Chasing Eden: Margaret Atwood's *MaddAddam* Trilogy and the Value of Reading in a Technological Age

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By Zoë June Bosman

ORCID ID

https://orcid.org/0000-0002-4905-3889

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Supervisor: Dr D. Seddon

Abstract

This thesis is focussed on Margaret Atwood's *MaddAddam* trilogy: *Oryx and Crake* (2003) *The Year of the Flood* (2009) and *MaddAddam* (2013). Detailing Atwood's own specifications as to why these texts should be categorised as works of speculative fiction, the thesis examines how this literary genre, and Atwood's *MaddAddam* trilogy in particular, is uniquely capable of encouraging readers to interrogate critically the socio-economic, environmental, and ethical problems to which she, and the contemporary reader, bear witness in the present technological age. With reference to Atwood's essays and critical writings, Darko Suvin's *Metamorphoses of Science Fiction*, and Wolfgang Iser's *The Act of Reading*, this project explores the value of reading speculative fiction and details how Atwood has constructed the fictional, yet plausible, possible future world of her trilogy by extrapolating our current scientific capabilities, environmental challenges, and political configurations to their logical conclusions. It explores the close relationship that exists between the near-future world of Atwood's texts and the contemporary context from which she has drawn her subject matter, and argues that the trilogy demonstrates graphically the long-term consequences of capitalism, sustainability, and the doctrine of human exceptionalism, which this project, following Yuval Harari, defines as orthodox guiding narratives: fictions that humanity has created, and which structure our perception of reality and guide our behaviour. The project maintains that Atwood's trilogy presents the reader with a hypothetical future that looks towards and beyond the end of contemporary technological society in order to urge her reader to imagine, and actualize, alternatives to the scenarios that these texts depict. The most significant question Atwood's texts ask is whether contemporary technological society is willing and able to transform in order to avert the ecological apocalypse that is the logical conclusion to the Anthropocene?

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Introduction

"Pray for us, who once, too, thought we could fly": Speculative Fiction and the Mythic Imagination

Margaret Atwood's collection of critical essays, entitled *In Other Worlds: SF and the Human Imagination* (2011), explores humanity's profound connection to stories and story-telling, particularly those stories which "are thought to be key to [our] identity" (49). Tracing humanity's relationship with narratives through recorded human history, Atwood contends, in an essay entitled "Burning Bushes: Why Heaven and Hell Went to Planet X," that "stories, themselves, of one sort or another, are always with us, and are always moving and changing through time" (43). Her preoccupation with stories, their form and content, as well as what role they play in human society, can be seen through her entire body of well-crafted works in which metatextuality and intertexts are often at work; a deliberate narrative choice that speaks to her awareness of the connections that exist between all forms of stories and story-telling.[1] One of the most astute, erudite and perceptive authors and socio-political commentators of our contemporary technological age, Atwood has produced literature worthy of both critical and popular acclaim. Her vast canon of work, which includes novels, short stories, essays and poetry, as well as children's books, bears testament to the scope of her creativity, influence and lucidity of thought; an appraisal that is supported by the twenty six honorary degrees she has had bestowed on her by universities all over the world, including Oxford, Cambridge, Harvard and The Sorbonne Nouvelle. Atwood's creative output spans five decades and her works have garnered eighty eight awards, including the first Arthur C. Clarke Award in 1987 for her first work of speculative fiction, *The Handmaid's Tale* (1985), the Booker Prize in 2000 for *The Blind Assassin* (2000) and the Prince Asturias Prize for Literature in Spain in 2008 ("Awards" pars. 3; 6).

In 2005, Margaret Atwood was presented with the Edinburgh Book Festival

[1] *Alias Grace* (1996), for example, is a story about a real woman called Grace Marks who was convicted of murdering her employers. It explores how stories shape our perceptions of ourselves and others, and questions the notion of truth (Atwood, "In Search of" 1503; 1504). *The Blind Assassin* (2000) explores the lives of two sisters, Iris and Laura, and through Iris's inward-directed inquiry into Laura's apparent suicide, encourages the reader to investigate how memory – the stories we tell ourselves about ourselves and others – functions, as well as the notion of truth (cover copy). *The Blind Assassin* also includes a story-within-a-story, "The Peach Women of Aa'A" (428 – 443), described by Atwood as an "oral concoction presented by its male romantic lead to his lover in response to her demand for happy endings" (*Other Worlds*, 215). This story is one of Atwood's only forays into what she calls "science fiction proper" ("In Context" 513) and provides the reader with a clear textual example of the ideological and conceptual differences that exist between science fiction and the works of speculative fiction that Atwood produces.

Enlightenment Award "for a distinguished contribution to world literature and thought" in recognition of her ability to penetrate popular culture and the modern consciousness (*Oryx and Crake*, "About the Author" i). *The Handmaid's Tale* (1985) explicitly proves this: after winning the Arthur C. Clarke award thirty one years ago, it has continued to resonate with readers until, like a phoenix, the story rose to prominence again in 2017 in the form of an eponymous television series. Atwood has also recently authored and published a book called *The Testaments* (2019) in response to the attention generated by the digital re-telling of *Handmaid*. This text, which has been described as both a prequel and a sequel to *Handmaid*, offers the reader the opportunity to discover how Gilead came into being and presents her with the story of how Gilead's theocracy functions in the years following the end of *Handmaid's* narrative present (Freeman pars. 3; 7; 9).

Critics, commentators and journalists alike have credited the renewed interest in this story to the zeitgeist that has been ushered in by the current president of the United States, Donald Trump; an observation that draws the reader's attention to the symbiotic relationship that exists between fiction and reality and a statement which is strengthened when the reader comes to learn that since Trump took office, "sales of the book have jumped by two hundred percent" (Q on CBC, "*Handmaid's* Relevance" 00:40-00:45). As Simon Houpt, a journalist for the Canadian newspaper *The Globe and Mail*, puts it so eloquently, Trump's victory has led those familiar with the text and its themes to recognize that "Gilead and our own world have been bleeding into each other ever since *Handmaid* burst like a roman candle onto the scene … borne on wings of gorgeous despair and exquisite timing" ("Authoritarianism" par. 6).[2] Examining the legal, social and political bills that Trump has endorsed, pushed through American Congress or has else ratified with an Executive Order, it is unsurprising that those familiar with Atwood's book and its later television adaptation sense an echo of the Republic of Gilead in Trump's vision of a new, white, and ultraconservative America. As Atwood

