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Telling Stories About Animals: The Evolution of Moral Storytelling in Margaret Atwood's Oryx
and Crake and The Year of the Flood

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Abstract

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By Jennifer Leigh Nelson

For many scholars in the humanities, the notion of combining the often diametrically opposed fields of the humanities and sciences creates a curious kind of anxiety. This anxiety can be traced from the tension surrounding the publication of Darwin's works on evolutionary theory in the 19th century to the present lagging nature of the humanities in incorporating evolution into the study of literature. The recent critical school of Literary Darwinism as well as the first two speculative works of fiction in what will eventually comprise Margaret Atwood's *MaddAddam* Trilogy challenge this opposition. For my thesis, I have chosen to focus on the animals that populate the landscape of Atwood's fiction and remain essentially linked to humans on the continuum that Darwinists seek to evoke. I specifically examine the novels' human-animal relationships in conversation with Literary Darwinist theory in order to reveal an urgent need for interdisciplinary dialogue. In my discussion of *Oryx and Crake*, I explore the destructive implications of using a strictly humanities perspective to ignore the empathetic instinct toward other nonhuman animal species. My analysis of *The Year of the Flood* examines Atwood's imagined means of restoring an inter-human and interspecies empathy to the universe of her speculative fiction. My thesis argues that Atwood's creation of a religious narrative in which an ethical relationship to animals possesses an evolutionary function demonstrates the survival value of drawing connections between the humanities and sciences—a value that extends itself to the study of literature at large as well as the broader perspective of humanity's survival.

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INTRODUCTION:
STORYTELLING WITH ANIMALS

For many scholars in the humanities, the notion of combining the often diametrically opposed fields of the humanities and sciences creates a curious kind of anxiety. A particular instance of this tension occurred in the late 19th century, surrounding the publication of Charles Darwin's two main works on evolutionary theory, *On the Origin of Species* (first published in 1859) and *The Descent of Man* (first published in 1871). In the final section of *The Descent of Man*, Darwin anticipates charges against his work due to its being "irreligious to explain the origin of man as a distinct species by descent from some lower form, through the laws of variation and natural selection" (613). In other words, he predicts a strong sense of religious opposition based on a fear that his scientific theories would remove humans from their elevated status as a distinct species.

Recently, this fear – albeit in a secular form—has manifested itself in a specific branch of the humanities, that of literary study. In the introduction to *The Literary Animal: Evolution and the Nature of Narrative*, a work which compiles essays from the emerging critical school of Literary Darwinism, editors Jonathan Gottschall and David Sloan Wilson criticize literature's lagging nature with respect to evolutionary studies:

We call literature one of the last frontiers because it is an easily documented fact: choose any subject relevant to humanity—philosophy, anthropology, psychology, economics, political science, law, even religion—and you will find a rapidly expanding interest in approaching the subject from an evolutionary perspective.

(xvii)

Although evolution has been widely accepted in the sciences—and as Gottschall suggests, increasingly so in other disciplines—literary scholars seem to exhibit a discomfort with evolution similar to that of Darwin’s nineteenth-century readers. Both editors go on to suggest the following explanation for such a reluctance: “[R]esistance to the study of literature from an evolutionary perspective is dominated by fear of the consequences, as if Pandora’s box will be opened and its malevolent contents forever unleashed upon the world” (Gottschall and Wilson xxiv). Through language of malevolence, they suggest that there exists a fear of a certain imminent disappearance of human virtues resulting from the evolutionary perspective. In *On the Origin of Stories*, a prominent literary Darwinist scholar, Brian Boyd, cites the words of playwright George Bernard Shaw in order to evoke a sense of literature’s reservations regarding evolution: “There is a hideous fatalism about [Darwinism], a ghastly and damnable reduction of beauty and intelligence, of strength and purpose, of honor and aspiration[...].” (399). Just as Darwin himself predicted that he would cause a tension between science and religion by removing humanity from its privileged position relative to all other species, so do literary Darwinist scholars claim they might inspire fear that humans will lose some of the values present in great literature. Incidentally, many of these values—particularly that of “purpose”—overlap with religious values.

The project of Literary Darwinism seeks to dispel such fears and instead attempts to combine evolution and the arts to view purpose in a different, yet no less important, light. In the conclusion to *On the Origin of Species*, Darwin perceives “grandeur in this view of life” in which “from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved” (429). The promise of such grandeur drives many of the arguments of literary Darwinists. After exploring the evolutionary functions of art, specifically that of

storytelling, Boyd calls for a reorientation in the understanding of purpose: “Darwinism has made it possible to understand how purpose, like life, builds from small beginnings, from the ground up. Art, including the art of storytelling, and science, including the theory of evolution, have played key roles in the recent expansion of life’s purpose” (399). For many literary Darwinists such as Boyd, the conception of purpose as having evolved from a continuum with other species allows for a bridging of the gap between humanities and sciences in order to reaffirm—not erase—values that have long been cherished as “human.”

Theorists are not the only ones who are reimagining literary creation from a perspective of evolution. In her most recent works of speculative fiction, contemporary author Margaret Atwood dramatizes the gap between the humanities and sciences and imagines its terrifying consequences in a post-apocalyptic setting. In *Oryx and Crake* (2003) and *The Year of the Flood* (2009), the first two novels of what will comprise *The MaddAddam Trilogy*, Atwood creates the vision of a not-so-distant future in which a complex assortment of contemporary phenomena including but not limited to environmental catastrophe, genetic engineering, multi-national corporations, and social inequality speed humanity toward extinction. In “Writing *Oryx and Crake*,” Atwood describes the genesis of the first novel in terms of the “what if” question: “Every novel begins with a *what if* and then sets forth its axioms. The *what if* of *Oryx and Crake* is simply, *What if we continue down the road we’re already on? How slippery is the slope? What are our saving graces? Who’s got the will to stop us?*” (286). A crucial “what if” question in both *Oryx and Crake* and *The Year of the Flood* involves the division of humanities and sciences. What if we continue to separate different branches of knowledge? Could doing so accelerate humanity on the trajectory toward environmental degradation and ultimate extinction? This thesis seeks to place Margaret Atwood’s two aforementioned novels in conversation with

Literary Darwinism's attempts to bridge the gap between scientific and literary knowledge in order to examine the dangers of failing to reconcile the arts and sciences with one another and perhaps to look for hints at a solution.

For the purposes of my analysis, I have chosen to focus on the animals that populate the landscape of Atwood's speculative fiction. Not only do these creatures remain essentially linked to humans on the continuum that Darwinists (literary and otherwise) seek to evoke but they have also continued to inhabit the imagination of Atwood since her earlier works such as her poetry volume *The Animals in That Country* (1968). Last fall, I had the opportunity to participate in the Creativity Conversation with Margaret Atwood, an event that took place during her three-day visit to Emory University to present the 2010 Richard Ellmann Lectures in Modern Literature. When I asked her to talk about her interest in animals as literary figures, she offered the following insight:

Imagine an earth with nothing alive on it but us. We'd be dead very quickly because it is absolutely true that we are dependent on the life underground to even allow plants to grow and we are dependent on life in the sea in order to create enough oxygen for us to breathe[...] We are intimately connected with these other life forms much more so than people realize. You have a lot of them living in you, which if they did not live in you, you would be dead. We are symbiotic in that way. (Atwood and Magee, *Creativity Conversation*)

For humans, ignoring our intimate connections to other species is detrimental to our continued existence as a species. In the same way, Atwood's speculative apocalyptic vision of a world, not unlike ours, that divides branches of knowledge suggests that a failure to bridge the gap between science and the humanities compromises humanity's chances at survival. Leaving the

evolutionary relationship between ourselves and other species out of our stories hurts us because it ignores the vital symbiosis that results from our dependence upon them.

My thesis will contain two chapters, one on each of the novels in question. In my first chapter on *Oryx and Crake*, I will explore the dangerous implications of using a strictly humanities perspective to ignore the empathetic instinct toward other nonhuman animal species. In a world where the science/humanities divide is exemplified by the two characters, Crake and Jimmy-Snowman, Atwood does not simply place the burden of ecological crisis on the scientist character. While Crake is the genius scientist responsible for the creation of the virus that obliterates the majority of humanity, Jimmy-Snowman's interest in art and literature also results in problematic consequences on its own. After exploring the associations between an evolved empathetic instinct and the creative ability to imagine the perspective of the other, I turn the focus on Jimmy-Snowman's tendency to tell stories about animals in a destructive, non-empathetic way. This use of a supposedly uniquely human ability to exalt himself above all other species bears dangerous ramifications, informing his domination of women and reflecting society's tendency to similarly dominate nature. In this manner, the inability of the humanities to reach reconciliation with the sciences creates another a kind of human-centered vacuum with the potential to disconnect use from our place in the natural world. This leaves the cliffhanger at the end of *Oryx and Crake* without any kind of optimistic outlook.

In *The Year of the Flood*, Atwood returns to the same universe and time frame of *Oryx and Crake* but tells her story from the alternating perspectives of several members of The God's Gardeners, a religious vegan cult. My subsequent chapter on *The Year of the Flood* examines Atwood's imagined means of restoring a broader-reaching inter-human and interspecies empathy to the universe of her speculative fiction. By combining a Genesis-like narrative with the

acceptance of a bottom-up continuum between humans and nonhuman animal species, several members of the God's Gardeners manage to survive the apocalypse. In what might strike opponents of Literary Darwinism as an impossible marriage of different disciplines, religion—something Darwin predicted might come into tension with his theory—becomes the bridge between the humanities and sciences necessary to combat environmental crisis. By creating an empathetic religious narrative in which an ethical relationship to animals possesses an evolutionary function, Atwood demonstrates the survival value of drawing connections between the humanities and sciences.

Atwood's vividly imagined speculative future helps to give a terrifying shape to the claims made by theorist and biologist Edward O. Wilson, who incidentally appears as one of the many environmentally-linked saints worshipped by the God's Gardeners (*Flood* 246-7). In articulating a theory of connectivity between the arts and sciences, Wilson calls for the unity of seemingly disparate disciplines in his book *Consilience: The Unity of Knowledge* (1998). The title of his work derives its name from the term he employs to describe the “‘jumping together’ of knowledge by the linking of facts and fact-based theory across disciplines to create a common groundwork for explanation” (Wilson 8). Just as Atwood describes a symbiotic way of looking at humanity's relationship with other species, so does Wilson invoke a symbiotic relationship between the humanities, social sciences, and natural sciences. While opponents of Darwinism and Literary Darwinism might fear a loss of sense of purpose, Wilson offers an alternative way of looking at the concept: “When we have unified enough certain knowledge, we will understand who we are and why we are here” (Wilson 7). In other words, examining the correspondences between evolution and the arts would not eliminate the notion of a grander purpose. Rather it would help find answers to a question generally addressed by religion.

While Literary Darwinists offer diverse answers of how to look at purpose, Boyd specifically uses art to connect both science and religion through a common creative root. For Boyd, art opens up new interpretations through the creative dimension of possibility:

Art at its best offers us the durability that became life's first purpose, the variety that became its second, the appeal to the intelligence and the social emotions that took so much longer to evolve, and the creativity that keeps adding new possibilities, including religion and science. We do not know a purpose guaranteed from outside life, but we can add enormously to the creativity of life. We do not know what other purposes life may eventually generate, but creativity offers us our best chance at reaching them. (414)

Boyd makes no claims that we will be able to definitively arrive at an understanding of our purpose; however, the arts' intimate connection to the imagination has led to the evolution of disciplines that similarly seek to arrive at answers. Atwood adds to this dimension by using her own art to explore the combinations of these possibilities.

In a world such as that of Atwood's speculative fiction, one in which humanity's contribution to environmental devastation compromises its survival as a species, Literary Darwinism's project of combining disciplines takes on a particular quality of urgency. In *The Year of the Flood*, the character Adam One questions whether or not humanity deserves to survive: "Do we deserve this Love by which God maintains our Cosmos? Do we deserve it as a Species? We have taken the World given to us and carelessly destroyed its fabric and its Creatures" (Atwood 424). Atwood not only uses her fiction as a means of exploring the trajectory of humanity's current practices in a cautionary bleak future, but she also calls for a renewal in purpose. In order to create lasting solutions to environmental crisis and ensure

species survival, humanity does not simply need to change its current behavior. Rather, it needs to change the framework through which it views itself in relation to the environment. Literary Darwinism offers a tool for instigating this kind of perspectival change: if literature is an expression of what makes us human, and what makes us human is evolution, then evolutionary processes determine how literature has taken shape. By dramatizing a need for conciliation in *Oryx and Crake* and *The Year of the Flood*, Atwood adds to the project undertaken by literary Darwinists. She gives her human readers a framework for looking at ways to simultaneously preserve the species and preserve meaning.

