 220.

²¹ Ibid., 224.

²² Ibid., 224.

pure enjoyment and avoided unhappy endings expressly because of his “already keen sensitivities” that were easily exacerbated by suffering or tragedy.²³

Of greater importance to the work of this thesis, however, is Fleming’s connection of Darwin’s loss of higher or intense feeling with his total loss of religious beliefs. The landscapes Darwin viewed during his time with the *Beagle* were his “most powerful experience of ‘the sublime,’” which was associated “by Darwin with an upwelling from the depths of the spirit that appeared to set reason aside and prevail over it.”²⁴ Thus, the sublime came to be associated in Darwin’s mind to religion, and “scenic grandeur” especially was able to incite in him this “reverence, devotion, and worship.”²⁵ Fleming rightly notes Darwin’s connection between his religious beliefs and the feelings of sublime awe he felt when viewing the wonders of nature, but in basing his argument on Darwin’s published *Autobiography*, and not examining the continuation of such feelings, though sometimes tempered depending on the subject (barnacles could hardly compare to Brazilian rainforests even to the most dedicated scientist), in Darwin’s private writings, he oversimplifies Darwin’s complex thoughts on natural beauty as evidence of a Creator and his own religion in general.

Take for example Fleming’s argument that “the mature Darwin moved away from art because he was continually moving away from religion.”²⁶ The entire basis of this argument is Darwin’s loss of intense feeling and appreciation for beauty, which I will argue below is overstated. Moreover, Fleming explains that the only way Darwin could

²³ Ibid., 229.

²⁴ Ibid., 226.

²⁵ Ibid., 226.

²⁶ Ibid., 227.

truly maintain the integrity of his theory of natural selection was to abandon all religion, which is clearly untrue. Again Fleming contradicts himself and writes that the “deeply sensitive” Darwin until the end could only understand the place of suffering in nature through his total “repudiation of religion.”²⁷ Fleming claims this “total repudiation” only in passing though, and does not provide much analysis of it besides his inclusion of Darwin’s thoughts in the *Autobiography*. I would argue that Fleming also completely misunderstands Darwin’s ability to maintain a belief in a Creator and his belief in his theory in tandem with each other and without contradiction. He claims, for example, that for Darwin “a God that dwelt in natural selection would be the worst of all possible Gods,” because it would mean he was no longer the Benevolent God that Darwin’s sensitive character sought.²⁸ It would be rather a capricious or apathetic Deity who cared not for the sufferings of man and nature. But this is not how Darwin viewed God or natural selection, and tellingly Fleming does not cite any remarks by Darwin that could insinuate such an argument. Darwin did despise suffering, but natural selection was a completely independent, natural, and secondary law. Secondary to the primary or First cause of the Creator who was not directly interfering or condoning such consequences of these secondary laws, but rather presiding over them according to a larger plan.

Fleming also implies that Darwin was satisfied with the idea that suffering meant the world had no Creator and was the result of “brute and ungrounded” consequences, which the previous chapter has argued to be completely untrue.²⁹ Chance bewildered

²⁷ Ibid., 231.

²⁸ Ibid., 231.

²⁹ Ibid., 231.

Darwin, and undesigned consequences or variations caused him confusion, but he repeatedly remarked that despite his doubts, this could never be enough to send him completely away from theism into atheistic thoughts that the entire world was the result of blind or brute force. In basing his arguments solely on Darwin's remarks in his *Autobiography*, Fleming argues that Darwin lost completely his ability to appreciate beauty in nature or experience intense feelings of sublime wonder. Moreover, he argues, since this sublime wonder led Darwin into reverent thoughts towards a Creator and belief in a higher purpose as a young naturalist experiencing Brazilian rainforest and Chilean mountains, this loss of the sublime equates to a total loss of religion for Darwin by the time he developed his theory of natural selection.

It is true that Darwin was less likely to succumb to moments of sublime awe where he could set aside the rational for feeling. As a naturalist working on the same theory for decades, his mind did become more mechanical and rationally focused. But scholars like Fleming also continue to miss the interest, wonder, and delight Darwin expressed when studying the ordinary in nature. His language did change in intensity, but it should be noted that Darwin wasn't trekking through the snow capped peaks of the Andes or the rainforests of Brazil, he was studying barnacles, earthworms, and pigeons from his own home at Down. The same type of elevated language and feeling can hardly be expected, and yet it did persist through his later life! Just as times of agnosticism could not tamper out all theism, so too did senses of sublimity, wonder and reverence continue for Darwin when he observed natural beauty, as well as art, even when coupled with an empirical focus.