[2] These journalists, critics and commentators are from both print and digital media. They include but are not limited to the following writers and publications: the article included above, written by Simon Houpt in 2018; "Why *The Handmaid's Tale* is So Relevant Today" (2018), written by Jennifer Keishin Armstrong and published by *BBC Culture*, and "How *The Handmaid's Tale* Became TV's Most Chilling Trump-Era Series" (2017), a piece authored by Phoebe Reilly that appears in *Rolling Stone* Magazine. The effects of the adaptations of this book on the popular consciousness has also been examined by Atwood herself, in her two essays "Margaret Atwood on What *The Handmaid's Tale* Means In The Age of Trump" (2017), published by *The New York Times*, and "Haunted By *The Handmaid's Tale*" (2012), which explores previous stage and movie adaptations of her text and which is circulated by *The Guardian*. *YouTube* is also a wealth of information about how the novel and its themes have affected actual readers, as well as their opinions on its relevance to the Trump administration – one just needs to search "Margaret Atwood And *The Handmaid's Tale* Relevance" on *Youtube* to see the prolific amount of commentary and criticism that this novel has generated in both informal discussions and critical circles. *Youtube* is able to highlight the impact that Atwood has had on the contemporary cultural consciousness, as well as on the 'lay' readers of her work.

herself notes, Trump's campaign slogan – "Make America Great Again" – coupled with the rhetoric and narratives his administration adheres to and perpetuates, resonates with what she calls the "foundation of the 17th-century Puritan roots that have always lain beneath the modern-day America we thought we knew" ("What *The Handmaid's Tale* Means" par. 5). Trump's efforts to exert autocratic control over the female body through his fervent support of anti-abortion laws that threaten imprisonment for both the women who undergo this procedure and the doctors who perform it, his overt perpetuation of the social, political and economic structures ordained by patriarchy and misogyny, as well as his thinly veiled endorsement of ultraconservative Christianity, have uncanny parallels with the neo-theocracy upon which the fictional Republic of Gilead is founded. Trump's fervent desire to build a wall to keep immigrants and their cultures out of white America, his insatiable need to stoke religious and cultural intolerance, his admonishment of the current justice system and the media, as well as his increasingly isolationist trade policies correspond eerily to the socio-political and psychological landscape which Atwood's 1985 work explores (Q on CBC, "*Handmaid's* Relevance" 01:50-03:25).[3] The narratives that President Trump and his White House are constructing and perpetuating in service of their socio-political agenda are described by Atwood in her essay "Dire Cartographies" as creating "the conditions necessary for a takeover of its own power structures by an anti-democratic and repressive government" through fostering fear and propagating disunity (90).[4] Atwood has argued on multiple occasions that that "we are and become the stories we tell," and taking this observation into consideration, it is therefore no surprise that the present American climate worries many individuals, as it is becoming something of a precursor to Atwood's Gilead (A Rocha Canada, "Atwood and Kostomo" 14:40-14:46).[5] The close connection between *The Handmaid's Tale* and the socio-political atmosphere to which it is currently speaking is why this text has experienced such a dramatic resurgence in the past two years and demonstrates

[3] It would prove fruitful to compare and contrast Trump's vision of America and his government's behaviour with the most famous of American literature's exploration of puritanical tyranny – Arthur Miller's play, *The Crucible.* While Miller wrote it in response to the communist witch-hunt authorized by Senator McCarthy during the Cold War, the enemies of society according to the Trump administration are non-whites, non-Christians, foreign immigrants and liberals (Miller, "Why I Wrote" par. 4).

[4] Atwood's essay investigates the sociological and political impetus that lies behind the literary forms of utopia and dystopia and how authors, including herself, make use these forms in their fiction.

[5] Following the shooting of 5 employees of the *Capital Gazette* newspaper in Annapolis, Maryland on 28th June 2018, many journalists have called attention to the fact that this shooting may have been a direct result of Trump's constant attacks on the media, labelling them "an enemy of the [American] people" ("Capital Gazette" par. 1). The newspaper apparently received correspondence following the attack congratulating the gunman for his heroic deeds against the 'fake news media' and making further death threats against journalists still working at the newspaper ("Capital Gazette Shooting" par. 1).

why the speculative fiction that Atwood writes is so important to both the present and the future. These works explore how the world works because, to use her own words, the speculative fiction that Atwood writes is "the news of us" ("In Context" 515). This claim is supported by her own writings on how she constructed the fictional world of *Handmaid*: Atwood states in "Dire Cartographies" that she did not "put into this book anything that humankind had not already done, somewhere, sometime, or for which it did not already have the tools" (88). The impact that *Handmaid* has had on popular culture, the theocratic and patriarchal belief system that it investigates, as well as the speculation, debate and discussions that its themes and motifs still encourage thirty four years after publication, serve to remind the reader of the necessity of analysing the stories that we tell and the ideologies that we create critically. In addition, this fictional text and its reception in the reader's contemporary context urges an awareness of how deeply those fictions which seem to have hardened into fact may impact and influence the way we choose to live our lives in the real world.[6] Atwood's critical analysis of her own works makes it clear that she is hyperaware of the importance of reflecting on the rhetoric we use and the narratives that we generate and disseminate so as to structure and "circumscribe" both our identities and our social order ("Burning" 50). Her speculative fictions tell us the story of our stories and, as will be argued shortly, her texts provide her readers with the opportunity to examine, evaluate and engage imaginatively with what the Oxford trained historian, Dr Yuval Noah Harari, calls the "network of stories" that we have created for ourselves and consequently live within (*Homo Deus* 170).

Speculative Fiction as a Special Kind of Story

When Margaret Atwood was awarded the inaugural "Arthur C. Clarke Award for Science Fiction" for *The Handmaid's Tale* (1985), critics, readers and authors familiar with the genre took offense when she chose to describe this text as a work of speculative fiction ("Awards" par. 3). In her book review of *The Year of the Flood*, the second text in Atwood's MaddAddam trilogy, the eminent science fiction author and critic Ursula Le Guin argues that *Handmaid* and Atwood's other speculative fiction works "all exemplify one of the things

[6] An author called Christina Dalcher wrote her own "petrifying reimagining of *The Handmaid's Tale*" (cover copy) called *Vox* (2019). The narrative follows the story of a woman called Jean McClellan, a world-renowned linguist who lives in an America controlled by a theocratic and patriarchal government. As a woman, she is only allowed to speak one hundred words a day and is banned from reading and writing. She, as well as her five-year old daughter, have to wear a "counter" (1) that tracks the number of words they utter out loud. If the women and girls overstep, they get shocked. The men and "boys do not wear word counters" (1).