CHAPTER ONE:

JIMMY-SNOWMAN'S DESTRUCTIVE STORYTELLING IN *ORYX AND CRAKE*

The very term “speculative fiction” that Margaret Atwood uses to designate the genre of her recent novels *Oryx and Crake* (2003) and *The Year of the Flood* (2009) provides a crucial lens through which one might examine these two works. In her article, “*The Handmaid’s Tale* and *Oryx and Crake* in Context,” Atwood herself defines the genre as “the tree, for which science fiction, science fiction fantasy, and fantasy are the branches” (513). That is, Atwood’s works remain linked to another genre that links two seemingly unlikely words together, “science” and the artistic term of “fiction.” While the literary genre often associated with *Oryx and Crake* presents a marriage of the terms science and fiction, its plot divorces the two disciplines from one another. The conflict between literature and science particularly manifests itself as a rivalry between two separate institutions as the prestigious science school Watson-Crick Institute courts Crake and as Jimmy-Snowman is placed in the liberal arts college of Martha Graham Academy (*Oryx* 173)¹. While Crake’s school links itself to genetics through its name, Jimmy-Snowman’s school derives its appellation from “some gory old dance goddess of the twentieth century [...]” (186).

The recent critical school of Literary Darwinism reveals dangerous implications of the failure to incorporate science into the study of literature by addressing the issue of humanity’s survival. In *The Art Instinct*, Denis Dutton places the crucial storytelling component of imagination into survival terms: “Imagination allows the weighing of indirect evidence, making chains of inference for what might have been or what might come to be. It allows for intellectual

¹ From this point on, a page number and/or range of numbers in parentheses will follow all in-text citations from *Oryx and Crake* found in the chapter.

simulations and forecasting solutions to problems without high-cost experimentation in actual practice” (105-6). By using the imagination to take empirical evidence and project it onto future consequences, one can choose to either hasten or avoid those consequences depending on where the imagination takes him. In this manner, the act of storytelling not only serves as an artistic outlet and form of human expression, but it also serves an evolutionary purpose. From a Darwinian perspective, sharing stories makes humans more fit for survival.

While Atwood’s speculative fiction provides abundant examples of Dutton’s theory, one of her major characters adamantly disagrees with the notion that the arts can be beneficial to the sciences, or to human adaptability and survival. Significantly, the genius scientist Crake purposefully attempts to stamp all artistic qualities out of the human species in order to help it achieve immortality. To ensure the survival of humanity in a not-so-distant future of environmental catastrophe, he paradoxically eradicates the already self-destructing species, thereby, making way for his new explicitly non-artistic replacement species.² These so-called “Crakers” do not engage in inventing “harmful symbolisms, such as kingdoms, icons, gods, or money” that might lead them to a downfall similar to that of the environmentally exploitative humans (305). By extension, stories that rely on representative words and images would also fall into this category of “harmful” constructions. As Atwood’s tale itself uses speculative storytelling as a device to caution contemporary society against a similar fate, the reader must approach the scientist’s words with a degree of suspicion. Indeed, Crake’s calculations ironically backfire, as an interest in the art of narrative begins to evolve his new species. Despite

² Crake describes the interconnectedness between the “Pill” containing the epidemic that eventually destroys most of humanity and the “Project” of the Crakers in the following terms: “They were inextricably linked—the Pill and the Project. The Pill would put a stop to haphazard reproduction, the Project would replace it with a superior model” (*Oryx* 304).

their meticulous genetic programming, the Crakers begin to demand that Jimmy-Snowman develop a Genesis-like narrative about their creator.³

According to the logic of Atwood's speculative fiction and in the context of this emerging field of literary criticism, Crake's exclusively scientific endeavors clearly present a deficient solution to the perils of environmental degradation. However, perhaps more surprisingly, her more artistically-inclined protagonist also exhibits a destructive capacity. Atwood chooses to tell her story from the perspective of Snowman, the supposed sole survivor of humanity after Crake instigates the apocalypse through the creation of the "rogue hemorrhagic" Pill, instead of giving the reader insight into the internal world of Crake (325). Several critics have pointed out the polarized function of the novel's two protagonists. According to J. Brooks Bouson, Snowman is presented as "a words man," a spokesperson for the humanities, whereas the genius responsible for destroying the world, Crake, remains a "numbers man" (94-5). Indeed, Jimmy repeatedly asks "Well, what about art?" to argue the case of the arts to his scientist friend. In one scene, he takes this responsibility upon himself, claiming, "He was, after all, a student at the Martha Graham Academy, so he felt some need to defend the art-and-creativity turf" (166). Despite his supposed knack for words, Jimmy, in Atwood's pre-apocalyptic world, remains unable to argue the case for art and the humanities to Crake throughout their friendship. Furthermore, his attempts at storytelling during this time take on a distinctly negative quality. Instead of using stories to ensure either his own survival or that of other humans, Snowman (then Jimmy) weaves words together to sexually dominate women. In thus undermining her protagonist's storytelling abilities, Atwood hints at a grain of truth in Crake's philosophy. Regardless of the survival instinct associated with creative art, human

³ Jimmy-Snowman perceives the Crakers' desire for stories when ask him, "Snowman, tell us please about the deeds of Crake" (*Oryx* 102).

storytelling, when sealed off from an evolutionary perspective and scientific knowledge more broadly, seems to possess a potential for destruction equal to that of Crake's use of science.

Literary Darwinism offers an insight into shortcomings of the arts, specifically literature, when they are closed off from an evolutionary perspective. In the introduction to *The Literary Animal*, Jonathan Gottschall cautions against the humanities' tendency to place humans in the center of the universe instead of viewing them on a continuum with other species: "Aspects of our culture, intelligence, and symbolic behavior make us different from the other apes, but they do not emancipate us from our evolved biology or lift us above other animals onto an exalted link of the chain of being" (xvii). In other words, while scientists such as Crake transcend nature by engineering new life, linguistic creative types such as Snowman use the arts to "exalt" themselves above nature. By using her fiction to point toward this tendency to push animals away through creative pursuits, Atwood places a portion of the burden of environmental catastrophe on the arts. This chapter will illustrate the dangers of sealing off the arts from an evolutionary perspective by examining the way in which Snowman's use of storytelling to disconnect himself from other animals informs his eventual destructive tendency to dominate women. The emergence of this objectifying form of storytelling corresponds with the double departure of Snowman's mother and the last animal subject with whom he empathizes.

Furthermore, it reflects society's trend of disconnecting itself from the environment as a whole.

Before Atwood introduces Crake to polarize the arts and sciences within the novel, Jimmy-Snowman exhibits a kind of storytelling that is very much connected to nonhuman animal species. Indeed, the animals Jimmy-Snowman encounters during his childhood play an integral role in his early emergence as a storyteller. In other words, the natural tendency of humans to tell stories exhibits a connection with, rather than transcendence over, other creatures

in the biosphere. In his essay, “Why Look at Animals?” which criticizes contemporary society’s treatment of animals from an aesthetic perspective, John Berger offers an insight that can be applied to Jimmy-Snowman’s initial instinct to tell stories using animals:

What distinguished man from animals was the human capacity for symbolic thought, the capacity which was inseparable from the development of language in which words were not mere signals, but signifiers of something other than themselves. Yet the first symbols were animals. What distinguished men from animals was born of their relationship with them. (7)

While humans characterize themselves through the unique practice of metaphor creation, a device that informs storytelling, they must simultaneously look to their relationships with other species in order to effectively engage in the art of storytelling. Stories do not simply separate humans from other species. Rather, the initial impulse to form symbolic relationships with animals remains crucial to humanity’s ability to tell the stories that might give its species an evolutionary edge. Indeed, as Snowman mentally travels back through his memories to make sense of them, many of his points of reference are his interactions with animals. Particularly as a child, Snowman (then Jimmy) remains keenly aware of the few species that populate the heavily industrial world of the compounds. However, as his creative impulse to imagine a connection to these creatures is disturbed by a socially imposed tendency to objectify them, Jimmy-Snowman experiences a parallel loss of connection to the world around him.

Jimmy’s early empathetic experiences with nonhuman animals enable him to develop into a storyteller with the ability to imagine fictional characters entirely separate from himself. The first crucial memory in the mind of the boy who was once known as Jimmy is the bonfire of diseased animals that he observes with his scientist father. Initially, Jimmy empathizes with

what he perceives to be the suffering of the other creatures: “Jimmy was anxious about the animals, because they were being burned and surely that would hurt them” (18). As Jimmy knows that he himself would feel the pain of a burning sensation if he were exposed to the flames, he is able to project his own repertoire of experience onto the animals in front of him. This is not only an essential means of understanding the other but it is also a key element of storytelling. In his essay on “Literature, Science, and Human Nature” from *The Literary Animal*, author Ian McEwan connects the ability to appreciate literary characters to the ability to understand the experience of another being. According to McEwan, literature remains fundamentally linked to relationships with other humans as well as the self:

We have, in the terms of cognitive psychology, a theory of mind, a more-or-less automatic understanding of what it means to be someone else. Without this understanding, as psychopathology shows, we would find it virtually impossible to form and sustain relationships, read expressions or intentions, or perceive how we ourselves are understood. (5)

Because individuals exist as separate vessels, the only way to approximate what the other, whether human or animal, thinks or feels is through the imagination. This same process of approximation applies equally when one creates or reads about a fictional character. Thus, Jimmy’s empathetic quality of attempting to imagine what it might be like to be one of the burning animals extends to the ability to create narratives. He turns the animals into characters in order to better understand them.

Examining Literary Darwinism’s discussion of empathy in conversation with philosopher Thomas Nagel’s writing on animals helps to emphasize the importance of narrative connection with other species. For Nagel, the only way of understanding the other is through the art of

fiction. The closest way to conceive of another human or even a nonhuman's experience is by imagining what it would be like to be him or her. In his famous essay "What is it Like to be a Bat?", such acts of imagination reach their apogee in attempts to articulate the experience of an animal: "At present we are completely unequipped to think about the subjective character of experience without relying on the imagination—without taking up the point of view of the experiential subject" (Nagel 449). Nagel's argument finds particular resonance in the matter of human-animal relationships. Because they cannot attempt to articulate the thoughts, feelings, or desires of animals through human language, humans must completely invent the subjective experience of other species.

Mirroring Nagel, Jimmy's initial empathy with the burning creatures manifests itself in an impulse to invent stories, but the birth of objectification interferes with his development as a storyteller. His father promptly cuts off the expression of his art instinct: "No, his father told him. The animals were dead. They were like steaks and sausages, only they still had their skins on" (18). By referring to the animals as nonliving meat, Jimmy's father linguistically reduces them into objects designed for human consumption. With these lines, he not only informs his child's way of looking at animals, but he also unknowingly attempts to subdue Jimmy's emerging imaginative powers. The father discourages his son from thinking about what it might be like to be another creature in a Nagelian fashion, to invent a narrative for the other. Although Jimmy continues to inwardly empathize with the animals, his perception subsequently takes on a strange quality of enjoyment:

And their heads, thought Jimmy. Steaks didn't have heads. The heads made a difference: he thought he could see the animals looking at him reproachfully out of their burning eyes. In some way all of this—the bonfire, the charred smell, but

most of all the lit up, suffering animals—was his fault, because he'd done nothing to rescue them. At the same time he found the bonfire a beautiful sight—luminous, like a Christmas tree, but a Christmas tree on fire. (18)

Jimmy continues to imagine the animals' pain to an extent that his compassion causes him to assume a burden of guilt. In addition to their suffering, he sees blame coming through their vacant eyes. However, critic Carol Osborne also points toward Jimmy's paradoxical "fascination with the spectacle" which operates as a kind of "distancing mechanism" (28). This mechanism allows Jimmy to separate himself from the animals. In the last part of the passage, Jimmy seems to turn away from his own creative storytelling instinct, and instead, toward the destructive, all-consuming power of the fire.