George Levine, though presenting a much more complex argument than Fleming, has also recently written in the same tradition that Darwin became a type of anaesthetic man, sacrificing the intense feeling as a young man to scientific rationality when viewing the wonders of nature as an aged naturalist. Like Fleming, Levine is similarly contradictory in just how far this process was successful for Darwin, and what this process meant for his religious beliefs. Citing Darwin's remarks on the mechanical "grinding" of his brain in his later years from his *Autobiography*, Levine argues that in the Romantic traditions of Robert Browning's annihilation of the "self" or John Keats's negative capability, in pursuit of true and pure knowledge, Darwin had to set aside all feeling. Thus, Levine writes, "Darwin's intellectual development, his self-descriptions, his theory of natural selection—all suggest how fundamentally the Western myth of knowledge led him in the direction of negation of the feelings, denial of the humanity of the perceiving self."³⁰ Levine goes on to note that in order for Darwin to become an independent observer of nature, for him "to know nature," he had to "make it alien, perceive it as fundamentally other, and deny [his] own desire[s]."³¹

But Levine rightly, though ambiguously and in contradiction with previous arguments in his article, notes that this denial of the self and of pleasure for the arts or wonder for nature can only be traced so far with Darwin and was never as complete as has been assumed. In the same paragraph in which he agrees with Fleming, he goes on to note Darwin's continued "pleasure in nature, which remained marvelous to him down to

³⁰ George Levine, "By Knowledge Possessed: Darwin, Nature, and Victorian Narrative," 375.

³¹ George Levine, "By Knowledge Possessed," 370.

his last days.”³² Clearly all feeling and appreciation for beauty, at least natural beauty, continued despite the anaesthetic process of removing all feeling in favor of rationality. Levine repeats that “if anything is permanent in Darwin’s evolving world, it is this sense of the marvelous,” and that “wonder was the beginning and end of Darwin’s work.”³³ Still, like Fleming, he seemingly trivializes this continued wonder and pleasure in nature by arguing it was a shallow remnant of his younger years and fervent exclamations as an observing naturalist on the *Beagle*. He argues that “beginning with wonder at the marvels of nature, Darwin goes on to take his pleasures from the explanations of it” alone.³⁴ In attempting to throw off the tradition of natural theology, Darwin’s pleasure in nature was merely a rational interest in explaining the “trivial, ordinary [and] unnoteworthy” to be wonderful, according to Levine.³⁵

Again, it should be noted that the intensity of Darwin’s language would change with the change of subject being observed. However, Darwin’s letters show his Romantic appreciation for the beauties of nature, and the pleasure he felt at observing the wonders of nature did continue. Nature did continue to leave him in awe, and though earthworms and cirripedes may not have excited the same level of sublimity within him, he took more than a surface, rational interest in the workings and wonders of nature throughout his life. The connection made between Darwin’s aestheticism and religion is important then. A gradual decline into an anaesthetic man coinciding with a gradual and linear decline in all religious beliefs is an appealing argument in that it is clear and simple. But in looking

³² Ibid., 377.

³³ Ibid., 378-379.

³⁴ Ibid., 378.

³⁵ Ibid., 378.

beyond just the published works and thoughts of Darwin, it becomes evident that times of doubt or a lessened degree of feeling did not obliterate either all of Darwin's ability for aesthetic pleasure, nor did it cause him to repudiate religion completely. Rather than linear depreciation, Darwin's relationships with religion as well as beauty and his emotions are better described as continual fluctuations, or a complex flux and flow of seemingly contradictory beliefs which he maintained throughout his life. Theism never weighed out all agnosticism and vice versa; so too did moments of intense feeling fade to calmer appreciation and back again.

Jonathan Smith examines Darwin's supposed loss of aesthetic pleasure in detail in his recent work *Charles Darwin and Victorian Visual Culture*.³⁶ Smith's largest concern throughout the book is describing how Darwin manipulated and utilized Victorian visual conventions that had long been dominated by natural theology and Paley's theories into something which would work well for his theory of natural selection, in print and within images. For example, Smith notes that in England, "William Paley's functionalist natural theology had ensured that depictions of animals in nature were seen as confirmations of Providential wisdom, goodness, and power – animals and their various anatomical features were divinely designed to occupy particular niches in the natural economy."³⁷ The issue Darwin had with the outlook Paley took is obvious; in nature his continued observations and, as he called it, the grind of his mechanical brain, meant that where Paley saw the plan of Providence and evidence of a Creator, Darwin saw instead the workings of natural general laws, laws which included much suffering, violence, and

³⁶ Jonathan Smith, *Charles Darwin and Victorian Visual Culture*, 11.