science fiction does, which is to extrapolate imaginatively from current trends and events to a near-future that's half-prediction, half-satire" ("Atwood" par. 1). While this may be true for most science fiction narratives, Le Guin maintains that Atwood's refusal to categorize her work as science fiction is not a generic consideration rooted in the kind of content that her speculative fictions deal with; rather, Le Guin suggests, that it is an issue of pride and arrogance that stems from Atwood's desire to "protect her novels from being relegated to a genre still shunned by … readers, reviewers and prize-awarders" ("Atwood" par. 1). Atwood responds directly to Le Guin's criticism in the "Introduction" to *Other Worlds,* where she draws the reader's attention the distinct conceptual differences that exist between "speculative fiction" and what she terms "science fiction proper" (7). Speculative fiction, according to Atwood, "means plots descended from Jules Verne" and these narratives present the reader with "things that really could happen but just hadn't completely happened when the authors wrote the books" (7). In contrast, science fiction texts are "those books that descend from H.G. Wells' *The War of the Worlds*" (6) and relate events that "could not possibly happen" (6). Their narratives present the reader with "things in them we can't yet do or begin to do, talking beings we can never meet and places we can't go" (Atwood "In Context" 513). In her essay "Burning Bushes," Atwood does, however, concede that the labels used to refer to those stories about science and technology that are set in the future are "fluid [and that some] use *speculative fiction* as an umbrella covering science fiction and all its hyphenated forms" (61), which is how Le Guin and the celebrated science fiction critic Darko Suvin describe these texts. As this discussion will show, however, speculative fiction as Atwood defines it, is a special kind of story "about the future" (61).

Suvin's *The Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* ([1979]2016) delves into the "genological [*sic*] jungle" (29) inhabited by the genre of science fiction (he refers to it as SF) with the intention of analysing critically and better identifying the genre, exploring the "inner kinship of [its] subgenres," and separating it from other fictional texts wherein science and notions about the future are also explored (25). Suvin's definition of SF is lengthy because, as Gerry Canavan observes in his introduction to the 2016 reprint of *Metamorphoses,* Suvin's seminal work focusses on differentiating SF from both "mere fantasy" and "nonfiction and mimetic 'realism'" ("The Suvin Event" xix). Suvin therefore defines a true SF text as a

> fictional tale determined by the hegemonic literary device of a *locus* and/or *dramatis personae* that (1) are *radically or at least significantly different from the empirical*

> *times, places, and characters* of 'mimetic' or 'naturalistic fiction, but (2) are nonetheless – to the extent that SF differs from other 'fantastic' genres, that is, ensembles of fictional tales without empirical validation – simultaneously perceived as *not impossible* within the cognitive (cosmological and anthropological) norms of the author's epoch. (2)

In addition, SF, in juxtaposition to the three genres mentioned above, is able to produce what Suvin calls a "space of potent e*strangement*" ("Preface" 2). This term, originally theorized by Bertolt Brecht, is defined as a "representation which estranges [and one] which allows us to recognize its subject, but at the same time makes it seem unfamiliar" (Brecht qtd. in Suvin 18). It is, in essence, another term for Freud's concept of "the uncanny," defined by Valerie Mosca as "something that evokes a feeling of familiarity, yet at the same time, comes across as strange" (40). This key characteristic of 'estrangement' or the "articulation of radical difference" (Canavan, "The Suvin Event" xxvi) that is shared amongst all SF works, denotes how the SF text affects the reader and is, according to Suvin, one of the genre's "*necessary and sufficient condition*[s]" (20). The second condition that an SF narrative has to satisfy is the presence of "*cognition"* (Suvin 20), a term which refers to how the world of the text is constructed.

According to Suvin, SF "takes off from a fictional ('literary') hypothesis and develops it with totalizing ('scientific' rigour)" so that appears as though the SF narrative is "factual" (18). Furthermore, while the world of a work of SF is drawn from the author's "empirically verifiable reality" (Suvin 23), the text reflects "*on* [the author's] reality" (Suvin 22). The reality of an SF text is therefore not mimetic; rather, it portrays a sense of verisimilitude and engages directly with the "reality principle of what is physically, biologically and socially possible" (Canavan, "The Suvin Event" xviii) according to the author's present "cosmological and anthropological norms" (Suvin 2). In other words, although a work of SF can contain implausible science and bizarre otherworldly beings, its world and the technology, science and characters with which the reader engages must not be in conflict with what is known, possible or plausible according to our current body of knowledge; if it is, it is known as a "folktale" or a "fantasy" (Suvin 32).

The genre of SF, like all works of fiction, is intimately involved in interrogating the "norms of any age, including emphatically its own" (Suvin 19). Whereas "*naturalistic fictions*" endeavour to interrogate these norms through authentically representing the author's experiential environment, "*estranged fiction,*" by contrast, explores the concept of

normativity "by creating a radically or significantly different formal framework – a different space/time location or central figures for the [story]" in which humanity's relationship to other humans as well as their surroundings can be "illuminated" and investigated (Suvin 31). The imaginary alternative framework through which the norms that inform the world of the SF text are examined, is produced by employing what Suvin calls a "novum" (80). This "cognitive innovation" is conceptualized of as "a totalizing phenomenon or relationship deviating from the author's and implied reader's norm of reality" (Suvin 80). It can take the form of an invented "gadget [or] technique" like the technologies and scientific methods upon which the action and plot of *Star Trek* revolves (Suvin 80), or a new and radically different "spatiotemporal locus" (Suvin 80) as in S*tar Wars*, which presents a "realistic irreality" populated by "humanized non-humans" and situated on "this-worldly Other Worlds" (Suvin, "Preface" 2). The "novum[s]" (Suvin 80) that differentiate SF from other kinds of other-worldly literature do not, therefore, have to "conform to a 'real possibility' – to that which is possible in the author's reality and/or according to the scientific paradigm of [her] culture" (Suvin 83), as *Star Trek* and *Star Wars* make clear. Rather, the "novum" (Suvin 80) employed by an SF text should be seen as representing an "'ideal' possibility, meaning any conceptual or thinkable possibility [wherein] the premises and/or consequences [of the 'novum'] are not internally contradictory" (Suvin 82). This is what Suvin means by the "cognitive logic" (Suvin 82) that is used by SF texts: the "presence of [a] scientific cognition" whose methodology is "identical to that of a modern philosophy of science" (Suvin 81). In other words, the "novum" (Suvin 80) invented and employed by an SF text does not have to be an actualisable possibility; rather, it, like the world of the text itself, must abide by the methods of thinking, understanding and perceiving "that human beings have acquired in their culture from the beginnings to the present day" (Suvin 83).