In the "OrganInc Farms" chapter, in which Atwood first introduces the laboratory where Jimmy's father works on genetic engineering of animal hybrid species, Jimmy similarly empathizes with the new pigoon splice. [In *The Year of the Flood*, the character Ren explains the origins of the name in a hybridization of the words "pig" and "balloon," with reference to the appearance of their inflated bodies (221).] As Jimmy's father linguistically transforms the burning animals into objectified food, so does he physically engineer pigs into living "organ factories" to satisfy human purposes (Ingersoll 164). In the sardonically named OrganInc Farms, scientists aim to engineer individual pigoons to grow up to six kidneys at once (22). Even their commonly used nickname of "balloon" acknowledges their status as an object. Once again, Jimmy uses his imagination in order to envision himself in the place of the pigoons. When his father's colleagues distastefully joke that pigoons might have made it into the frequently-served pork dishes of the staff café (referred to as "Grunts"), Jimmy does not find their comments amusing. Instead, the connection he has made between himself and the pigoons causes him to

question who has a right to eat animals: “This would upset Jimmy; he was confused about who should be allowed to eat a pigoon, because he thought of the pigoons as creatures much like himself. Neither he nor they had a lot of say in what was going on” (24). By looking for parallels between the plight of the caged animals and his own powerlessness, Jimmy simultaneously attempts to describe their experience and uses them as a metaphor to elaborate upon his own story. However, the humor of the adults around him complicates his understanding of the metaphorical human-animal relationship described by Berger. Through the distancing mechanism of humor, the OrganInc scientists transform the pigoons into objects and absolve themselves of any kind of guilt; Jimmy sees them as “creatures.” The nature of the metaphorical relationship requires that there exist at least one point of similarity between the two parties in order to make the linguistic comparison relevant. By ignoring any kind of similarities between themselves and the pigoons and by neglecting to take on the difficult task of explaining an exact distinction, the scientists further complicate Jimmy’s emergence as a storyteller. Like his father’s nonchalant treatment of the burning animals, the scientists’ objectification through supposedly humorous stories continues to pull Jimmy away from his initial empathetic and imaginative tendencies.

As Jimmy continues to exalt himself over other animal species through objectification, his initial creative impulse takes on a distinctly destructive quality. Atwood links the scene of the father’s work to Jimmy’s experiences with his mother at home through her next chapter’s title, “Lunch.” After pondering whether or not pigoons have made it into the meal he shares with his father and Ramona, Jimmy remembers eating lunch with his mother at home. In this new scene, he begins to adopt the objectifying views towards animals exhibited by his father and his father’s colleagues in his relationship with his mother. Starved for his detached mother’s

approval, Jimmy uses animals as instruments to provoke a reaction. As Jimmy eats peanut butter and jelly sandwiches, the animals in this chapter do not manifest themselves as food. Instead, Jimmy brings them up in his calculated plea for a pet. Within this context, his pressing questions do not result from a longing for a relationship with a pet; the pet simply serves as a way for him to connect with his mother. When he pushes her to the point of tears, Jimmy remembers,

He loved her so much when he made her unhappy, or else when she made him unhappy: at these moments he scarcely knew which was which[...]And he was sorry, but there was more to it: he was also gloating, congratulating himself, because he'd managed to create such an effect. (33)

The empathetic narrative powers Jimmy exhibited as a younger child watching the burning animals disappear in this passage. They are entirely replaced by his fascination with the damage created by the fire. Through the manipulation of his desire for a relationship with a pet, he reproduces the quick devastating effects of the fire. Furthermore, Jimmy does not attempt to understand his mother's experience—a practice which, according to McEwan, is the basis of creating characters—in the way that he formerly attempted to conceptualize the suffering of the animals in the fire. In pushing his mother away, he trades his ability to imagine himself in the place of the other for a newer and more immediately effective kind of creative power, the power to destroy.

By distancing himself from the other species around him, Jimmy begins to embody the warnings of Literary Darwinists. In *On the Origin of Stories*, Brian Boyd offers an evolutionary perspective to a child's bid for attention through destructive storytelling:

[C]hildren have discovered they can make more of a difference to their world more quickly by destruction. It can take several minutes of painstaking concentration to build a tall pile of blocs, but less than a second, and one exuberant push, to make the whole thing clatter down. In story as in play, destruction is a way of causing maximum impact for minimum effort. (185)

Because destruction provides more immediate results with a lower cost of energy, it presents itself as more favorable in the short term. While Jimmy's calculated words allow him to provoke an immediate response from his mother, it is at the cost of another form of storytelling, the ability to create empathetic readings of another being. This destructive storytelling is at odds with one of the adaptive advantages of fiction outlined by Dutton: "Stories encourage us to explore the points of view, beliefs, motivations, and values of other human minds, inculcating potentially adaptive interpersonal and social capacities[...] Stories provide regulation for social behavior" (110). In this manner, taking into account the perspective of the other provides a way of working toward long-term survival, rather than immediate impact. In failing to take this perspective into account, Jimmy eventually compromises his long-term relationship with his mother. While Dutton's words specifically refer to a human other, Atwood's demonstration of Jimmy-Snowman's simultaneous lack of empathy for animals and his mother suggests that this kind of adaptive empathy begins with other species.

Just as the father interfered with Jimmy's empathy toward the burning animals and the pigeons, so does he interfere with Jimmy's connection to his mother. While Jimmy's mother does not respond positively to his incessant requests for a pet, Jimmy's father answers his supplications by presenting him with a rakunk for his tenth birthday. The raccoon and skunk splice comes from another OrganInc project in which scientists bring new beings to life simply

because they can: “create-an-animal was so much fun, said the guys doing it; it made you feel like God” (51). Jimmy’s friendship with the animal allows for the return of his ability to connect with other species. However, the lure of destruction also mixes with his love for his new companion. While Carol Osborne claims that the naming of the rakunk reveals Jimmy’s tendency to “hid[e] his emotions in order to be accepted by his father,” his decision rather seems to be an extension of his attempts to provoke his mother (30). When Jimmy’s mother reads his mind by correctly predicting that he wants to name the rakunk “Bandit,” he promptly invents a more violent appellation: “‘No,’ he said. ‘That’s boring. I’m calling him Killer’” (52). By choosing a name that pleases Jimmy’s father, Jimmy is not attempting to ingratiate himself to him. Rather, he aligns himself with his father because he knows doing so will annoy his mother. While Jimmy’s empathy initially allowed him to imagine a closer relationship to the animals surrounding him, he uses this creative ability to place distance between himself and his mother. This scene demonstrates a severe consequence of ignoring Nagel and Dutton’s respective discussion of the imagination as a means of taking on the perspective of the other. Jimmy moves away from this natural instinct and instead uses his relationship with the animal Killer as a device to create further tension within his already fragile family unit. This echoes McEwan’s warning of the “impossibility of sustaining relationships” without attempting to understand the other being through fiction (5). Tragically, as Jimmy increasingly comes to view and use animals as objects, he also uses his creative powers to achieve destructive ends in the realm of his relationships to other humans, specifically his mother.

Jimmy’s tendency to disconnect himself from animals through an objectification demonstrates a narrowly-defined creative outlook that results in a cruel lack of compassion. Jimmy continues to spend very little time imagining himself in the position of Killer. Instead, he

ignores her own subjectivity and allows her to become a silent mirror to his own character.

During lunch at school, Jimmy begins to use his parents' domestic disputes as fodder to entertain his fellow students at lunch, and thus create a new harmful form of narrative. He reproduces and skews plotlines derived of their conversations and uses a combination of hand puppets and cafeteria food to realize them:

At school, he enacted a major piece of treachery against them. He'd draw eyes on each of his index-finger knuckles and tuck his thumbs inside his fists. Then, by moving the thumbs up and down to show the mouths opening and closing, he could make these two hand-puppets argue together. His right hand was Evil Dad, his left hand was Righteous Mom. Evil Dad blustered and theorized and dished out pompous bullshit, Righteous Mom complained and accused. (60)

In his cafeteria shows, Jimmy does not even shy away from sharing intimate details of his parents' sex lives with the other children. The guilt Jimmy exposes to Killer demonstrates an awareness of having gone too far; however, the positive response from his peers motivates him to continue anyway. He is able to do so because of his manipulation of Killer. Immediately following this passage, he uses her to absolve his guilt: "'Was that out of line, Killer?' he would ask. 'Was that too vile?' *Vile* was a word he'd recently discovered: Righteous Mom was using it a lot these days. Killer would lick his nose. She always forgave him" (60). Not only has Jimmy abandoned his ability to create narratives based on empathy, but he has also transformed his parents' private fights into destructive exhibitions. By using the animal as an object that reflects the answer he wants to hear, Jimmy takes advantage of Killer's voicelessness in order ventriloquize his own desires through her. In doing so, he justifies his damaging practice so that he may continue to tell stories that he himself did not invent. These stories push him further

away from his parents and enable him to achieve domination within his own species and in relation to other species. Just as Jonathan Gottschall cautions his readers, Jimmy's stories serve to artificially elevate humans over nonhuman animals.

Jimmy's objectification of Killer foreshadows his destructive relationship with human women as he becomes an adult. When he exhibits Killer at the school's show-and-tell, he continues to regard his pet as an extension of himself. When Jimmy's crush, Wakulla Price, pets Killer, he mentally substitutes the animal for himself: "She stroked Killer's fur, brown hand, pink nails, and Jimmy felt shivery, as if her fingers were running over his own body" (55). Nowhere does Jimmy imagine what the experience of being stroked by several strange children might be like for Killer; instead he uses his imaginative powers to sexualize the experience for his own benefit, thereby appropriating Killer's experience and turning it into an opportunity for narcissistic self-reflection. When Jimmy later develops unrelenting womanizing tendencies, he similarly continues to manipulate his relationship with Killer. As an adult he incorporates her into stories which help him to seduce women: "When he got to the part where she'd stolen Killer the rakunk away from him he could usually wring out a tear or two, not from himself but from his auditors" (191). In this passage, he tells stories about animals not to create meaningful relationships, but rather to achieve sexual domination. Hannes Bergthaller connects Jimmy's insatiable sexual appetite to larger problems associated with the human species:

[...]Jimmy's failure to discipline his sexual urges is a dominant theme: he is a chronic seducer of women who dumps them as soon as they begin to bore him or start to demand serious commitment—and a master at crafting exit strategies and mitigating circumstances which allow him to shuck responsibility for his behavior. The parallel also makes sense in terms of the novel as a whole, because

Jimmy's own failure is presented as symptomatic for the larger failure of his culture to tame the destructive appetites of its members. (733)

For Bergthaller, the problem of sustainability relates to Jimmy's storytelling. He only uses his creative impulse to fill the role of an escape artist, and thereby, feed a sexual appetite that hurts the women whom he encounters. As he used Killer to absolve the guilt associated with his lunchtime exhibitions, so does he continue to imagine ways of deferring responsibility in his later years. This practice is not exclusive to Jimmy; the use of storytelling to craft "exit strategies" contributes to humanity's overall reluctance to assume responsibility for environmentally damaging behaviors. Jimmy's parallel destruction of his relationships with other species and creation of "exits" from his relationships with human women signal a form of storytelling with larger, more dangerous implications. Humans are not telling stories to help each other survive in the long term; they are telling stories to enable themselves to ignore their relationships with the nonhuman animals in the environment, and therefore, their own potentially impending extinction.

Indeed, Jimmy's departure from his natural storytelling instinct to empathize with animals eventually inhibits the instinct for survival described by Atwood. As Jimmy and his best friend Crake (formerly Glenn) play a series of video games together after school, Crake comes across the game centered on the reality-based rapid extinction of animal species:

"...Extinctathon, an interactive biofreak masterlore game he'd [Crake] found on the Web.

EXTINCTATHON, Monitered by MaddAddam. Adam named the living animals, MaddAddam names the dead ones. Do you want to play?" (80). In Extinctathon, players simply name obscure species of animals based on a set of descriptions in order to score points. While Crake excels at the game, Jimmy remains distinctly uninterested. A particularly telling passage occurs in the

discussion of their respective codenames, Crake and Thickney, which Crake derives from two extinct Australian birds: “For a while they called each other Crake and Thickney, as an in-joke. After Crake had realized Jimmy was not wholeheartedly participating and they’d stopped playing Extinctathon, Thickney as a name had faded away. But Crake had stuck” (81). Just as Jimmy increasingly fails to connect with the animals surrounding him, so does he fail to connect with his new animal name as well as the aspects of reality represented in the game itself. By failing to connect with the extinct species present in the game that were once present in the boys’ world, Jimmy fails to use his imagination to see the dire state of humanity. He watches the extinction of other species as his own propels itself toward an apocalyptic fate. In this manner, the severance of a human-animal storytelling connection goes against any form of survival instinct.