³⁷ Ibid.

often the random effects of chance. Darwin, like T.H. Huxley and John Tyndall, emphasized scientific naturalism over natural theology and sought to explain “every conceivable natural phenomenon...as the result of physical causes.” This perspective included for Darwin the moral and aesthetic tastes of humanity, which infuriated artists like John Ruskin. Also, despite warnings from his wife, cited below, as well as those from friends like Lyell, Darwin took this perspective into his religious interpretation of nature. Rather than seeing evidence of a plan, Darwin argued that “flowers and fruit were not provided by a beneficent Creator for our pleasure and sustenance; they resulted from natural selection.”³⁸ Darwin was on similar ground when discussing the coloration of hummingbirds and the opinions expressed by the Duke of Argyll. Argyll argued in his *Reign of Law* that the colorful plumage of hummingbirds was mere ornament and “served no utilitarian purpose and thus could not be the result of natural selection.”³⁹ Moreover, Argyll argued that beauty existed for beauty’s sake, and that the source of this beauty in nature was Divine.

Within *Origins* Darwin had argued that the coloration did serve a purpose by making males more attractive to female hummingbirds, and thus increased their reproductive success. Thinking only of the relevance of color and ornamentation in regards to his theory of natural selection, Darwin failed to see beauty in nature for purely aesthetic reasons, and furthermore failed to connect it in any way to being evidence of a Creator. Take for examples Darwin’s remarks on the subject in an 1867 letter to the clergyman and fellow author Charles Kingsley. Relating his opinion on the Duke’s book

³⁸ Ibid., 27.

³⁹ Ibid., 97.

to Kingsley, Darwin goes so far as to say, “With respect to the Deity having created objects beautiful for his own pleasure, I have not a word to say against it but such a view could hardly come into a scientific book.”⁴⁰ Again, as an older man Darwin’s need to preserve the independence of his theory and to argue against direct theistic interference in the workings of nature, led him to pursue the argument in a one-sided manner, leading many in his personal life, as well as scholars today to mistakenly believe he lost all appreciation for beauty because it had no role in his scientific work, and thus that he also lost all real theistic beliefs. Charles Lyell conversely, could see both sides of the argument, writing to Darwin that Argyll assumed “far too confidently that the colours of the humming-birds are for mere ornament and beauty,” but going further to say that he had “no objection to the idea of beauty or variety for its own sake.”⁴¹ He also agreed with Argyll’s warning that perhaps “variation or natural selection cannot be confounded with the creational law without such a deification of them as exaggerates their influence.”⁴² In only looking at nature through his theory, Lyell maintained, Darwin ran the risk of exaggerating its results and effects, and moreover of missing out on the opposite side of nature, of its beauty and reflections of the Divine.

What is most interesting in regards to the ambition of this thesis to argue that Darwin is best classified religiously as theistic agnostic is that this loss of higher aesthetic appreciation and Darwin’s supposed loss of wonder when viewing the beauties of nature, did not obliterate all theistic convictions. Yes, he rejected *particular* design as evidence of a Creator, but less because he refused to believe there could be a Creator and more

⁴⁰ Charles Darwin, letter to Charles Kingsley, June 10, 1867, *DCD* entry no. 5567.

⁴¹ Charles Lyell, letter to Charles Darwin, January 16, 1865, *DCD* entry no. 4746.

⁴² *Ibid.*

because he simply could not see nature without his scientific perspective in his later years. As Emma would warn, he was viewing the issue from one side only, and she was right to warn him. Still not all theism was lost. This is especially strengthened by his rejection of the alternative of believing in a Creator, the belief that his beloved natural laws were the result not of a divine plan but of blind chance and the effects of the brute force of a violent world. Just as he rejected natural theology, so he rejected atheism. And so he continued to fluctuate between theism and agnosticism and back again, between the outright rejection of design as a confirmation of the Creator and the confusion and dissatisfaction that this rejection brought on.

Such sentiments are noteworthy in light Emma's letter to Darwin just a year after their marriage, quoted in the Introduction of this thesis, and repeating fears she had addressed with him via correspondence before they were married. It is worth quoting here, for Darwin views the issues of religion and inward feeling very much in the way Emma feared he would, as something to be proven and empirically tested, which she rightly worried would lead to a loss of conviction in her husband. Emma opens her letter by writing:

The state of mind that I wish to preserve with respect to you, is to feel that while you are acting conscientiously & sincerely wishing, & trying to learn the truth, you cannot be wrong; but there are some reasons that force themselves upon me & prevent my being always able to give myself this comfort. I dare say you have often thought of them before, but I will write down what has been in my head, knowing that my own dearest will indulge me. Your mind & time are full of the most interesting subjects & thoughts of the most absorbing kind, viz following up yr own discoveries—but which make it very difficult for you to avoid casting out as interruptions other sorts of thoughts which have no relation to what you are pursuing or to be able to give your whole attention to both sides of the question.⁴³

⁴³ Emma Darwin, letter to Charles Darwin, February 1839, *DCD* entry no. 471.