The use of "cognitive logic" (Suvin 82) is therefore the primary characteristic that differentiates all subgenres of SF from other kinds of similar literature, such as the "supernatural fantasy-tale" immortalized, for example, by Marvel's *The Avengers*, which also includes strange non-humans, other-worldly places and "gadgets [and] relations basically new and unknown to the author's [empirical] environment" (Suvin 80). According to Robert M. Philmus, whom Suvin quotes in support of his argument that "scientific *content* or scientific data" (Suvin 80) is not the defining characteristic of SF, "naturalistic fiction does not require scientific explanation, fantasy does not allow it, and SF both requires and allows it" (Philmus qtd. in Suvin 8).

Suvin goes on to further complicate SF's ideological jungle and the concept of the

"novum" (80) when he argues that there are two main models of SF: "extrapolative" and "analogical" (40). Works written in latter mode usually employ "ideal possibilities" as their "novum" (Suvin 80) and these texts' "indirectly modelled world" can subsequently be conceived of as "fantastic" or implausible, although not impossible (Suvin 42). In contrast, extrapolative SF stories are "based on direct, temporal extrapolation" (Suvin 41) and the "novum" (Suvin 80) and alternative framework that they use to estrange the reader has to "conform to a real possibility" (Suvin 82). Suvin calls these kinds of SF narratives "near-future SF" (Suvin 83). To Atwood, these texts are what she would define as "speculative fiction" as, to her, such a text "employs the means already more or less to hand, and takes place on Planet Earth" in order to present the reader with a hypothetically possible future; not an implausible one ("In Context" 513).

As previously stated, Atwood traces the literary advent of speculative fiction as she defines it to Jules Verne, whom she argues "confine[d] himself to [the] realm of possibility" in creating his fiction ("Burning" 56). While Suvin does admit that Verne is "one of the founding fathers of SF" (169), he does not share Atwood's enthusiasm for Verne's speculative works, preferring to view them as "*roman scientifique*" or "novel[s] of science" (169), a particular kind of SF narrative that he argues "belongs in the compost heap of … juvenile or popular subliterature" (35). Suvin disparages Verne's texts further, calling them "a primitive technological or at best technocratic extrapolation" (36) of the scientific norms which informed his particular "empirical environment" (20) because, according to him, Verne's works introduce a single and "easily digestible new technological variable" (22) that does not involve any "*cognition*" (20) and thereby fail to satisfy one of the necessary requirements of "aesthetically significant" SF ("Preface" 2). Suvin also argues that Verne's writings exemplify "the *voyage extraordinaire* … an initial (and for the reader initiatory), function of SF" (35) which he asserts should be "kept in its proper humbly useful place" (35). While Verne's texts do follow the journey undertaken by a protagonist and present the reader with a "catalogue of wonders" (Suvin 35), it can be argued that, in reference to Verne, Suvin does not engage fully with the authorial intent that informs Verne's distinctive speculative fiction.

Arthur Evans points out in his article, "The Origins of SF Criticism: From Kepler to Wells," that the "novum[s]" (Suvin 80) Verne employs in his works are, in his own words, "based upon a groundwork of actual fact, and of using in their construction methods and materials which are not entirely beyond the pale of contemporary engineering skill and knowledge" (qtd. in Evans 175). Suvin is correct when he states that the "novum[s]" (Suvin

80) Verne uses are relatively straightforward and uncomplicated. *Twenty Thousand Leagues Under The Sea* (1869), for example, uses the single technological innovation of a submarine to produce the alternative framework wherein the action of the text takes place – the depths of the Earth's seas. The subject matter of Verne's work makes it clear, however, that he is not concerned with "the exotic uniqueness of the *novum* itself [but rather] its real-life *effects* on the protagonists and/or societies portrayed" (Evans 173); a remark that implies that science fiction, in juxtaposition to speculative fiction, focusses more on the technologies that its narratives explore.[7] Taking this observation into account, it can be argued that the criticism that Suvin levels at Verne is rooted in the fact that he is judging the generic considerations of Verne's speculative fiction according to the criteria of the "ideal possibility" (Suvin 82) that informs the writing of "science fiction proper" (Atwood "In Context" 513); the kind of SF that Suvin lauds and which Atwood argues Wells produced. In interviews Verne gave in 1903 and 1904 respectively, he draws the critical reader's attention to the clearly discernible difference between his and Wells' works when he explicitly states that they

> do not proceed in the same manner … [Wells'] stories do not repose on very scientific bases … I make use of physics. He invents. I go to the moon in a cannonball discharged from a cannon. Here there is no invention. He goes to Mars … in an airship which he constricts out of a metal which does away with the law of gravitation … But show me this metal. Let him produce it.
>
> The creation of Mr Wells … belong unreservedly to an age and degree of scientific knowledge far removed from the present, though I will not say entirely beyond the limits of the possible. (qtd. in Evans 175)

Verne's comments also begin drawing the reader's attention to the alternative "*imaginary framework*[s]" (Suvin 20) that these "two distinct but interwoven literary traditions" (Evans 173) produce: when his personal remarks are read in conjunction with Suvin's criticism, the critical reader can discern that Verne's (and Atwood's) characterization of speculative fiction parallels what Suvin calls an "anticipation – tales located in the

[7] In *Leagues*, this focus is distinct: the narrative presents the reader with how three shipwreck survivors are captured by the "mysterious and volatile Captain Nemo" who commands the submarine *Nautilus* (cover copy) respond to the novel sights with which they are faced, and follows their attempts to navigate the machinations of a "deranged captain" (cover copy) who has been able to "cut himself off from all civilization" (cover copy) on account of the submarine that has built. When the reader critically engages with this text, she can discern that its content calls her attention "the onward march of [real] science and technology" and explores how scientific progress can affect the psychology of the individual, as well as of society (Verne 5).

historical future of the author's society" (95). While Suvin acknowledges that this is a "valid SF form or sub-genre" (95) if it is found to "analogical[ly] reference the author's present rather than … predict[ing]" her future, he does not consider that perhaps this anticipatory impetus informs Verne's "near-future" (Suvin 83) extrapolatory works.