Despite Jimmy’s nascent inability to use his relationships to other species in order to create a narrative that might contribute to his future survival, Atwood occasionally gives the reader a glimpse of his residual desire to connect with other species and also other human beings. Even as he uses Killer to hurt others around him, he also exhibits an innate inarticulate awareness of the importance of his relationship to her. When Jimmy’s mother deserts the Compound, she not only leaves a confused Jimmy behind, but she also “liberates” his pet. In his process of mourning, Jimmy cannot distinguish which loss affects him the most: “Jimmy had mourned for weeks. No, for months. Which one of them was he mourning the most? His mother, or an altered skunk?” (61). Jimmy’s devastated reaction to the imposed severance of his connection to Killer demonstrates sincerity in his attachment to the animal. The narrator continues to connect Killer and Jimmy’s mother in the following lines: “In secret, in the night, he yearned for Killer. Also—in some corner of himself he could not quite acknowledge—for his real, strange, insufficient, miserable mother” (67). Even though Jimmy initially used Killer to

push away at his mother, he begins to view them interchangeably. This longing for a connection to the other, whether it is for an animal or his human mother, continues to haunt the progression of his memories into adulthood. Not only is the experience of the loss in and of itself traumatic for Jimmy, but Atwood also links it to his ability to form language. Jimmy remains unable to articulate his feelings concerning his mother's departure. In this manner, Jimmy's relationship to Killer is also implicitly connected with his ability to express himself verbally, to tell stories. Indeed, the story of Jimmy's relationship to this rakunk remains the last of all of his empathetic relationships to a living animal. Although he can function as a storyteller while simultaneously ignoring McEwan's prerequisites for creating characters, eventually Jimmy's destructive manner of storytelling begins to break down.

At around the same time that Jimmy begins to develop a bond with Killer the rakunk, he also discovers the interactive animal character, Alex the parrot. Through Alex, Atwood also explores Jimmy's relationship with language. Having abandoned both the uncomfortable childhood lunches with either his father and OrganInc colleagues or his own mother at home, Jimmy begins to spend a large portion of his school lunches—the portion where he is not creating obscene displays of domestic dispute—watching old educational computer programs in the library:

Alex the parrot was his favorite, from *Classics in Animal Behaviour Studies*. He liked the part where Alex invented a new word—*cork-nut*, for almond—and, best of all, the part where Alex got fed up with the blue triangle and yellow-square exercise and said, *I'm going away now. No, Alex, you come back here! Which is the blue triangle—no, the blue triangle?* But Alex was out the door. Five stars for Alex. (54)

As Jimmy is drawn to words even from an early age, he admires that Alex can create words of his own. Despite Alex's virtual nature, these words serve as another kind of tie between Jimmy and an animal being. The boy and parrot reverse roles as Jimmy employs Alex's words in his interactions at school: "Cork-nut, he'd say to anyone who pissed him off. No one but he and Alex the parrot knew exactly what cork-nut meant, so it was pretty demolishing" (59). In this instance, Jimmy parrots Alex's language and manipulates it to be destructive. Osborne notes that "Jimmy delights not only in Alex's invention of new words, but also his refusal to follow the commands of his trainer" (Osborne 38). In addition to creating his own words, Alex creates his own script by refusing to adhere to the program. Earl G. Ingersoll comments upon a similar creativity in the circumstances surrounding the departure of Jimmy's mother:

She became so angry and depressed by her husband's boyishly gleeful tampering with Life that she dropped out into an underworld of others who also reject what is happening and protest this brave new world at the risk of their imprisonment and even their death. (115)

Like Alex, who exhibits the inventiveness to break from pre-established parameters and manipulate his own narrative, Jimmy's mother must imagine a life beyond the prescribed structure of Compound life. Indeed, just as Jimmy continues to associate his mother and Killer with one another throughout his adult life, so does he begin to connect her with Alex the parrot. While Jimmy has subdued his ability to empathize, an ability that Literary Darwinists link to survival, he has begun to tap into another adaptive function of storytelling—the imagination of the possible.

Even though the boy Jimmy loses his empathy with animals, and thereby, goes against creativity he so admires in Alex, his mother continues to remind him of his lost imaginative

powers. As government men from the CorpSeCorps force Jimmy to watch his mother's execution, her last words—words that will later be echoed by Oryx⁴—link him back to Killer: “Goodbye. Remember Killer. I love you. Don't let me down” (258). After reminding Jimmy of her unconditional love, his mother juxtaposes Killer with her longtime desire for Jimmy to become aware of the Compound's deceptively comfortable lifestyle. In this manner, she uses the animal to encourage Jimmy to imagine an entirely new existence outside of his prescribed convenient yet mundane existence in the Compounds and create his own narrative. Unlike Jimmy's manipulation of Killer to absolve the guilt associated with his episodes of lunchtime storytelling at school, Jimmy's mother reminds Jimmy of the liberated animal in order to hold him accountable for his position within the environmentally destructive society. Jimmy does not perceive the connection in this way: “Why did she have to drag Killer into it? So he'd know it was really her, that's why. So he'd believe her” (259). He merely sees the incorporation of Killer as a tool for communication. However, images of his old friend Alex continue to haunt him after his traumatic witnessing of the execution. Jimmy seeks out old videos of Alex on the net in order to comfort himself: “On the worst nights he'd call up Alex the parrot, long dead by then but still walking and talking on the Net, and watch him go through his paces... Seeing this would bring tears to Jimmy's eyes” (260). Without realizing what he is doing, Jimmy seeks out the animal remembered from his childhood, when he invented his own narratives for comfort. Although he does not attempt to leave the Compound behind, Jimmy's mind gravitates toward the sort of inventive storytelling that structured Compound life shuts down and that Crake later tries to snuff out from his new species. Despite years of social pressure away from his

⁴ When Oryx asks Jimmy to take care of the Crakers in case anything happens to her, her words link her to Jimmy's mother: “Say you'll do it, don't let me down. Promise?” (322).

connection to other species, Jimmy's art instinct to tell stories that acknowledge a connection to animals has not been permanently subdued.

While the loss of his relationship with Killer and his mother coincides with his loss of ability to empathize with other species, the introduction of Oryx, who is also associated with animals, hints at a potential for re-emergence. As Osborne points out,⁵ Atwood not only uses the image of the rakunk to connect Jimmy with his mother, but she also repeats it when Jimmy breaks his cycle of female domination by falling in love with Oryx, a woman whom Jimmy thinks is the young child he once saw while browsing HottTotts, the "global sex-trotting site" (89). Atwood visually links her to the animals that played such a crucial role in Jimmy's early attempts at storytelling. When Jimmy first beholds the adult Oryx among the Crakers, she is significantly holding a young rakunk (308). This image bears immediate associations with Killer, and by extension, the mother whose disappearance coincided with that of the animal. When Jimmy hears that the young Oryx and several other children were crammed into a truck bearing a red parrot logo, he creates an internet search in order to confirm the reality of her story: "He found Alex the cork-nut parrot who'd said I'm going away now, but that was no help to him because Alex was the wrong colour. He wanted the red parrot to be a link between the story Oryx had told him and the so-called real world" (138). In this passage, Jimmy not only attempts to use Alex the parrot to establish a connection between himself and Oryx, but he also tries to reconnect himself to his environment. However, because of the discrepancy in the birds' colors, he stops short of making the connection. He ultimately fails to connect make any of these connections due to his inability to use his imagination to do so.

⁵ Osborne notes three significant instances in which the image of the rakunk appears in *Oryx and Crake*: "[F]irst, with his actual pet rakunk; the second with his mother, whose last words, to 'remember Killer' link her to this animal, and finally with Oryx, who is holding a rakunk when Jimmy first sees her in the flesh" (30-1).

Jimmy's complex relationship to animals and women come together in a memory that presents itself to the Snowman of the novel's postapocalyptic present. As the supposed last man who longs to hear a human voice in a world where such a feat remains physically impossible, Jimmy-Snowman notices his own voice transform into an animalistic cry:

Sometimes he laughs like a hyena or roars like a lion—his idea of a hyena, his idea of a lion. He used to watch old DVDs of such creatures when he was a child: those animal-behaviour programs featuring copulation and growling and innards, and mothers licking their young. Why had he found them so reassuring? (10)

Unable to form his cries into human language, Jimmy-Snowman remembers finding comfort while watching animal mothers and young interacting. In her review for *The New Yorker*, writer Lorrie Moore offers an answer to Jimmy-Snowman's silent question. She suggests that *Oryx and Crake* links all animal species, including humans, together through a fundamental truth: "[T]here is a more pervasive and recurrent idea, one that would be sentimental if it were not for its inherent animal truth, and that is the power of maternal love [...] The ur-mother in *Oryx and Crake* is, of course, Mother Nature herself" (Moore). Ingersoll connects the departure of Jimmy's mother to scientific pursuits which attempt to dominate a feminized nature: "The gendering of genetic engineering as a masculinist pursuit of a goal, regardless of the consequences of that compulsive pursuit, is played out in the conflict between Jimmy's parents, ending with his mother's departure" (115). This departure also marks the disappearance of Killer, as well as any other form of relationship to animals, from Jimmy's everyday life.

Examining this separation from a perspective of Literary Darwinism helps to highlight the dangers of the limited perspective exemplified by Jimmy-Snowman's use of stories to destroy his relationships with animals and other human beings. Science isn't the only force

pushing the mother away; the humanist Jimmy's failure to use empathy to connect with the experience of other species, and thereby place himself above the animal-human continuum, also further contributes to this effect. In a society that pollutes the environment, systematically ignores the extinction of other animals in the biosphere, and thus continues to push Mother Nature away in the manner that Jimmy pushes his own mother away, Atwood's question "How much is too much, how far is too far?" bears particular resonance for the novel as a whole (206). How far can the human species push Mother Nature away before it is too late? Even though Jimmy does not exhibit a sense of environmental responsibility by the end of *Oryx and Crake*, the calls of his mother and Oryx not to let them down encourage him to re-establish his relationship to stories and other species. In *The Year of the Flood*, a novel which presents a more optimistic scenario in which Jimmy is not the single human left on earth, Atwood will explore the implications of storytelling and species relationships for survival on a larger scale.

CHAPTER TWO:

SUSTAINABLE STORYTELLING IN *THE YEAR OF THE FLOOD*

By ending *Oryx and Crake* with a cliffhanger, Margaret Atwood leaves her readers with two distinct problems. Most obviously, Crake has implemented a radical solution to humanity's destructive relationship to the environment in which he uses science and technology to bioengineer a more improved model of humans that are "perfectly adjusted to their habitat" (*Oryx* 305). In order to solve ecological crisis and make way for this newer, more sustainable species, humans must die. Secondly, the supposedly last human alive fails to provide overwhelming evidence of redeeming human qualities that might outweigh their environmentally destructive practices. As I illustrated in Chapter One, the destructive tendencies of Jimmy's storytelling remain consistent with Crake's warning against symbolic thinking in the Crakers creates a set of ominous implications for Atwood's readers. The irreconcilability of Crake and Jimmy's separate perspectives leaves the postapocalyptic world of *Oryx and Crake* with a disturbing lack of solution to the horrors the reader has just witnessed. However, Atwood subtly hints at a potential merging between the two opposing viewpoints when the Crakers eventually malfunction. When this new replacement human species produces a "scarecrowlike effigy of Jimmy," Jimmy-Snowman is reminded of Crake's specific words of caution:

Watch out for art, Crake used to say. As soon as they start doing art, we're in trouble. Symbolic thinking of any kind would signal downfall, in Crake's view. Next they'd be inventing idols, and funerals, and grave goods, and the afterlife, and sin, and Linear B, and kings, and then slavery and war. (Oryx 360-1)

Through free indirect discourse involving words such as "idols," "funerals," and "sin," Atwood suggests that Crake's distrust of the arts is rooted in a particular form of storytelling—the stories

associated with religion. These religious term “sin” immediately precedes “Linear B,” “kings,” “slavery,” and “war.” By arranging his progression in this order, Crake seems to indicate that religion leads into other strains of human behavior, some of which are harmful. Not only does Atwood subvert Crake’s words by allowing his manufactured species to “develop reverence” for himself, Jimmy, and Oryx, but she also places the theme of religion at the center of the companion novel to *Oryx and Crake*, *The Year of the Flood* (Oryx 157). This next installment of what will become the *MaddAddam* trilogy tells the tale of the events leading up to and following the apocalypse of its predecessor from the perspective of members of the God’s Gardeners—a religious cult only briefly mentioned in *Oryx and Crake*.⁶ Instead of serving as living illustrations of Crake’s theories on religion, the God’s Gardeners in *The Year of the Flood* create a set of moral principles surrounding the unlikely juxtaposition of religion and science in order to achieve what Crake deems an unthinkable achievement—many of the Gardeners manage to survive the apocalypse.