Emma is warning Darwin about viewing issues as being one sided and always able to be empirically tested, and furthermore to view anything other than the scientific question he was considering and studying as not being worth his attention. As a religious woman herself, this pained Emma, since she knew many aspects of religion must be taken on faith and that Darwin's empirical focus might lead him into doubts and feelings which she would not be able to comprehend easily. Emma continues in the same letters to expand upon these fears:

It seems to me also that the line of your pursuits may have led you to view chiefly the difficulties on one side, & that you have not had time to consider & study the chain of difficulties on the other, but I believe you do not consider your opinion as formed. May not the habit in scientific pursuits of believing nothing till it is proved, influence your mind too much in other things which cannot be proved in the same way, & which if true are likely to be above our comprehension.⁴⁴

Emma's second sentence in this passage is especially worth noting. Not only did she fear Darwin would view religious issues as being one sided and thus possibly easily dismissed by him, she also rightly worried that the habitual and daily use of his mind for purely scientific purposes would leave him unable to see religious questions, matters like prayer and revelation taken on faith and not empirical especially, with the same understanding and perspective as she would.

Ironically, Darwin himself remarked on this possibility in a letter to his sister Susan just months before leaving for his expedition with the *Beagle*, noting, "I begin to think Natural Hist: makes people Egotistical."⁴⁵ Unlike his wife, Darwin could not be satisfied with things "likely to be above our comprehension" or things unable to be proven, such as internal feelings and convictions. Darwin distrusted these feelings more

⁴⁴ Ibid.

⁴⁵ Charles Darwin, letter to Susan Elizabeth Darwin, April 28, 1831, *DCD* entry no. 98.

and more as he lost his appreciation for the higher aesthetic tastes, and especially distrusted their use as proof of existence of a God as he had seen that throughout different countries and cultures, internal convictions led people to vastly different Gods and religions.⁴⁶ This would inevitably prove to disconnect Darwin from the internal and personal side of his religion in many ways. Internal convictions and feeling, particularly their connection to beauty in nature and its use as evidence of the existence of God, would also serve to disconnect him from his colleagues Asa Gray and Charles Lyell, who while believing in Darwin's theory of natural selection, maintained a firmer belief in a Creator and in the spiritual.

But this side of Darwin has also been overemphasized. L. Robert Stevens also addresses the thesis of Donald Fleming, discussed earlier, that "Darwin dissociated himself from art because he identified art with religion and thought of religion as an ideological justification for pain."⁴⁷ Going against this, I agree with Stevens that based on aestheticism and art, "even though there was a diminishment in Darwin's reading of poetry...there was not an anaesthesia," and that "it is time to alter the claim that Darwin was an anaesthetic specialist getting on with his job in an intellectual vacuum."⁴⁸ Stevens argues correctly and though he focuses on Darwin's continued appreciation of the higher arts, certainly worth discussing, and on Darwin's notebooks more so than his private letters, his arguments are also enlightening regarding Darwin's continued pleasure and higher feelings when witnessing natural beauty and phenomena as well as in regards to a

⁴⁶ See especially Charles Darwin's comments on this on page 75 of the *Autobiography*.

⁴⁷ L. Robert Stevens, "Darwin's Humane Reading," 52.

⁴⁸ *Ibid.*, 52-53.

study of his private writings. Both Stevens's work, as well as my own, show a basis of the *Autobiography* as the only source for Darwin's anaesthesia and loss of all intense or religious feeling is misleading and incorrect. For example, the notion that Darwin lost aesthetic appreciation simply because he did not enjoy the higher arts is subjective and implies he did not appreciate much or any art as an older man because he did not have the emotional capacity to do so. Stevens has shown successfully though that Darwin continued throughout his life to record his readings of literary and formal essays, "indeed a high art, and at its best, a humane one," including for example John Henry Newman's *On the Soul* and *Phases of Faith*.⁴⁹ He consumed dozens of biographies, including those of Bunyan, Byron and Goethe. And his "continuing love for novels" is readily acknowledged by even those scholars that maintain he lost all artistic appreciation and pleasure.⁵⁰

Darwin himself remarked in the *Autobiography* without any feeling of contradiction that he lost his aesthetic tastes while continuing his deep love of novels. Within the same page in which he describes the grind of his mechanical mind based on laws and facts, cited above in his words and Emma's, Darwin writes, "novels, which are works of the imagination, though not of a very high order, have been for years a wonderful relief and pleasure to me, and I often bless all novelists. A surprising number have been read aloud to me, and I like all if moderately good, and if they do not end unhappily."⁵¹ Darwin's heightened sensitivity to feeling and drama should be noted in his

⁴⁹ Ibid., 55.

⁵⁰ Ibid., 56.