Verne and Atwood's characterization of the genre of speculative fiction echoes the thinking of Robert A. Heinlein, who formally introduced the term "speculative fiction" to the academy in 1947 in his essay, "On the Writing of Speculative Fiction." In his critical analysis of the genre, Heinlein argues that "[t]here are at least two principal ways to write speculative fiction – write about people, or write about gadgets" (1). Although he does not explicitly state it, Heinlein implies that what the reader is used to defining as science fiction usually confines itself to "the gadget story" (1), whereas the "speculative story" (3) as he, Verne and Atwood understand it, is a "human-interest story" (1) whose narrative focusses on "the story of people dealing with contemporary science and technology," and not the inventions themselves (3). As a "story embodying the notion 'just suppose' or 'What would happen if'," a speculative fiction narrative takes

> accepted science and established beliefs [which] are [then] extrapolated to produce a new situation, a new framework for human action. As a result of this new situation, new human problems are created – and our story is about how human beings cope with those problems. (Heinlein 3)

To further distinguish the focus of speculative fiction, Heinlein reiterates that the speculative fiction story "is not about the new situation*; it is about coping with problems arising out of the new situation*" (Heinlein 3; my emphasis). Atwood's critical essays on the impulse that lies behind her speculative fiction concur with Heinlein.

According to Atwood, speculative fiction "begins with a what if, and then sets forth its axioms;" a critical opinion that clearly parallels Heinlein's ("Writing *Oryx and Crake*" 2).[8] As a means of further differentiating speculative fiction from both science fiction and realism, Atwood draws upon the dual denotation of "the short story" in French ("In Context" 515). While "*conte,*" which means "tale," and "*nouvelle,*" which is defined as "news," can both be used to denote a short story, their connotations differ markedly and Atwood hones in

[8] Suvin does not mention Atwood in the 2016 reprint of *Metamorphoses*, for which he wrote the "Preface". This elision is both odd and worth mentioning, as Atwood was the first ever recipient of the "Arthur C. Clarke Award for Science Fiction" for *Handmaid* ("Awards" par. 3). Suvin, as a reputable SF critic, would have been aware of her receiving this accolade, and his omission of Atwood's work from the reprint and revision of his seminal 1979 work may give the reader pause.

on this difference when she is explaining what distinguishes speculative fiction as a genre ("In Context" 515). She argues that "tale" refers to those stories which "can be set anywhere, and can move into the realms that are off-limits to the novel" – those "prose fiction narratives" which can be classified as fantasy or science fiction, and which involve imaginary creatures like "monsters or vampires" and far-off places inhabited by "space aliens" (Atwood, "In Context" 515). The term "*nouvelle*" is defined as the "news of us; it's the daily news, as in 'daily life'" (Atwood, *"*In Context*"* 515), and Atwood uses it to indicate those realistic fictions which purport to reflect the verisimilitude of "the conscious waking state" ("Burning" 59). As Atwood points out, however, "there's more to the news than 'the news'" and the genre of speculative fiction is capable of "bring[ing] us that other kind of news; it can speak of what is past and passing, but *especially of what's to come*" ("In Context" 515; my emphasis). The kind of future and "other world" explored imaginatively by speculative fiction is, in Atwood's own words, "our own planet in a future" ("Introduction" 5) as works of speculative fiction make "educated guesses" (Atwood qtd. in Boedeker para. 2) about where humanity is heading based on extrapolating current trends to their logical conclusions: they aim to explore humanity's possible future, they do not purport to predict it. As Atwood states explicitly in "Burning Bushes," "[t]he future can never be truly predicted because there are too many variables. You can, however, dip into the present, which contains the seeds of what might become the future" (61). Therefore, according to Suvin's own critical opinion, speculative fictions like Atwood's should be seen as a "valid" (95) and "aesthetically significant" ("Preface" 2) form of SF writing.

Within the context of the readers' contemporary technological age and the exponential rate of scientific and technological progress to which she is currently bearing witness, combining Heinlein's definition of the speculative fiction story with Atwood's view of what the speculative fiction narrative is actually about, encourages her to consider seriously how and if human beings will be able to "cop[e] with problems arising out of the new situation[s]" (Heinlein 3) created by actualizing the "real possibilities" (Suvin 80) presented by contemporary science and technology; a discipline and a field of study that has a tangible effect on the social, political, economic and environmental "norms" (Suvin 80) that regulate the way in which humans presently behave. The "didactic" (Evans 167) genre of speculative fiction affords the reader to the opportunity to imagine what effects humanity's possible scientific and technological advances may have on her real-world, by presenting her with a strange, yet familiar near future world, and involving her in a narrative which is capable of "explor[ing] the consequences of new and proposed technologies in graphic ways,

by showing them fully up and running" (Atwood, "In Context" 515).

Furthermore, if a reader finds the world of the speculative fiction text wanting, then she, by virtue of her imaginative engagement with the text, necessarily imagines how the possible future it contains could be different. The power of the imagination to entertain the "what-if" that alternative scenarios are founded upon has, as will be discussed shortly, been with humanity since the beginnings of recorded human history and the advent of mythological narratives, the first stories that humanity ever told (Armstrong, *Myth* 9). This is why the genre of speculative fiction should be designated as a special kind of story in our technological age. By virtue of the intimate relationship that these fictions share with the author's "empirical environment" (Suvin, "Preface" 2) and their exploration of humanity's "near-future" (Suvin 80) on Earth, this genre is uniquely capable of dramatizing the potential real-world effects of the inventions, norms and narratives upon which the technological age's identity is founded. In the context of Atwood's speculative fiction *MaddAddam* trilogy, these are the narratives of science, capitalism, the discourse of sustainability, the technology of genetic engineering and the norm of human exceptionalism, all of which have become so entrenched that they can be understood, to use Atwood's words, as stories that are "central to our self-understanding" ("Burning" 54). Atwood's trilogy is essentially a story about the effects that our narratives have on reality. In an age wherein it is becoming increasingly impossible to "distinguish fiction from reality" (Harari, *Homo Deus* 207), the genre of speculative fiction is indispensable when the reader acknowledges that the stories that we tell structure our lives and regulate our behaviour through the norms that they prescribe and disseminate. These narratives have become invisible because they are so ingrained, which is precarious. As Le Guin states in her 2014 "National Book Awards Speech," "[h]ard times are coming when we will be wanting the voices of writers who can see alternatives to how we live now;" who can "see through" the fear-mongering, disunity and the "obsessive technologies" that characterize our contemporary technological age and open a window onto "other ways of being, and even imagine some real grounds for hope" (par. 2). Atwood is one of these writers, one of the few "realists of a larger reality" (Le Guin, par. 2), whose speculative fiction *MaddAddam* trilogy is able to lay our narratives bare, and whose characters remind the reader that "[a]ny human power can be resisted and changed by human beings" (par. 2). We just have to choose to do so.