The literary Darwinists’ attempts to explore the arts from an evolutionary perspective can also be extended to the development of morality. In *On the Origin of Stories*, Brian Boyd articulates an evolutionary connection between morality and storytelling:

Another feature of fiction—but not of fact—also encourages the development of a moral sense. Story by its nature invites us to shift from our own perspective to that of another, and perhaps then another and another. Stories come most alive when all the principal characters have their own vivid life, especially when not only their actions but also their speech and thought are fully realized. (197)

⁶ In *Oryx and Crake*, The God’s Gardeners appear on a T-shirt worn by Jimmy’s Martha Graham Academy roommate, Bernice (189). Atwood features this character more prominently in *The Year of the Flood*.

This quote points toward Jimmy's initial empathetic instinct toward the burning animals that I explored in my previous chapter. Stories allow humans to take on the perspective of a human or nonhuman animal other. The development of a moral sense involves the multiplying of this process in order to empathize with a larger number of individuals. Boyd points out the particular feature of religious narratives to enable an individual to inhabit the perspective of several characters at once. In *Oryx and Crake*, Jimmy occasionally abandons his destructive tendencies in order to channel the basic empathetic qualities of the storytelling instinct to attempt to connect with a limited number of humans and animals. In *The Year of the Flood*, the Gardeners create a religious narrative that articulates an extension of empathy and responsibility towards a multiplicity of other species, humans, and the environment in general in order to promote survival within a setting of ecological crisis. Furthermore, the creation of a more sustainable narrative about the species' origins provides a means of reinserting values of empathy and sustainability into the landscape of Atwood's speculative fiction in a way that figuratively wipes humanity's slate⁷ clean. This provides a more optimistic alternative to Crake's attempt to wipe humanity off the face of the planet. In this manner, *The Year of the Flood* provides the answer to the question of how to reconnect with nature after humanity has worked to push it away, that is, through the unity of an empathetic religious narrative and scientific evolutionary principles. This chapter will argue that the connection between these two perspectives creates a fusion of forgiveness and sustainability.

Reconciling the perspectives of Jimmy's alignment with the arts and Crake's strict adherence to science seems to create a kind of paradox. Critic Hannes Bergthaller uses a frame of sustainability discourse to refer to the discrepancy between the two men's separate

⁷ The language of "wiping the slate clean" comes from Margaret Atwood's discussion of repairing one's debt to the earth in *Payback: Debt and the Shadow Side of Wealth* (187).

perspectives in *Oryx and Crake* as an “impasse” that Atwood must “resolve” in *The Year of the Flood* (729). Following the themes of fiction and storytelling, he points toward an aspect of “performance” inherent in the concept of living more sustainably: “Both novels... point to the paradox implicit in the ecological imperative, a kind of performative contradiction that becomes obvious as soon as it is slightly reformulated: humans *ought* to behave like a part of nature because they *are* a part of nature” (Bergthaller 731). The farther humans move away from nature through either the convenient destructive storytelling of Jimmy or the unrestrained scientific practices of Crake, the more humans forget this connection. In the environmentally devastated landscape of *Oryx and Crake*, Jimmy departs from his empathetic storytelling impulse to inhabit the perspective of human and nonhuman animals. Bergthaller’s analysis of this text as well as its companion calls for a more challenging use of the imagination. He suggests that sustainability must involve a premeditated act of fiction-making as humans must consciously imagine how they should fit into their environments and modify their behavior accordingly. In a sense, humans must extend empathy towards the environment as a whole. This use of fiction-making to fabricate a more empathetic character role for the species, and not the natural phenomenon of existence, precedes moral behavior towards the environment. Bergthaller labels this particular question with the expression “taming the human animal” (730). His consideration of this problem reveals the absence within *Oryx and Crake*:

Jimmy and Crake represent two different but equally flawed answers to the problem of taming the human animal. Crake fully understands the destructive potential of mankind’s evolutionary inheritance, but he does not appreciate what his revulsion against the latter indicates: that human beings are not fully determined by that inheritance, and that this lack of determination allows for the

forms of self-domestication that constitute cultural history... Jimmy, on the other hand, represents a humanism that fails to understand itself as a bio-political project. He is fully alive to the thrill of artistic beauty, yet does not understand that it is meaningful not in itself, but because it provides a way of coping with the conflicting tendencies rooted in our biological being. What is absent from *Oryx and Crake* is a perspective that would, as it were, put these two half-understandings together. (Bergthaller 737)

In separate ways, both characters fail to understand the arts as being linked to a biological perspective. This failure results in the first novel's morally and thematically ambivalent ending, in which Atwood conveys an ambiguity through Jimmy-Snowman's last thoughts, "Zero hour [...] Time to go," as he decide how he will engage with the strange group of human survivors—if at all (374). In this manner, the cliffhanger ending of *Oryx and Crake* not only leaves the reader wondering about humanity's survival, but it also demands some kind of merrgence of the two understandings embodied by Jimmy and Crake. This call for reconciliation resonates with the literary Darwinists' attempts to explain the arts through an evolutionary perspective, and thereby, blur the seemingly indelible line between the two.

However, despite this ambiguous ending, Atwood leaves one hint at a solution in *Oryx and Crake* in a scene involving an artist character. Amanda Payne, Jimmy's visual artist girlfriend and a character that spans both novels, attempts to create a fusion of nature and art to insert love into her project—a move that takes on particular thematic importance in *The Year of the Flood*. Amanda Payne combines animals and language to create her art project, the Vulture Sculptures. Atwood describes the highly resourceful project in the following terms: "The idea was to take a truckload of large dead-animal parts to vacant fields or the parking lots of

abandoned factories and arrange them in the shapes of words, wait until the futures had descended and were tearing them apart, then photograph the scene from a helicopter” (*Oryx* 244). The distinctly violent production methods of Amanda’s art are reflected in her choice of four-letter words. When she first meets Jimmy, she has “vulturized” the words “PAIN” and “WHOM” and “GUTS.” However, the text alludes to a missing word: “She was having a hard time during the summer of Jimmy because she was blocked on the next word” (*Oryx* 245). Amanda’s art uses the remains of a violence-obsessed society to create art that reflects its values—or lack thereof. Even so, she acknowledges an unknown word, which is conspicuous in its absence. In a world where the supposed last man spends his numbered days either searching for food or attempting to tell stories to the Crakers, an audience that does not understand him, Amanda’s missing word is amplified to create a more disconcerting effect.

Although Amanda finds her word in *Oryx and Crake*, Atwood does not fully explore its place within the universe of her speculative fiction until *The Year of the Flood*. After Jimmy tells Amanda of his new job writing promotional advertisements for AnooYoo Spa, she finds the inspiration to overcome her artistic slump: “[S]he’d unblocked herself artistically: the next key word for the Vulture Sculpture had come to her.” The word she reveals diverges significantly from her previous three words—that is—the word “Love” (*Oryx* 247). Soon after this point, Amanda and her mysterious words disappear from the novel, without any further elaboration. However, both reappear in Atwood’s follow-up novel. In one of the earliest God’s Gardeners hymns, which divide the different sections of *The Year of the Flood*, Amanda’s final elusive word reappears in the form of a question. The final stanza of the hymn entitled “When Adam First” asks a question that the novel itself will attempt to answer: “Oh Creatures dear, that suffer

here, / How may we Love restore?" (*Flood* 14).⁸ In a world where humans have pushed themselves away from other species, other humans, and nature in general, can love be restored or are we doomed to be replaced by a species such as the Crakers—a species that has been biologically programmed not to experience love? Atwood seems to begin to answer this question in a passage from *Oryx and Crake* that details the Crakers' mating ritual, an act that involves a quintuplet of four men and one woman, Atwood describes Crake's logic as a means of eliminating romantic pain: "Since it's only the blue tissue and the pheromones released by it that stimulate the males, there's no more unrequited love, no more thwarted lust; no more shadow between the desire and the act" (*Oryx* 165). Because *Oryx and Crake* ends with the Crakers, who are programmed to avoid feeling human love, as the new dominant species that coexists with only a handful of humans, without the companion novel, love cannot be restored.

Atwood uses *The Year of the Flood* to undo the cliffhanger of the first novel and takes on the project of reconciling science and the arts in its companion. As the companion novel progresses, Atwood presents her readers with hope for humanity in the form of the God's Gardeners. In a move that parallels Amanda's use of natural materials to find the missing word in her series, the God's Gardeners incorporate animals into the art of religious storytelling to create a compassionate and sustainable lifestyle and to reinstate a relationship with nature. According to Adam One, the main leader of the God's Gardeners, a failure to recognize some form of human-animal fellowship directly relates to humanity's chances at survival: "We must be ready for the time when those who have broken trust with the Animals—yes, wiped them from the face of the Earth where God placed them—will be swept away by the Waterless Flood [...]" (91). Here, the apocalypse of *Oryx and Crake* is redefined in religious terms that clearly

⁸ From this point on, a page number and/or range of numbers in parentheses will follow all in-text citations from *The Year of the Flood* contained in this chapter.

refer to the biblical story of Noah as a flood. Like Bergthaller, who points toward a problematic irreconcilability of arts and sciences in *Oryx and Crake*, Adam One indicates another form of division and imagines its dire consequences. According to Adam One, breaking a relationship of trust with other species will speed humanity toward extinction.

In the same way that Jimmy's first memories of storytelling involve his empathetic impulse toward the burning animals, the Gardeners' genesis-like story begins by depicting a strong human-animal bond. By focusing on such a bond, this particular creation narrative bears some resonances with evolution in the idea that humans are an animal species and should be understood on a continuum with other species in the environment. The same hymn in which the word "Love" reappears opens with a scene of inter-species coexistence: "When Adam first had breath of life.../ He dwelt in peace with Bird and Beast, / And knew God face to face" (14). In this new Genesis, Adam's paradise is characterized by a "Fellowship" with other birds and mammals. As a corollary, the fall from the Gardener paradise specifically results from the falling out of this relationship. The hymn goes on to lament the current post-fall state of humanity: "For Man has broke the Fellowship / With murder, lust, and greed" (14). Once again, the poem stresses the separation from other species as the most problematic consequence of humanity's sinful behavior. Words such as "murder," "lust," and "greed" echo the violent connotations of Amanda's initial word art such as "pain" and "guts." In other words, without love, humans dominate other species in nature through destructive behavior. Toby, one of the two principal narrators, later elaborates on the Gardeners' outlook on the fall of humanity by revealing tensions between Darwinian and religious perspectives on human/animal relations:

According to Adam One, the Fall of Man was multidimensional. The ancestral primates fell out of the trees; then they fell from vegetarianism into meat-eating.

Then they fell from instinct into reason, and thus into technology; from simple signals into complex grammar, and thus into humanity, from firelessness into fire, and thence into weaponry; and from seasonal mating into an incessant sexual twitching. Then they fell from a joyous life in the moment into the anxious contemplation of the vanished past and the distant future. (188)

Toby's language of primates falling out of trees strongly echoes Darwin's famous assertion of humanity's animal ancestry: "We thus learn that man is descended from a hairy, tailed quadruped, probably arboreal in its habits" (*Descent* 609). In Gardener theology, this literal descent from dwelling in trees as an "arboreal" species is equated with a figurative fall from grace. Toby reveals that the Gardeners associate violence and "sexual twitching" with humanity's distancing from other species. As we saw with Jimmy, this kind of behavior leads to problematic relationships with other human beings. Jimmy's use of non-empathetic storytelling to objectify the animals around him feeds into his incessant attempts to dominate the women in his life. In this manner, the beginning of the Gardeners' narrative portrays a situation that corresponds with Jimmy's destructive pattern; however, their religion itself attempts to undo the damage of the broken fellowship.