⁵¹ Charles Darwin, *Autobiography*, 113.

avoidance of unhappy endings and novels where the protagonist was not lovable. Though noting his enjoyment of novels, scholars have taken Darwin's disclaimer that novels were of a lower order and not proof of lingering aestheticism too literally.⁵² As Stevens notes, it is highly probable that Darwin was "merely repeating a modish critical cliché of the times, and that in the novel, his aesthetic tastes did in fact endure to some considerable degree." His reading lists and continued remarks throughout his private writings that he enjoyed immensely the times his wife and daughters read aloud to him, and Darwin's contradiction in not including this enjoyment as part of his continued aesthetic tastes "may be...nothing more than conceding the notion, fashionable in his day, of the novel as inferior literature."⁵³

Stevens makes the similarly interesting argument regarding what is viewed as the "loss" of aestheticism for Darwin based on his lack of depreciation for poetry that scholars should rather wonder he read as much as he did "and that he wished he had not ceased," since he was "grievously ill in the last decades of his life" and lamented often his lack of time and energy for anything, even for his beloved science.⁵⁴ It should be noted here that one of the reasons his love of novels was able to persist so was because they were read aloud to him, especially when he was ill.

Darwin also maintained an appreciation and love of music, which Fleming argued he connected to his feelings of the sublime and intense wonder and awe when viewing

⁵² See Janet Browne, *Charles Darwin: The Power of Place*, (Princeton, New Jersey: Princeton University Press, 2002): 68-70, Donald Fleming, "Charles Darwin, the Anaesthetic Man," 229, as well as Stevens's thoughts on this in L. Robert Stevens, "Darwin's Humane Reading," 56-58. See also George Levine, "Dickens and Darwin, Science, and Narrative Form," *Texas Studies in Literature and Language* 28, no. 3 (Fall 1986): 250-251.

⁵³ *Ibid.*, 56.

⁵⁴ *Ibid.*, 59.

nature as a young man.⁵⁵ Stevens correctly claims that the “masking effect of the myth of [Darwin’s] anaesthesia” has “begotten a topsy-turvy reading” of Darwin’s thoughts on music.⁵⁶ Within the *Autobiography*, Darwin writes, “Music generally sets me thinking too energetically on what I have been at work on, instead of giving me pleasure.”⁵⁷ This returns to Fleming’s somewhat backwards argument that Darwin could not or did not feel because he felt too much. The remark by Darwin has been read as evidence of Darwin’s depression and loss of appreciation for music, a clear change from his connection of music to the sublimity he felt as he connected to nature and God as a young naturalist.

But Darwin notes that “his mind was enlivened by music, not quieted.”⁵⁸ The change in his practice of listening to music, avoiding this source of intense excitement when working, did not necessarily mean he never enjoyed music again. Moreover, his remarks should be read in light of his son’s memories of Darwin’s relationship with music. Francis recalls, “He used to lament that his enjoyment of music had become dulled with age, yet within my recollection, his love of a good tune was strong.”⁵⁹ He notes Darwin recognized many favorites, was keen to changes of musical style, and kept a list of his favorite piano pieces for Emma to play. Francis goes on to say, “He much enjoyed good singing, and was moved almost to tears by grand or pathetic songs,” and that when Hans Richter came to visit, as late as 1881, Darwin “was roused to strong

⁵⁵ Donald Fleming, “Charles Darwin, the Anaesthetic Man,” 226.

⁵⁶ L. Robert Stevens, “Darwin’s Humane Reading,” 60, 50.

⁵⁷ Charles Darwin, *Autobiography*, 113.

⁵⁸ L. Robert Stevens, “Darwin’s Humane Reading,” 60.

⁵⁹ Charles Darwin, *The Life and Letters of Charles Darwin*, ed. Francis Darwin, 2 vols. (New York: D. Appleton and Company, 1898): I, 101-102.

enthusiasm by his magnificent performance on the piano.”⁶⁰ Certainly a change in aesthetic changes did occur as Darwin aged. His focuses changed, as did his surroundings and his deteriorating health. The Romantic poets did not excite him as much as a popular novel or biography. Music was limited because it often excited him too much to focus on his work. However, arguments for a complete anaesthesia in Darwin take his remarks on these changes too far, and present a skewed biographical view of Darwin as a cold, mechanical, unfeeling man as he grew older. Darwin’s complex relationships with beauty, nature and art as he navigated the implications of his theory of natural selection are not so simple.

Perhaps the most important facet missed regarding Darwin under the myth that he experienced a loss of all intense or elevated feeling is his continued wonder and awe when viewing even the most ordinary aspects of nature. His reverent thoughts from his time aboard the *Beagle* have been discussed above, and his deep appreciation for nature and its ability to connect his thoughts to a higher power as a young man continues to be acknowledged even by Darwinists who find in Darwin a linear depreciation of pleasure and lessened appreciation for natural beauty. I argue that simply because the subject matter changed from grand landscapes to the ordinary English country side does not necessarily mean Darwin lost all ability to feel as fervently for nature in his later years. John A. Campbell has also successfully argued that it is a partial reading of the evidence regarding Darwin’s opinion on these subjects which leads to the misleading view that “the fundamental reason for [Darwin’s] decline of feeling was his loss of religious

⁶⁰ Charles Darwin, *The Life and Letters of Charles Darwin*, ed. Francis Darwin, 101-102.

belief,” especially when connected to “the issue of Darwin’s responsiveness to nature.”⁶¹ Moving beyond the *Autobiography*, Campbell examines Darwin’s published scientific works and notes that “the very way in which his language expresses, evokes, or manifests feeling” is enough to prove no such affective decline occurred.⁶² For throughout his entire life, “the language of Darwin’s description betrays a relationship with the objects of his study that is personal and affective,”⁶³ and it continues well past his years as a young man.