Myths in Other Guises

In her essay entitled "Burning Bushes: Why Heaven and Hell Went to Planet X," Atwood claims that stories first appeared as myths, those "ancient, centrally important stories" (45) which are "taken seriously enough that people organize their ritual and emotional lives around them" (55). M. H. Abrams' primary definition of mythology parallels Atwood's. He states that the term myth or, to use the more precise denotation, 'mythos,' is used to reference

> a system of hereditary stories of ancient origin which were once believed to be true by a particular cultural group, and which serve to explain … why the world is as it is and things happen as they do, to provide a rationale for social customs and observances, and to establish the sanctions for the rules by which people conduct their lives. (Abrams 206)

Karen Armstrong, a well-known religious historian who authored *A Short History of Myth* (2006), expands upon both Abrams' and Atwood's definition of myth, and what function they fulfil in human society. In this text, Armstrong argues that "from the very beginning we invented stories that enabled us to place our lives in a larger setting, that revealed an underlying pattern, and gave us a sense that … life had meaning and value" (2). Joseph Campbell, the eminent scholar of myth, characterizes mythology as humanity's endeavour to "interpret the mysteries of life" through the medium of narrative (Campbell and Moyers xvii). He argues that the first stories that humanity ever told are our way of confronting and attempting to come to terms with some of our greatest fears and worries, which are the inevitability of death, humanity's place in the universe and the anxiety we experience when we are confronted by the possibilities our future may bring (Campbell and Moyers xi). He further maintains that we see these narratives as capable of providing satisfying answers to the fundamental existential questions that plague humanity (Campbell and Moyers xi).

Both Atwood and Armstrong concur with Campbell. In "Burning Bushes" Atwood contends that myths strive to respond to the queries humanity has about our origins, purpose and the nature of our relationship to the divine and with ourselves (51-52) and in *A Short History of Myth* Armstrong claims that mythology is "designed to help us cope with the problematic human predicament" (6). According to Armstrong, however, this is not mythology's main function: she argues that a myth "is primarily a guide to behaviour" (23). This observation draws the reader's attention to the pedagogy inherent to mythological

narratives, which is a feature that Atwood also emphasizes when she asserts that myths are capable of stipulating the moral and ethical guidelines that govern humanity's interpersonal interactions with each other, as well as with their broader environmental context ("Burning" 52). This characteristic of myth forms the foundations of the central focus of this thesis, which is to examine the ways in which Atwood's *MaddAddam* trilogy performs an investigation of humanity's modern myths, and explores the effects that these narratives have on contemporary technological society, as well as on our psychology and behaviour. In order to engage critically with this hypothesis, however, my introduction to the thesis will first engage with the conceptual foundations of mythic thinking so that it can provide the reader with a more contextually relevant and restrictive definition of myth. This will enable my later argument to demonstrate how the technological age's identity is founded upon narratives and why these stories can be designated as myths.

Those living in today's technological age – one that is dominated by the supposed mortal enemy of mythology, Logos – dismiss the mythic mode of thinking as inferior to the orthodox narratives that the Age of Reason has produced (Armstrong, *Myth* 7 - 8). Armstrong, among others, argues against accepting this value-laden dichotomy, suggesting that if we think of both 'mythos' and 'myth' as merely fabricated stories "involving supernatural or fancied persons … [and] fictitious person[s] or thing[s] or idea[s]" (*COD*, "myth" 721) we will be committing an intellectual fallacy, as the first stories humanity told never positioned themselves as relaying observable facts (Armstrong, *Myth* 23). Instead, we need to recognize that

> [m]yth is make-believe … it is a game that transfigures our fragmented, tragic world, and *helps us to glimpse new possibilities by asking 'what if?'* (Armstrong, *Myth* 8-9; my emphasis)

Armstrong painstakingly points out that the alternate possibilities that the question 'what if things were different' encourages humanity to consider, allows us to imagine alternatives to how and why we live our lives as we do. Furthermore, the 'what if' that mythic thinking foregrounds has directly enabled the human uses of science and technology to invent and analyse different ways of living and being in our modern world, as these intellectual and practical disciplines are founded on a metamorphic desire (Armstrong, *Myth* 9). Science and myth are therefore not binary opposites, as traditionally believed. The dichotomy between mythic and scientific thinking is perpetuated ceaselessly, however, and the value judgements inherent to the connotations and denotations of these terms has led to

the prominence and orthodoxy of the scientific mode of thought. These two seemingly distinct and autonomous ways of thinking and being in the world – "Logos" and "Mythos" – are more interdependent than we realize, effecting and affecting each other very subtle ways. They are both seeking answers to the same questions; they merely employ different methods of knowledge acquisition in order to answer the following:

> *Where did the world come from? Where did people come from? Where did OUR people come from? Why do bad things happen to good people? Why do good things happen to bad people? What is right behaviour? What do the gods want, or God, if it's a monotheism? What are the right relationships between men and women?*
> (Atwood, "Burning" 51 – 52)

In Abrams' exploration of the term 'myth,' he, like Armstrong, points out that in modern times, 'myth' and 'mythos' are applied to a disconcerting number of disparate terms: ranging from signifying "any widely held fallacy … to denoting the … imagined realm within which a fictional narrative is enacted" (207). Taking this obfuscation into consideration, it is necessary to distinguish between these two closely related terms for the purpose of this thesis' argument. 'Mythos,' as Abrams uses it, is defined as "a system of hereditary stories of ancient origin" (206) and this thesis will employ this term to reference the oldest stories that humanity tells – those narratives that "precede histories and were once thought to *be* histories," such as Greek or Egyptian mythology, for example (Atwood, "Burning" 50). The overarching theme of 'mythos' is one of legend or fable and its imagery is conclusively tied to the ancient gods that were thought to preside over the human realm in the ancient past (Armstrong, *Myth* 21; 69).

In contrast, 'myth,' as I would like to re-contextualise and re-define it, will be used to reference a "story that is central to our self-understanding: nothing about truth or falsehood is implied" (Atwood, "Burning" 54) and a narrative that guides human lives and provides structure and meaning. This is primarily because the purpose of myths, as defined traditionally, is "not [to] impart factual information;" rather, these stories are chiefly concerned with chaperoning humanity's behaviour (Armstrong, *Myth* 23).