Adam One uses storytelling in a way that fleshes out Boyd's theoretical claims about the evolutionary roots of morality and create a belief system out of evolutionary theory. The other Gardeners with leadership privileges are each renamed "Adam" or "Eve" followed by a number based on their "areas of expertise" (5). When Toby is promoted to the role of Eve Six, Adam One allows both her and the reader access to some of the logic behind the Gardeners' religious ideology:

The truth is [...] most people don't care about other Species, not when times get hard. All they care about is their next meal, naturally enough: we have to eat or die. But what if it's God doing the caring? We've evolved to believe in gods, so this belief bias of ours must confer an evolutionary advantage. The strictly materialist view—that we're an experiment animal protein has been doing on itself—it is far too harsh and lonely for most, and leads to nihilism. That being the case, we need to push popular sentiment in a biosphere-friendly direction by pointing out the hazards of annoying God by a violation of His trust in our stewardship. (241)

Consistent with the view put forth by Bergthaller in his discussion of sustainability, Adam One points out that humans do not naturally behave as part of the environment. Instead, they ignore or exploit the other species in the biosphere in favor of pursuing short-term goals. In *Oryx and Crake*, Jimmy uses storytelling destructively by manipulating the animals around him in order to elicit an immediate harmful effect on his mother. In *The Year of the Flood*, Adam One proposes a way of using storytelling in a constructive manner that generates human interest in the long-term. In this passage, he suggests that humans appeal to a higher presence in order to create a sense of compassion toward animals and toward the environment in general. By changing humans' fundamental understanding of the world through a story of religion, Adam One manages to impose a sense of morality or empathy. Toby further perceives a universal sense of responsibility inherent in religion: “‘What you mean is, with God in the story there's a penalty,’ said Toby” (241). In the context of sustainability outlined by Bergthaller, the stories accompanying religion are not diametrically opposed to evolution. Rather, the evolutionary functions of storytelling enable the human species, whose attempt to push away nature helped to

set in on a dangerous trajectory, take responsibility for destructive behavior and reconnect with it.

Toby goes on to invoke a language of penalty that echoes Boyd's discussion of religion as a kind of evolved storytelling. Adam One responds to her insight by affirming that "Yes...There's a penalty without God in the story too, needless to say. But people are less likely to credit that. If there's a penalty, they want a penalizer. They dislike senseless catastrophe" (241). In other words, humans want to imagine a character that distributes punishment. Boyd constructs a similar argument while elaborating on how religion fits into storytelling's evolutionary purpose of engaging human attention:

And in societies of any size, stories involving agents with unusual powers capture attention and monitor our behavior and administer punishment or reward—the stories we call religion—permeate and persist partly because they offer such powerful ways of motivating and apparently monitoring cooperative behavior. Religious stories establish a secret spirit police. (64)

For Boyd, humans are universally drawn to creating religious narratives because in their basic ideal form, they promote cooperation within the species. Acutely aware of this phenomenon, Adam One manipulates his own religion through the hymns and sermons that divide Atwood's chapters not simply to inspire a sense of community within the Gardeners but also to instigate cooperation across species divisions.

The evolved tendency toward narrative results in some internal contradictions to the Gardener doctrine. In Adam One's sermon for The Feast of Serpent Wisdom, he outlines a difference between humans and other species: "We Humans must labour to believe, as the other Creatures do not. They know the dawn will come. They can sense it—that ruffling of the half-

light, the horizon bestirring itself...Unlike us, they have no need for faith” (235). His speculation about non-human animals’ inherent immersion in the environment as opposed to humanity’s need to use fiction to achieve the same effect reflects Bergthaller’s interpretation of the paradox of sustainability. While Adam One eventually uses storytelling to propose a kind of difference between humans and other species, this same separation helps to restore a connection with the environment and other species in it. Denis Dutton similarly elaborates on this emerging contradiction while outlining the project of *The Art Instinct*: “Paradoxically, it is evolution—most significantly, the evolution of imagination and intellect—that enables us to transcend even our animal selves...” (9). Despite evolution’s ability to evoke a continuum between humans and other species by drawing on their common roots, its connection to fiction also provides humans with a defining characteristic. In order to examine the paradox raised by Adam One and his sermons about human-animal relationships in the pre-apocalyptic world, one must examine the ways in which the values inculcated in the Gardeners play out before and especially after the Waterless Flood wipes away most of the human population.

The answer to the question of what specifically makes humans different from animals within the context of evolution and storytelling appears in the environmentalist Bill McKibben’s book *Enough: Staying Human in an Engineered Age* (2003). Atwood herself reviewed McKibben’s exploration of the consequences of contemporary environmental degradation favorably.⁹ Furthermore, it is cited on the web site for *The Year of the Flood* as along with Dutton’s *The Art Instinct* as a possible inspiration for “the founders of the God’s Gardeners in their youth, before they discarded electronic modes of communication and severely limited their use of paper products” (Atwood, “Reading List”). After painting the picture of genetic

⁹ Atwood’s review, which first appeared in *The New York Review of Books* appears again in her compilation of reviews and essays, *Writing With Intent: Essays, Reviews, and Personal Prose: 1983-2005* (2005).

engineering's Crake-like tendency to push the boundaries of humanity, McKibben explains his title by posing the question of whether humans will ever be able to say "enough" to relentless scientific pursuit.¹⁰ In this manner, he invokes Crake's tendency to tirelessly pursue science in order to make his imagination into a reality in *Oryx and Crake*. McKibben goes on to answer his own question by arguing that despite his understanding that Darwin "shattered" the conception that humans are "special" among other animals, one thing does distinguish humans from other species (204). He claims, "We are unique in that we set limits" (McKibben 205). For McKibben, humanity's constant evolution sets it on a dangerous trajectory, the trajectory that Atwood envisions in *Oryx and Crake*. In *The Year of the Flood*, the God's Gardeners use storytelling and religion to say "enough."

Like McKibben, Bergthaller suggests that the ability to set limits seems to exist as a capacity outside of humanity's biological origins. Thus his attempt to hermetically seal the performative act of creating limits and self-moderating behavior accordingly contradicts the theories of Literary Darwinism. However, in the work of Margaret Atwood, the Crakers' emerging tendency toward artistic creation, despite their genetic programming, suggests that McKibben dismisses the connection between animals and humans too quickly. The language of limits reappears as Bergthaller sets up his analysis of Atwood's speculative fiction:

While the idea of sustainability is often advanced in the terms of traditional environmentalism, as a call to heed the laws of nature, in practice it amounts to a rejection of any normative claims brought forward in the name of nature; after all, no other species ever *decided* to impose limits on its interactions with the environment in order to perpetuate its own existence. (732)

¹⁰ In the chapter that shares its title with that of the book, McKibben finally articulates his central question: "[W]hen do we say 'enough?'" (McKibben 109).

While Bergthaller's argument for the uniqueness of the species' conscious decision to create limits resonates with McKibben's thesis, both miss an important aspect of *The Year of the Flood*. Even as the stories told by the Gardeners differentiate them from other animals, they also engage with animals in order to create their theology. By setting limits that "push popular sentiment in a biosphere-friendly direction by pointing out the hazards of annoying God by a violation of His trust in our stewardship," Adam One and the Gardeners depend on animals to set their limits to environmentally destructive behavior (241).

Despite any differences between species, Atwood stresses the connectedness of humanity to the environment through the imaginative structure of poetry. As the hymn "Oh Let Me Be Not Proud" articulates, a Gardener should adhere to the following guidelines of humility: "Not rank myself above / The other Primates, through whose genes / We grew into your Love" (54). Not only does the hymn urge the Gardeners not to exalt themselves above the primates from whom they evolved, but it also reintroduces Amanda's missing word into the discourse of animals. Boyd accomplishes a similar effect in his discussion of the evolution of morality:

We can observe the basis for human moral emotions in other animals, especially primates: empathy, which as Darwin noted makes individuals much more able to live in groups; a sense of fairness and self-righteous indignation, recently found experimentally even in capuchin monkeys, and demonstrated cross-culturally in humans; forgiveness and reconciliation, needed to repair relations, observed over the last twenty years in many species... Nature has endowed us with a moral capacity 'much like a gyroscope at rest,' and culture's role is 'to spin it and establish its orientation. (140-1)

If human morality depends upon the ability to set limits, this interpretation offers a means of reconciling the differences outlined by McKibben. The empathy exhibited by the young Jimmy in *Oryx and Crake*, an ability derived of primate ancestry, eventually results in humanity's ability to forgive. This forgiveness eventually becomes as important to the novel's plot as love.

Toby, the older of the two female narrators and the one who appears to have the most advantageous characteristics for survival initially experiences difficulty with both animal empathy and forgiveness. She first comes to the Gardeners when they help her escape from her sexually abusive boss at the SecretBurgers¹¹ restaurant, a food establishment whose use of whatever kind of animal (or maybe even nonanimal) protein it can get a hold of parallels the boss, Blanco's, exploitation of women. For a brief period of time, before she meets the Gardeners, Toby studies "Holistic Healing" at Martha Graham Academy, "the third tier institution" where Jimmy studies humanistic pursuits in *Oryx and Crake* (32). At the Garden, she soon uses her Martha Graham Academy background to instruct the young Gardeners in the ways of "Holistic Healing with Plant Remedies" (46, 61). Even with Toby's initial desire to leave the Garden behind and frequent cravings for meat protein, Adam One and the Gardeners identify her educative background as one of the necessary survival skills to inculcate in the children in anticipation of the Waterless Flood. When Pilar, the original Eve Six who specializes in Bees and Mushrooms dies, Toby must swallow her pride and speak to her mentor's presumably indifferent bees in order to fulfill a promise: "But she went to tell the bees. She felt like an idiot doing it, but she'd promised [Pilar]. She remembered that it wasn't enough just to think at them: you had to say the words out loud" (180). Despite the philosophy of the Gardeners about animal relationships and pride, she admits to feeling silly and uncomfortable

¹¹ Atwood sardonically reveals to the reader that "The secret of SecretBurgers was that no one knew what sort of animal protein was actually in them" (*Flood* 33).

while speaking to the insects. She uses the ability to understand linguistic structures as a means through which she can rise above the other species.

However, later in the novel, Toby's emerging relationship with the bees directly contributes to her survival. When the unforgiving Blanco breaks into the Garden with the intention of punishing Toby, she imagines a creative solution for escape: "She pushed the hive over—three of them... The bees poured out, whining with anger, and went for [Blanco] like arrows, he fled howling down the fire-escape stairs, flailing and slapping, trailing a plume of bees" (255). This act not only shows her resourcefulness in the form of working with the animals in her environment to survive, but it also marks the emergence of her reciprocal relationship with the bees. Forced to flee the Garden in order to save both herself and the other Gardeners from Blanco, she genuinely apologizes to the bees for those they lost in battle and says goodbye: "'I'll miss you bees,' she said. As if in answer, one of them started crawling up her nostril. She breathed it sharply out. Maybe we wear hats for these interviews, she thought, so they won't go into our ears" (258). Atwood uses the storytelling device of simile through the words "as if" to portray Toby's attempt to imagine the animals' response. However, unlike Jimmy, who imagines Killer's responses in order to serve his own purposes of absolving guilt, Toby describes a physical merging of herself and the bees. Furthermore, her use of the human term "interview" literally indicates a "mutual view (*of each other*)" (*OED* 2). That is, her storytelling with animals simulates a kind of symbiosis missing in Jimmy's stories in *Oryx and Crake*. In this manner, her creative relationship with the bees remains consistent with Bergthaller's conception of necessary performative sustainability.