The connection of his loss of feeling to his religious decline is then again threatened. His elevated thoughts are connected to his theism, and the depreciation to total loss of these sentiments has thus been read as a mirror to Darwin’s descent into atheism and doubt. Campbell has presented a compelling argument Darwin’s pleasure and intense personal feeling for natural wonders are well represented through to the last of his published works. He notes, “when Darwin writes of nature he typically shares with us not only facts and inferences but lively admiration and affection for what he sees,” and his language is full of genuine feeling and enthusiasm.⁶⁴ Every fact has its accompanying adjective; the delight he felt in the early letters and journals from his time with the *Beagle* is echoed again in his continued use of “remarkable,” “extraordinary,” “astonishing,” “striking,” “beautiful,” and “wonderful” in his published works.⁶⁵

⁶¹ John A. Campbell, “Nature, Religion and Emotional Response,” 159-160.

⁶² *Ibid.*, 161.

⁶³ *Ibid.*, 161-162.

⁶⁴ *Ibid.*, 162.

⁶⁵ *Ibid.*, 163. See this page especially for Campbell’s study of the numerous times these sentiments are repeated in Darwin’s published works.

We find the same reverent sentiments for nature as in his published works, regardless of what Darwin was viewing or studying, throughout his private letters as well. These sentiments are repeated by Darwin dozens of times in his letters, on all kinds of natural subjects. Though as he became older his response to natural beauty “became less effervescent and more serene,” it did not cease to be intense or genuine.⁶⁶ His letters to Asa Gray and J.D. Hooker regarding orchids again show Darwin’s relationship with nature was not only a polite or professional interest, but one of continued wonder and appreciation. He remarked to Gray in 1857 on the “beautiful contrivances” he observed in the flowers, and repeated himself a year later to Hooker when he noted, “I have been examining *Orchis pyramidalis*...they are beautifully adapted to leave pollen on the two *lateral* stigmatic surface.—I never saw anything so beautiful.”⁶⁷

He reiterated these thoughts to his friends and colleagues many times as each new variety delighted him, noting the “beautiful adaptation[s] in every structure” to Gray and exclaiming to Hooker, “What wonderful structures!....The beauty of the adaptations of the parts seems to me unparalleled....I fear my long lucubration will have wearied you; but it has amused me to write, so forgive me....I marvel often as I think over the diversity & perfection of the contrivances.”⁶⁸ Darwin continually repeated his amusement and delight at the “marvellous” orchids and flowers he was studying, and wrote as late as 1863 to Hooker, “You cannot imagine what pleasure your plants give me (far more than your dead Wedgewood ware *can* give you): Henrietta & I go & gloat over them; but we

⁶⁶ Ibid., 164.

⁶⁷ Charles Darwin, letter to Asa Gray, September 5, 1857, *DCD* entry no. 2136. Charles Darwin, letter to J.D. Hooker, July 12, 1860, *DCD* entry no. 2864. Italics Darwin’s.

⁶⁸ Charles Darwin, letter to Asa Gray, August 11, 1860, *DCD* entry no. 2896. Charles Darwin, letter to J.D. Hooker, July 28-August 10, 1861, *DCD* entry no. 3221.

privately confessed to each other, that if they were not our own, perhaps we shd. not see such transcendent beauty in each leaf.”⁶⁹ This letter is especially illuminating; even the smallest details of variations within each leaf are enough to move Darwin to describe their “transcendent beauty.” His pleasure is evident, as is the personal relationship he experienced with even the smallest aspects of nature.

Though orchids were the source of the most reverent exclamations from Darwin, the same responsiveness to nature’s beauty can be seen in his remarks on other subjects as well. Take for example his letter to J.D. Dana in which he states, “I have always thought the Crustacea a beautiful subject,” a sentiment he repeats in 1865 when he writes, “what a marvellous range of structure the Crustacea present.”⁷⁰ The “wonderful spontaneous movement of Climbing plants,” was viewed by Darwin with similar personal interest and pleasure, even when recording the most detailed scientific facts.⁷¹ It is true that the intensity of Darwin’s appreciation for natural beauty was at a different level when describing particular case studies as compared to the reverence he portrayed for vast and grand landscapes. He lamented to Charles Lyell, “it makes me groan to think that probably, I shall never again have the exquisite pleasure of making out some new district.”⁷² Yet within that same letter he ends his description of “my Cirripedia,” by

⁶⁹ Charles Darwin, letter to J.D. Hooker, February 24[-5], 1863, *DCD* entry no. 4009. For Darwin’s repeated use of “marvellous” see letter to J.D. Hooker, November 1, 1861, *DCD* entry no. 3305, letter to J.D. Hooker, May 30, 1862, *DCD* entry no. 3575, and letter to Asa Gray, August 21, 1862, *DCD* entry no. 3692.