Defining 'myth' in its original context as an orthodox guiding narrative enables a controlled extension of this specific term's denotations and connotations, which will enable this thesis to interrogate the modern guiding narratives of scientism, capitalism, human exceptionalism and the discourse of sustainability which, as this thesis will argue, have been identified by Atwood as "neo-mythical structures" in her *MaddAddam* trilogy (Atwood,

"Burning" 53). Her works of speculative fiction are capable of drawing the reader's attention to the observable fact that the "ancient themes and motifs of mythology" (Campbell and Moyers xiii) have simply donned modern masks in order to re-contextualize themselves and remain relevant to us in this modern technological age. Engaging critically with Atwood's texts, this thesis will attempt to discern how contemporary technological society has re-imagined the traditional 'epics of the past' produced by mythic thinking. This will provide my argument with the opportunity to explore imaginatively the impact these neo-myths or orthodox guiding narratives have on modern civilization's behaviour and the perception of reality they engender, and prove that they operate in the same way as the myths of old do: they are ways of thinking of, interacting with and situating ourselves within our broader social and environmental context (Armstrong, *Myth* 6).[9]

In "Burning Bushes," Atwood clearly concurs with Campbell's views on where the subject matter explored conventionally by myths have gone: "when the core statements about truth and reality [communicated by myths] cease to be entirely, factually believed … they emerge in other guises, such as Art, or political ideologies" (55), the intellectual disciplines of science and philosophy, as well as self-help books and New-Age religions. She goes on to claim, like Campbell does, that the questions posed by myths and the experiences and ideas they communicate to their readers or listeners also appear in the form of "films like *Avatar* [and] books like *The Left Hand of Darkness*" because "every question that myths address, SF has addressed also" (Atwood, "Burning" 55). Atwood maintains that humanity's re-imagination of the classic mythic themes and motifs results from the fact that our "deep inner selves still contain the archetypal patterns that produced [mythological narratives]" originally (65).

Armstrong's writings on myth are able to contribute an additional nuance to this argument when she states that the recontextualization of mythological narratives is possible and develops organically because "mythology is an art form that points beyond history to

[9] For example, in *The Power of Myth*, Bill Moyers and Joseph Campbell have a discussion about how *Star Wars* is a modern interpretation of the mythic theme of the hero's attempt at "overcoming [his] dark passions… [and his] ability to control the irrational savage within [him]" (xiii). Sadly, Darth Vader did not complete his mythic journey or achieve the redemption these kinds of heroes are usually offered. Mythic characters are also usually archetypes – the hero, the anti-hero, the powerful man overcoming his obstacles in the face of overwhelming odds (Campbell and Moyers xiii). In the same vein, mythic themes are universal – the power of love, the journey to enlightenment, overcoming the darkest depths of one's soul, fighting for what you believe in, and the importance of family (Campbell and Moyers xiii). In modern times, superheroes are our modern mythic heroes, (Bland, "Comic book" par. 2; 6) although many themes and archetypes are found in other fictional stories that we read, tell and view today, such as the *Harry Potter* series, *Hunger Games* and *Crouching Tiger, Hidden Dragon* (Haynes, "Modern Myths" pars. 11; 8). *The Bible* and the story of Jesus Christ is, however, probably the greatest myth ever told (Atwood, "Burning" 46-47).

what is timeless in human existence" (7) and thus "every time men and women took a major step forward, they reviewed their mythology and made it speak to the new conditions" (11). Furthermore, the main preoccupations of myth – death, the future and the humanity's place in the world – are also re-defined when the context demands: "[w]henever they enter a new era of history, people change their ideas of both humanity and divinity" (66). Harari's *Homo Deus: A Brief History of Tomorrow* (2017) which was referred to in passing earlier, takes Atwood and Armstrong's proposals further and analyses critically how our context influences the neo-mythical stories that we tell and, most pertinent to the focus of this thesis, how and why these fictions affect our both our behaviour and our perception of the world.

In *Sapiens: A Brief History of Humankind* (2014), the book that precedes *Homo Deus*, Harari argues that the secret to humanity's domination of the planet and the key to our survival as a species is language, its malleability and our ability to use it to tell stories (*Sapiens* 19). In *Homo Deus*, Harari explores what our linguistic ability has enabled humanity to achieve, namely the capability to create "completely new realities" (173) through the stories that we tell, instead of simply describing what is corporeal and material. He argues that the capacity to generate and believe collectively in stories facilitates the social cohesion necessary to create a society and form the "mass co-operation networks" (Harari 167) that maintain and perpetuate the social order, which is why he contends that "[s]tories serve as the foundations and pillars of human society" (Harari 208). He goes on to probe the origin of stories themselves in *Homo Deus* in order to explore their evolution, investigate why they exert such influence over humanity and interrogate how they have structured the socio-political and economic landscape of the reader's contemporary technological age, which is the general subject matter of Atwood's speculative fiction trilogy.[10]

Harari begins his investigation into the pervasiveness of and the authority accorded to narratives by highlighting the common assumption that humans experience a dual reality conclusively divided into objective "trees, rocks and rivers" and subjective "fear, joy and desire" (181).[11] He goes on to claim that humans also experience a "third level of reality: the intersubjective level," whose existence is wholly dependent on "communication among many

[10] Please note that from this point on, *Homo Deus* will be the primary text of Harari's that this thesis will refer to in its argument. Should the argument refer to his other works, this will be clearly stated.

[11] *The Concise Oxford Dictionary* defines 'objective' as "[b]elonging not to the consciousness or the perceiving or thinking subject, but to what is presented to this, external to the mind, real" (752). It is also defined as "dealing with outward things, exhibiting actual facts uncoloured by the exhibitor's feelings or opinions" (*COD* 752). Juxtaposed against this is subjective reality "which depends on my personal beliefs and feelings" (Harari 167) – something exists because of what I believe and what I feel. *The Concise Oxford Dictionary* definition parallels Harari's, stating that 'subjective' should be thought of as "belonging to, of, due, to, the consciousness or thinking or perceiving subject or ego as [opposed to] real or external things" (*COD* 1148).

humans rather than on the beliefs and feelings of individual humans" (Harari 168). The stories that we tell each other about the world inhabit this layer of reality, as does meaning. According to Harari, meaning can only be constructed "when many people weave together a common network of stories" (170) that they believe to be valuable and true. Harari further contends that this layer of reality creates an "intersubjective web of meaning: a web of laws, forces, entities and places that exist purely in [our] common imagination" (175) and which is accompanied by "imagined orders" that he defines as "sets of rules that, despite existing only in our imagination, we believe to be as real and inviolable as gravity" (167). These edicts, the stories that created them and the "web of meaning" that they collectively weave allow humanity to organize "large-scale … cooperation" (Harari 203).