The extent to which the Gardeners internalize their empathetic interspecies relationship doctrine greatly informs their abilities as storytellers. Ren, the young protagonist who comes to

the Garden as a child, seems the more fragile and the less well-equipped to survive of the two women. Even though the Gardener Zeb's Predator-Prey Relationships class prepares the children to eat animals in circumstances where it might be necessary for survival, Ren experiences difficulty getting past the fact that she is incorporating something that was once living into her body:

Zeb made the chunks of meat really small so everyone could try, and also because he didn't want to push us too far by making us eat big pieces [...] He handed me a chunk. I put it into my mouth. I found I could chew and swallow if I kept repeating in my head, "It's really bean paste, it's really bean paste..." I counted to a hundred, and then it was down. But I had the taste of rabbit in my mouth. It felt like I'd eaten a nosebleed. (140)

Not only does this passage reveal Ren's strong distaste for eating animals, but it also reveals her crucial function as an Atwood character. While Jimmy's father transforms the burning animals at the beginning of *Oryx and Crake* into "sausages" with their "skins on" because he wants to erase their subjectivity, Ren mentally transmutes the animal protein into a plant out of an overwhelming desire *not* to eat the animal in front of her (*Oryx* 18). In order to make herself participate in the classroom exercise of meat-eating, Ren uses her imagination to create another reality that makes the act of eating more acceptable. Out of all the characters in *Oryx and Crake* and *The Year of the Flood*, Ren is the most ready storyteller as she internalizes the following Gardener mantra of reality creation: "You create your own reality, the horoscopes always said, and the Gardeners said that too" (284). Furthermore, Atwood chooses to write the chapters depicting this character's internal thoughts in the first-person—something she does not do for either Toby or Jimmy, the protagonist of *Oryx and Crake*. Earl G. Ingersoll specifically

comments on Atwood's decision to make Jimmy-Snowman a third-person narrator through comparison to her other novel, *The Blind Assassin*: "Unlike *The Blind Assassin* whose narrator and central figure, Iris, is not only an 'eye' but also an 'I,' preserving the history of her family (and Canada's in the 20th century), Snowman is disabled from being an 'I' in this novel..."

(121). In *The Year of the Flood*, Atwood makes the decision to enable Ren, above all of her other characters, as the "I" / "eye" of her *MaddAddam Trilogy*. Not surprisingly, she is also the character with the most empathetic relationship toward other species.

Ren extends her empathetic animal storytelling to her other human relationships, particularly that with Amanda. When she learns that her best friend is dating Jimmy, the man with whom she is in love, Ren uses storytelling to subdue her jealous impulse. Remembering Adam One's warning against the harmful effects of jealousy, she uses her imagination to give it a tangible shape that she can watch disappear:

I tried to visualize my jealousy as a yellowy-brown cloud boiling around inside me, then going out through my nose like smoke and turning into a stone and falling down into the ground. This did work a little. But in my visualization a plant covered with poison berries would grow out of the stone, whether I wanted it to or not. (304)

By using the same techniques she does with animals to dispel any impulse to hurt her friend, Ren accomplishes the end for which Crake created an entirely new replacement species. She tames emotions, which bring about the climactic double-murder scene in *Oryx and Crake*, as Crake slits Oryx's throat, and Jimmy immediately shoots his friend all in a single paragraph (*Oryx* 329). Even though she cannot turn her jealousy into the inanimate object of a stone and must

settle for the living poison berry plant, she is subsequently able to resume her friendship with Amanda.

Atwood immediately follows this scene with an instance of parallax between the two novels. Just as she discussed her Vulture Sculptures with Jimmy in the earlier novel, so does Amanda mention her project to Ren. After Amanda breaks up with Jimmy, she tells Ren about her disappearing word art: “‘I’m up to the four-letter words.’ And I said, ‘You mean the dirty ones, like *shit*?’ And she laughed and said, ‘Worse ones than that.’ And I said, ‘You mean the c-word and the f-word?’ and she said, ‘No. Like *love*’”(304). Not only does this exchange stand out as important because Atwood has chosen to explore Amanda’s art from the perspectives of two different protagonists, but it also stands out because of the way in which Ren handles the information. After Ren finds out about the breakup, she adds another crucial word into the dynamics between the two women. She thinks to herself, “*Now I can forgive her...*” (304). Thus Atwood juxtaposes Amanda’s missing word of “love” with another word that appears in the work of literary Darwinists and also becomes prominent in the last chapter of her book *Payback: Debt and the Shadow Side of Wealth* (2008). This book, which is really more of a long essay, combines a multiplicity of different perspectives such as history, scientific studies, literature, politics, and personal narratives in order to examine society’s relationship with debt. In the final chapter, “forgiveness” becomes an “antidote” to the cycle of revenge initiated by debt (Atwood, *Payback* 159). In other words, this new word, “forgiveness,” is a means through which Jimmy-Snowman could have avoided his fate as the lonely human being among the Crakers.

Atwood places a test on the qualities of love, forgiveness, and empathy espoused by the God’s Gardeners’ theology when Ren, Toby, and Amanda leave the Garden to fend for

themselves in the devastated post-apocalyptic world. Just as Toby experienced difficulty in exhibiting empathy toward the bees, so does she initially hesitate to help the bird-woman, Ren. After Ren has been raped by group of released Painballers¹² and separated from Amanda, she begs Toby for help. Without recognizing Ren under her glittery bird suit from her former job at Scales and Tails, a high-end strip club, Toby thinks to herself, “The bird woman. Some freak from a sex circus. She’s bound to be infected, a walking plague. If she touches me...I’m dead” (354). Instead of imagining the pain of the other woman, Toby concerns herself exclusively with her own survival. The woman might be carrying what a reader of *Oryx and Crake* knows to be Crake’s virus. Before Toby recognizes Ren, she hears the voice of Nuala, a former Gardener, in her head: “You are an uncharitable person, says the voice of Nuala. You have scorned God’s Creatures, for are not Human beings God’s Creatures too?” (354). In her reluctance to save Ren, Toby goes against the Gardener values toward animal life. Ren’s bird costume allows Toby to dehumanize Ren and deny her help, therefore, going against the doctrines of animal compassion. Furthermore, she ignores the underlying Gardner message of community. Not only should she exhibit empathy unto other animal species, but also unto other human beings. Ren’s costume highlights the similarity between humans and animals.

Through her initial lack of compassion towards Ren, Toby engages in a behavior that is potentially destructive with regards to the human species as a whole. Even when Toby decides to rescue Ren, she briefly considers feeding her the poisonous plant, the Death Angels in order to prevent the food stores from going “twice as quickly” (357). For Toby, survival means fending for oneself before helping others. While Toby’s logic makes sense from a perspective of

¹² “Painball” is the name Atwood gives to the arenas designated for criminals. She describes what occurs in these violent prisons in the following terms: “You got enough food for two weeks, plus the Painball gun—it shot paint, like a regular paintball gun, but a hit in the eyes would blind you, and if you got the paint on your skin you’d start to corrode, and then you’d be an easy target for the throat-slitters on the other team” (98).

immediate personal survival, she departs from Bergthaller's conception of immersing oneself in the environment. Her inability to empathize also motivates her to consider eliminating one of the last members of her already dying species. In the same way that Boyd points out an evolutionary view of morality, so does he point out an advantage of cooperation: "An evolutionary view of cooperation allows us to look at the social world without inordinate hopes, but with real confidence that we can continue to find better solutions, even to the new problems that the very successes of our cooperation create" (66). An evolutionary perspective based form of creativity could allow for a more successful outcome for an individual member of the species. By placing herself above the bird-woman, Toby fails to engage in this advantageous combination of evolution and creativity. She also fails to look at the bigger picture of species survival.

In a chapter of silent prayer, Atwood uses a third-person narration of Toby's internal thoughts to draw the reader's attention to a moment of tension between the two protagonists. Once again, Toby wonders to herself whether or not she should have abandoned Ren, who seems ill-equipped for survival: "Then there's Ren. Couldn't you have picked someone less fragile? Less innocent? If [Ren] were an animal, what would she be? Mouse? Thrush? Deer in the headlights? She'll fall apart at the crucial moment: I should have left her back there on the beach" (414). Ren's extreme sensitivity to the devastation around her causes Toby to continue to refer to her in dehumanized animal terms. In a review for *Double X*, a part of *Slate Magazine*, Amy Hungerford, claims that "Toby is the one you'd want as your friend." On the other hand, she maintains that readers instantly recognize Ren's deficiencies:

[Ren]'s not the sharpest knife in the drawer, and we know that. Her hapless love for Jimmy emerges as a species of human virtue, the shadow of that unreasoning respect for life that stays Toby's trigger when she finally gets the Painballers in

her rifle sights or makes her hesitate to administer Death Angel mushrooms to the terminally gangrenous, and terminally hostile, Blanco. (Hungerford)

Despite Toby and Hungerford's presumptions that Ren might not contribute much to the team of survivors left at the end of the novel, Ren easily exhibits a virtue that plays a crucial role in the final sequence of events. If Ren possesses any main flaw, it is not her lack of intelligence.

Rather, it is that she cannot seem to turn off her empathetic impulse. When she and Toby are reunited with several Gardener survivors, Ren insists on abandoning her newfound safety to save Amanda from the gang of Painballers from whose clutches she only just escaped. Zeb attempts to veto Ren in favor of searching for Adam One and the other Gardeners:

Zeb says he's very sorry, but we have to understand that it's an either/or choice.

Amanda's just one person and Adam one and the Gardeners are many; and if it was Amanda, she'd decide the same thing. Then I say, "Okay, I'll go alone then," and Zeb says, "Don't be silly," as if I'm still eleven. (399)

In this instance, Ren defies the patronizing logic of her fellow survivors out of loyalty to her friendship with Amanda. In doing so, she adds an element to the story that is missing from *Oryx and Crake*—an empathetic love that asks for nothing in exchange. In a previous conversation with Ren, Amanda scoffs at the word she herself adds to her Vulture Sculptures: "[Amanda] said love was useless, because it led you into dumb exchanges in which you gave too much away, and then you get bitter and mean" (219). In the postapocalyptic world of *The Year of the Flood*, Atwood uses Ren's storytelling abilities to elaborate on the visual representation created, yet not necessarily espoused, by Amanda.

Returning to a perspective of Literary Darwinism allows one to redraw Toby's dismissal of Ren's survival instincts as evidence of her storytelling capabilities. Boyd uses Shakespeare as

an example of an artist who can erase his own identity in order to express himself through the expertly fleshed-out personalities of his characters: “The most eloquently expressive artist of all, Shakespeare, expresses himself so much through the mouths of others that we find it difficult to judge his stance on anything” (72). Perhaps Ren’s inability to eat meat and her constant love for Jimmy and Amanda are manifestations of her artistic ability to erase her own needs and put those of other human and nonhuman animals with whom she so easily empathizes before herself. In this manner, her storytelling presents the answer to why Jimmy longs for his mother and why Oryx imagines her own mother’s voice pursues her in the forest through the song of a bird (124). They are searching for the missing bonds of love through a missing connection between humans and animals. In the end of *The Year of the Flood*, Ren restores a redeeming concept of love to humanity through her indiscriminating ability to freely distribute it to those who might or might not deserve her devotion. This ability comes from her Gardener-informed impulse to understand her relationship with other species on a continuum with humans.

As is the case in *Payback*, love and forgiveness have the last say in the end of *The Year of the Flood*. Adam One begins the last section of the novel by using the sermon for “Saint Julian and All Souls Day” to relate one of the unanswered questions from *Oryx and Crake*. Even though Atwood leads her readers to believe that something is missing in her replacement humans whose organs turn blue when they are ready to procreate without any kind of romantic attachment, she does not endow Jimmy with any specific qualities that give them hope for humanity. In the final sermon of *The Year of the Flood*, Adam One asks, “Do we deserve this Love by which God maintains our Cosmos? Do we deserve it as a Species? We have taken the World given to us and carelessly destroyed its fabric and its Creatures” (424). In *Oryx and Crake*, Jimmy goes out to meet the three strange humans, armed with only one saving grace, his

story. Atwood frames his only possession in terms of exchange: “[H]e has nothing to trade with them, nor they with him [...] They could listen to him, they could hear his tale, he could hear theirs” (*Oryx* 374). In the last pages of *The Year of the Flood*, Atwood resolves her previous cliffhanger by introducing a form of storytelling that does not involve an equal exchange between parties—rather it involves a more difficult method of storytelling. Adam One proposes that the Gardeners instead look upon those who have abused the earth and destroyed endangered species with forgiveness: “This Forgiveness is the hardest task we shall ever be called upon to perform. Give us the strength for it” (425).