⁷⁰ Charles Darwin, letter to J.D. Dana, December 5, 1849, *DCD* entry no. 1276. Charles Darwin, letter to J.F.T. Muller, August 10, 1865, *DCD* entry no. 4881.

⁷¹ Charles Darwin, letter to C.W. Tait, March 12 and 16, 1869, *DCD* entry no. 6661.

⁷² Charles Darwin, letter to Charles Lyell, September 2, 1849, *DCD* entry no. 1252.

claiming “Truly the schemes & wonders of nature are illimitable.”⁷³ Perhaps less sublime and more serene, the same wonder and awe for nature remained with Darwin through to the end of his life.⁷⁴

Moreover, Campbell also strengthens my argument that a clean, linear decline in religious feeling is not representative of the complexities Darwin experienced, and cannot be proven based on his relationship with nature. In arguing that Darwin remained a theistic agnostic throughout his life, fluctuating between the two with neither overcoming the other, it is important to remember that Darwin rarely used “nature’s particulars as occasion for religious affirmation,” and that we never find Darwin referring back to God’s Providence when experiencing the “intricate beauty and particularities of a flower.”⁷⁵ The previous chapter on design confirms this, as Darwin continually argued with Lyell and Gray that he could never concede to particular design. Adaptations were the results of independent, natural laws and no divine explanation was necessary when discussing them. Still, without contradicting himself, Darwin maintained this argument while agreeing a Creator was above all and could be working these laws towards His will and larger goal. Campbell rightly acknowledges “the God of Darwin’s old age and the

⁷³ Ibid.

⁷⁴ To avoid repetition here, see the results of searches within the Darwin Correspondence Database for continued use of such adjectives and sentiments by Darwin. They are repeated dozens of times throughout his life. Searches for “marvellous,” “remarkable,” “wonderful,” “wonder,” “beautiful,” in combination with the natural topic like “barnacles,” “plants,” “leaf,” “orchid,” “cirripedes,” etc. all result in evidence of this continued appreciation for the beauties of nature even when Darwin was viewing rather ordinary subjects and show just how many times he expressed this appreciation.

⁷⁵ Ibid., 167.

God of his youth have this in common: both are remote from the ordinary and the particular.”⁷⁶

As was argued in the previous chapter on design, this separation was necessary for Darwin in that it allowed him to maintain the integral independence of his gradual adaptations and variations in nature from God’s direct interference as well as a belief in a First Creator presiding over and ordering all natural laws. His delight and pleasure for nature did not decrease or fade, and even if it had it is not sufficient evidence for the argument for a decline in Darwin’s theism. Nor should this disconnect be read as an argument for Darwin to be classified as a Deist. He argued repeatedly that his separation of God from the independent workings of natural selection did *not* mean he was deifying the theory or Nature, especially to Charles Lyell who worried Darwin’s explanations of natural selection encroached on Divine purposes. He also retained a belief in a Creator above natural laws, ordering the greater purpose of man and the universe.⁷⁷ Darwin is best regarded then as a theistic agnostic, who certainly experienced doubt and did not maintain a personal relationship with God as an older man, but who did retain a belief in that Creator working above the natural laws he studied.

⁷⁶ Ibid., 167.

⁷⁷ See Phillip R. Sloan’s very helpful description of this in “‘The Sense of Sublimity’: Darwin on Nature and Divinity,” *Osiris* 16, Science in Theistic Contexts: Cognitive Dimensions (2001): 266-269.

CHAPTER FIVE

Conclusion

This thesis has argued that despite the fact much has been written on Charles Darwin, and despite the ample amount of primary sources from Darwin himself and his contemporaries, his religious beliefs continue to be oversimplified and misremembered. Arguing against the tradition set forth by scholars like Maurice Mandelbaum, Howard Gruber, Sylvan Schweber, Michael Ruse, and Matthew Day, I argue that a comparison of Darwin's extensive private writings compared to his scientific notebooks and published works proves a simple model of linear devolution into atheism and non-belief is a misleading perspective for viewing Darwin's religious beliefs throughout his life. Similarly, the numerous letters concerned with religion from Darwin himself prove that Darwin was never unconcerned with his own religion or seeking to attack the religious beliefs held by friends, family, colleagues or his general reading public.

Instead I have expanded upon the work of scholars like Frank Burch Brown, John Brooke, and James Moore, who acknowledge the complexities of Darwin's religion and the fluctuations in this belief which he experienced as he developed and published his theory of natural selection, and as he navigated the complicated reactions his work received. Even these scholars, however, have not always focused completely on Darwin's religion, and similarly have not explored Darwin's religion in depth after the publication of his theory in 1859, or the year he suffered greatly from the deaths of his beloved father and daughter Annie in 1851. Both dates have been set forth as traditional end points to

Darwin's religious convictions, but in exploring the themes of slavery and abolition, design in nature, and beauty and aestheticism, I argue this view must be complicated. The continued presence of theism throughout Darwin's life, despite fluctuations and times of doubt and agnosticism, supports my thesis that a better lens through which to view Darwin's complex religious beliefs is the term theistic agnostic. In the same way, I have emphasized the model of fluctuations and ebbs and flows as opposed to linear devolution as the best representative of Darwin's religion as he muddled through his confusion and doubt.

The introduction established the arguments presented above. The first full chapter, "'Great God how I shd like to see that greatest curse on Earth Slavery abolished;' Charles Darwin as Abolitionist, Humanitarian, and Theistic Agnostic," argued that the topic of slavery in Darwin's private and published works presents an example of Darwin's theistic agnosticism at work in his thoughts and opinions outside those expressly dedicated to the topic of religion. When discussing slavery and his belief that nothing less than the total abolition of institutional slavery would suffice, Darwin was the most morally charged and firm in his religious beliefs. His language was fervent, earnest, unambiguous; a clear change from the hesitant, polite, reluctant to offend Darwin that had previously been presented to the public and to his friends and colleagues. An examination of Darwin's arguments against slavery, especially in his letters to Asa Gray and Charles Lyell, more importantly shows that Darwin continued to express himself theistically throughout the 1860s and even until 1871. Rather than send him into complete atheism and doubt, Darwin's distinction between natural suffering through chance and unnatural, manmade sin like institutional slavery allowed him to maintain a belief in a Benevolent Creator

above all, even while struggling to accept the positive belief in Providence that Gray and Lyell maintained.

In “‘My mind is in simple muddle about ‘designed laws’ & ‘undesigned consequences’’: Charles Darwin and the Insufferable Problem of Design in Nature,” a discussion of Darwin’s writings on the issue of design in nature as evidence of a Creator, as well as his relationship with the Cambridge tradition of natural theology in which he studied as a young man, prove, like that of slavery, that Darwin continued to be a theistic agnostic even in times of extreme doubt. His opinions on slavery, as stated above, were sure and established, but design is the topic that caused him the most religious confusion. When discussing it with friends like Gray, Lyell, and Charles Kingsley, Darwin continually noted he was in a muddle, he was bewildered, he was out of his depth and confused on a topic that perhaps was above human intellect. Even still, this issue did not lead Darwin into total non-belief. Rather, he expressed himself much as he had when discussing slavery. Darwin emphasized that though a case for particular design as being Divine evidence in the tradition of Paley and Gray would mean his theory of natural selection was superfluous, and was an issue that was not empirically provable and thus irrelevant to the discussion, he still could, and did, maintain a belief in general design and an overall Divine Will working above independent natural laws for good. Dissatisfied with complete atheism and the belief that the entire world was the result of blind, brute force or chance, this distinction between particular and general, and moreover between First causes and secondary laws, allowed Darwin to retain his theistic beliefs in a Benevolent Creator God working above natural laws, as well as retain the independence of his theory.

Finally, the fourth chapter, “‘I never saw anything so beautiful’: Sublime Wonder and Serene Appreciation, Charles Darwin on Beauty and Aestheticism,” examined the argument put forth by Donald Fleming and repeated in more recent works by scholars like George Levine and Jonathan Smith, that Charles Darwin experienced an affective decline, losing his ability to appreciate beauty, art, and in the case of Fleming, even natural beauty as his mind became increasingly mechanical. Focusing mostly on Darwin’s *Autobiography* as its source base, this tradition misses the fluctuations and complexities of Darwin’s aestheticism. Though his language changed as the subject matter changed, his appreciation for beauty and his wonder for the workings and mysteries of nature are as evident in his discussions of earthworms, barnacles and orchids as they are in his recollections of sublimity and awe when standing amongst the peaks of the Andes or rainforests of Brazil. The connection of this affective decline to a linear devolution in all religious belief made by Fleming is also refuted, as a continuation of Darwin’s aestheticism and feelings of wonder for nature and beauty in his later writings substantiates my claim that throughout his life Darwin experienced fluctuations in belief rather than a total decline, with times of doubt continuing to affect his theistic convictions but similarly never destroying them completely.

In examining these themes at length and allowing for the complexities and changes Darwin experienced, Darwin is more accurately presented as a man who did not seek to attack or disprove religion but was open and sympathetic to the religious convictions of others, who was often preoccupied with religious issues, and who ultimately did not completely succumb to secularization, but retained much of his theism.

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