The concept of forgiveness reveals a means of wiping the slate clean that does not involve the mass-extinction and resetting of the human species. The final Gardener hymn, “The Earth Forgives,” suggests that even when humans have pushed Mother Nature to extreme distances, there is still hope:

Oh, if Revenge did move the stars
 Instead of Love, they would not shine
 Give up your anger and your spite,
 And imitate the Deer, the Tree;
 In sweet Forgiveness find your joy,
 For it alone can set you free. (427)

The first two lines in this excerpt reflect the moral universe of *Oryx and Crake*, where revenge characterizes the friendship of Jimmy and Crake and leads to Jimmy’s inevitable outcome. In this world where Mother Nature has been pushed away, the absence of morality or hope flickers at the end of the novel. Adam One’s hymn instead invokes the performative aspect of human nature from Bergthaller’s article. Humans must imitate other animals and plants in order to find

forgiveness—a word that Atwood continually interchanges with that of “love.” Storytelling teaches both the act of apology and empathy. It subsequently teaches forgiveness and sustainability. The hymn also closely parallels the function of forgiveness in *Payback*:

You may think that all of this forgiveness stuff is watery-eyed idealism of the clap-if-you-believe-in-fairies variety, but if the forgiveness is sincerely given and sincerely received—both parts are admittedly difficult—it does appear to have a liberating effect. As we’ve noted, the desire for revenge is a heavy chain, and revenge itself leads to a chain reaction. Forgiveness cuts the chain. (Atwood 160)

Just as forgiveness sets the Gardeners free, so does it create a liberating effect in Atwood’s discussion of debt. This quality might present humans with a way to begin wiping the debt slate clean. One must pay close attention to language of cutting chains and resetting debt at zero when considering *The Year of the Flood*, a novel whose title refers to the waterless flood which supposedly wipes the earth clean of the human species. In these two works, Atwood offers an alternative to the drastic measure taken by Crake to accomplish this end. Storytelling thus becomes an act of reparation that changes humanity’s imaginative framework and allows for a more sustainable kind of thinking.

Despite her former reservations about engaging in conversations with bees, Toby ends by asking forgiveness of the burning roasting rakunk from the end of *Oryx and Crake*. Atwood reveals that the three humans whom Jimmy encounters around a fire are two of the Painballers who abducted the escaped Ren and Amanda. After Toby and Ren enter the scene to rescue Amanda and safely bind the Painballers, Toby turns to the dead rakunk with compassion. As this image of animal bonfire appears in the second novel, Toby’s explanation for her actions to Ren redefines its function in terms of responsibility:

When she put the bones of the rakunk into the water she spoke the words of apology and asked for its pardon.

“But you didn’t kill it,” I [Ren] said to her.

“I know,” she said. “But I wouldn’t feel right unless somebody did this. (429)

Even though the two Painballers killed the rakunk, Toby temporarily erases her own identity, substituting herself for them and assuming the burden of guilt in their stead. Furthermore, she shares the meal not only with the former Gardeners Ren and Amanda, but also with Jimmy, and the two Painballers who were once on a Painball team with her former abuser Blanco. Using her apology to the rakunk as a springing board, Toby manages to accomplish “the most difficult task” of forgiving her enemies, just as the Earth forgives humankind in the hymn. Boyd specifically discusses the function of animals in stories in the following terms: “Story emerges out of our focus on one another and other animal agents, and out of the play that helps us learn to imagine by way of actions and agents” (Boyd 207). Not only does art emerge from play, but it also emerges when one agent attempts to focus on another—regardless of whether he or she is another human or a member of another species. In this final scene, Toby focuses on both. By empathetically engaging animal agents, she manages to use prayer as a means of summoning the forgiveness as apology that comes so easily to the novel’s “I” storyteller, Ren.

Just as Atwood stops short of delivering a concrete panacea to society’s problematic relationship with debt in *Payback*, so does she conclude her speculative fiction without providing definite answers to how to stop humanity’s destruction of the environment. However, by introducing the creation of new stories of forgiveness as a means of wiping the slate clean, she uses the forgiveness explored in *Payback* to provide a sense of hope absent from *Oryx and*

Crake. In her review for *The New York Times*, Jeannette Winterson comments on the new landscape of hope that Atwood provides in the second part of the *MaddAddam Trilogy*:

In this strangely lonely book, where neither love nor romance changes the narrative, friendship of a real and lasting and risk-taking kind stands against the emotional emptiness of the money/sex/power/consumer world of CorpSeCorps, and as the proper antidote to the plague-mongering of Crake and Jimmy, for whom humankind holds so little promise. As ever with Atwood, it is friendship between women that is noted and celebrated — friendship not without its jealousies but friendship that survives rivalry and disappointment, and has a generosity that at the end of the novel allows for hope. Atwood believes in human beings, and she likes women. It is Toby and Ren who take the novel forward from the last page, not the genetically engineered new humans.

Indeed, the empathetic storytelling restored by the two female narrators in *The Year of the Flood* restores that which was lost in *Oryx and Crake*. The emerging art instinct of the Crakers and subdued art instinct of Jimmy-Snowman as he shares narratives with them is explored to fuller potential in these two human women. The ability to empathize with the other allows them to erase their own personal thoughts of jealousy or revenge in order to benefit the species as a whole.

As the Gardener hymns suggests, the ability to extend empathy across species borders might benefit the damaged yet resilient Earth in the same way. The literary Darwinist project of using common human-animal origins to explore a relationship between humanities and sciences makes their religious narrative of sustainability possible. Bergthaller concludes his article by saying, “It is not enough to simply survive—what is needed is a symbolic order within which the

fact of survival can appear as meaningful and ‘good’” (Bergthaller 738). By the end of *The Year of the Flood*, Atwood does not simply show that humanity stands a chance of physical survival. She shows that more importantly, morality has survived in the form of the religious hymns and stories told by the Gardeners and actively employed by both Toby and Ren. Even without any definite conclusions about whom the strange candle-bearing singers might be or what might become of the survivors, Atwood’s work gives her readers sufficient hope that they might use empathy to rewrite the framework of their imaginations in order to tell their own stories about sustainability and forgiveness.

CONCLUSION:

EVOLUTION AND THE IMAGINATION

Examining the correspondences between the theory of Literary Darwinism and the imagination of Margaret Atwood reveals an urgent need for interdisciplinary dialogue. While the undisciplined scientific pursuit portrayed in the plot of *Oryx and Crake* leads to the extinction of countless animal species and the near-extinction of humanity, the exclusively humanities-centered approach conveyed through Jimmy's non-empathetic storytelling fares no better and may even contribute to the destruction. In failing to empathize, he stops short of extending his imaginative capabilities to the ability to understand the other species, and by extension, humanity's precarious place in the environment. Through this protagonist, Atwood illustrates that the humanities, when divorced from a perspective that takes into account an evolutionary animal-human continuum, both allow humans to dangerously place themselves above other species and to disconnect themselves from the natural world. In *The Year of the Flood*, as in Literary Darwinism, Atwood's attempt to follow the two branches of knowledge to their common root of evolution allows her to discover a means of preserving both the species as well as a purpose in that survival. This manifests itself in the God's Gardeners' fusion of evolutionary biology and religion, which allows humans to empathize with nonhuman animals in order to reconnect with the natural world and create a renewed sense of purpose. The connection between these two perspectives creates a fusion of forgiveness and sustainability.

The capabilities of the human imagination form a powerful component of Literary Darwinism. They are also central to the work of Margaret Atwood. Denis Dutton reveals the complicated nature of the relationship between imagination and human's evolutionary relationship to other animal species: "Paradoxically, it is evolution—most significantly, the evolution of imagination and intellect—that enable us to transcend even our animal selves[...]"

(9). While the evolutionarily-rooted imagination serves as a point of distinction between humans and animals, Atwood's most successful characters use their imaginations to insert themselves in the perspective of the animal through the storytelling mechanism of empathy. Thus, literary Darwinist principles not only serve as a useful tool for analyzing the work of Margaret Atwood, but they also figure into the novel's plot as the characters themselves attempt to create narratives that collapse the distinction between the self and the other, and thus, write themselves back into the environment.

The imaginative power that allows literary Darwinists to envision an integration of traditionally opposing disciplines also informs the speculative genre of Atwood's works such as *The Handmaid's Tale*, *Oryx and Crake*, and *The Year of the Flood*. In her discussion of the SF genre in her article, "*The Handmaid's Tale* and *Oryx and Crake* in Context," Atwood ends by emphasizing the importance of imagination within the context of survival:

As William Blake noted long ago, the human imagination drives the world. At first it drove only the human world, which was once very small in comparison with the huge and powerful natural world around it [...] Literature is an uttering, or outering, of the human imagination. It puts the shadowy forms of thought and feeling—heaven, hell, monsters, angels, and all—out into the light, where we can take a good look at them and perhaps come to a better understanding of who we are and what we want, and what our limits may be. Understanding the imagination is no longer a pastime or even a duty but a necessity, because increasingly, if we can imagine something, we'll be able to do it. (517)

In her most recent two works of speculative fiction, the outering of Atwood's own imagination addresses the natural world. By exploring the evolutionary roots of the human imagination, she

places anxieties about the future of environmental catastrophe into a light that is outlandishly terrifying and yet unsettling in its familiarity. The combination of humanities and science present in her works—the combination that allows us to look at the consequences of our behavior in a potential future—offers a solution within the context of *The Year of the Flood*. If we believe Atwood’s words, then the very fact that a solution can take shape within the human imagination means that it can also manifest itself in a reality. In the words of Ren, “*We are what we wish*” (*Flood* 400). In this mantra, wishes and reality become interchangeable.

In Atwood’s potential solution, the wishes associated with the imagination equate themselves to prayers. In a teaser for *In the Wake of the Flood*, a behind-the-scenes look at Margaret Atwood’s tour for *The Year of the Flood* directed by Ron Mann, Atwood proposes that a combination of evolutionary and religious ideas might be the only way to combat climate change. During footage of a panel discussion that includes evolutionary biologist Richard Dawkins, Margaret Atwood proposes that such cooperation must occur in order to combat environmental crisis, “otherwise it’s not going to work. There’s only a few Richard Dawkins’s, but there’s a ton more people who would get behind an attempt to save the planet if they believed it was their duty” (*Wake*). By establishing a powerful belief system, a specifically religious storytelling combined with an evolutionary foundation creates an even stronger incentive to change human behavior. Thus, we might wish or pray ourselves back into the environment—something Atwood claims we once excluded from our imaginations.

Atwood’s speculative fiction infuses the theories of Literary Darwinism with the solidifying possibility of belief. Through a reconciliation of the humanities and sciences, she presents a potential answer to the question of “what are our saving graces?” that she asks in “Writing Oryx and Crake” (286). The question aptly employs the traditionally religious

language of “grace.” Just as the Gardeners sing that the Earth grants grace her creatures, so do the human characters of *The Year of the Flood* manage to use a storytelling informed by an evolutionary perspective to forgive one another. By the end of the second installment to Atwood’s *MaddAddam* trilogy, a potential answer presents itself in a conciliatory merging of disciplines, including art, science, and the firm connecting thread of religion. Her speculative fiction ultimately speculates that one of our saving graces is grace itself.

In the context of contemporary environmental crisis, the merging of disciplines takes on a quality of necessity. During Charles Darwin’s lifetime, scientific romance author H.G. Wells also explored the connection between animals and humans in *The Island of Doctor Moreau*, a novella in which an ambitious scientist, not unlike Crake, attempts to vivisection animals into human beings. Horrified by what he has witnessed on the island, narrator Edward Prendick takes refuge in the intense study of strictly scientific disciplines upon his return to London: “I have withdrawn myself from the confusion of cities and multitudes, and spend my days surrounded by wise books... My days I devote to reading and to experiments in chemistry, and I spend many of the clear nights in the study of astronomy” (Wells 131). In this final passage, the study of a single discipline is equated to burying one’s head in the sand. Margaret Atwood, who revisits human-animal relationships in her contemporary speculative fiction, does so in a way that prevents her readers from taking Prendick’s approach. The imagined potential future that she transcribes on the page for her readers demands the reconciliation between the humanities and sciences urged by Boyd, Dutton, Wilson, and other literary Darwinists. In the wake of possible extinction, Prendick’s temporary attempt at solace cannot offer a long-term solution. Because Margaret Atwood’s literature offers a multidisciplinary approach in both its internal plot and

external genre, reading and thinking about her works becomes an important step toward humanity's survival.

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