The negation, or ignorance of the "intersubjective" (Harari 168) layer of reality can lead us to mistake it for either the objective or subjective; a faux pas which is deceptively easy to commit, especially when many individuals who believe in the same things are involved. When a subjective belief is shared amongst many and "constantly reinforce[d] … in a self-perpetuating loop" (Harari 171), it gives the illusion that what you believe is objectively true (Harari 170). In order to demonstrate what he means, Harari applies his theory to the concept of money.

The idea that money is an "intersubjective entity" (170) is "relatively easy to accept" (169), which is why Harari begins his critical demonstration with this specific example. We can admit, without damaging our sense of ourselves, that money is a fiction and that its meaning and value depends exclusively on the "common network of stories" (170) that are told about it.[12] While money's existence is independent from an individual's subjective belief in its worth, verisimilitude and veracity, the ubiquity of the monetary system and the collective belief in it can deceive one into accepting, on face value, that money exists objectively in the world. We must not forget, however, that it has no objective reality – [y]ou cannot eat, drink or wear a dollar bill," as Harari jokes (168). Rather, it is a value system based on the participation of all who subscribe to the global financial rules and laws, and its meaning and value would completely "evaporate once people stop believing in it" (169).[13]

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[12] This acceptance does not provoke anxiety, probably because this fictional entity is impersonal: we would not be offended or feel as though our lives have lost all meaning and purpose if we were forced to acknowledge that we invented currencies and their value has been assigned to them by us. One could argue that the pieces of paper and coins we collectively believe in and call 'money' are the object and thus money inhabits the objective reality. The paper or the coins we use to signify monetary value refer to nothing but themselves, however. In de Saussure's terminology, there is no stable "referent" or "signified" that money and monetary value possesses outside of itself (Mosca 48).

[13] Harari's argument that money's existence, and the power we accord it, is wholly dependent on collective belief is further supported by the following observations. Firstly, if money was real in the sense that trees are,

We are Peter Pan and the dollar bill is Tinkerbell – fairies and money only exist if you believe in them as a collective. Furthermore, the significance and authority that our collective belief bestows upon worthless pieces of paper allows it to exist in the world and exert power and influence over us. Harari maintains that the stories humans tell each other about other "intersubjective entities" (170) such as "gods, nations and corporations" (181) operate in the same way. Harari does, however, note that these three, specific imaginary "entities" (168) are especially prone to drifting osmotically between the intersubjective and objective layers of reality, as "these are the things that give meaning to our lives" (171). This is especially true of corporations, as the contemporary technological age is bound up in the "web of meaning" (168) spun by capitalism.

The cases of mistaken identity that Harari draws our attention to, as well as the slipperiness of their psychological categorization, echo Jean Baudrillard's theoretical construct of the simulacra, the misidentification of the 'model' for the 'original' and the hyperreality it subsequently produces, as outlined in his seminal essay, "The Precession of Simulacra" ([1981]1994). In this essay, Baudrillard argues that because we no longer have access to the original form of anything, we are becoming further removed from "the real" (6) or, to use Harari's terminology, the objective layer of reality. Baudrillard further contends that our familiarity with simulated originals – the "intersubjective entities" (Harari 168) and "imagined orders" (Harari 167) that Harari maintains exist within the third layer of reality – has allowed us to become desensitized to what is truly "real" (Baudrillard 6) or objective, and we have subsequently been seduced into believing that the reality of a simulation or reproduction is true and authentic (Baudrillard 6). The "intersubjective layer" (Harari 168) of reality that is composed of the stories created and told by us, correlates to Baudrillard's notion of the "hyperreal" (Baudrillard 6), which is the experience of reality as dictated by simulacra (Baudrillard 6). In addition, Baudrillard's conviction that modern society functions on "the generation by models of a real without origin or reality: a hyperreal" (Baudrillard 1) parallels Harari's observation that the "intersubjective level" (Harari 168) of reality in which we live is completely removed or abstracted from the objective. Just as Baudrillard argues that modern society is founded on the illusion of the real or original, Harari would maintain that the political, social and economic stories upon which contemporary technological society

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there would be one currency. Secondly, the fact that there are hundreds of currencies world-wide, not to mention intangible cryptocurrencies like Bitcoin, emphasizes the capricious nature of money and monetary value: these currencies exist because we believe they do, and they have value and meaning because we as a collective have agreed they do.

is founded, are invented and have no correlation to objective reality; they are neither "real" (Baudrillard 6) nor objective, even though our "hyperreal" (Baudrillard 6) or "intersubjective" (Harari 168) reality has conditioned us to believe that it is so. Rather, these stories are a means of helping humanity interpret, navigate and give form to the reality that we experience (Harari 185).

Although humanity's "intersubjective" (Harari 168) or "hyperreal" (Baudrillard 6) reality and the "intersubjective entities" (Harari 168) or "simulacra" (Baudrillard 6) that dwell within them can be and are misconstrued as objective and "real" (Baudrillard 6), contemporary human civilization would be incapable of functioning effectively if humanity did not embrace them in the course of daily life. Even Baudrillard acknowledges that we are past the point of no return: "[s]imulation is the master, and we only have a right to the retro, to the phantom, parodic rehabilitation of all lost referentials" (39). Society would disintegrate if we were forced to acknowledge that the "web[s] of meaning" (Harari 175) upon which our experience of reality is founded are imaginary, as the modern social order is premised on the inalienable conviction that there is a distinct difference between what is objectively real and what is imagined; between fiction and reality (Baudrillard 5) and, as Armstrong has pointed out, between "Mythos" and "Logos" (Armstrong, *Myth* 7).

In summation, human society is founded upon the globally accepted orthodox guiding narratives that bind us together through the "intersubjective web[s] of meaning" (Harari 175) that they weave. This thesis will argue that the neo-mythical scaffolding that configures the technological age's worldview, regulates our interpersonal interactions and prescribes our ethical and moral conduct, is founded upon the "intersubjective reality" (168) and "imagined orders" (167) created by the orthodox guiding narratives or contemporary myths of science, capitalism, the discourse of sustainability and humanism. These are, in Atwood's words, the "collective" myths that bind contemporary society together (50) and the genre of speculative fiction is geared explicitly towards analysing and investigating critically the effects that these fictions have on the real world.

The Value of Reading Margaret Atwood's *MaddAddam* Trilogy in the Technological Age

Margaret Atwood's *Oryx and Crake* (2003), *The Year of the Flood* (2009) and the eponymous *MaddAddam* (2013) are the trio of texts that make up Atwood's *MaddAddam* trilogy.[14] This thesis will argue that the "near-future" (Suvin 80) world that Atwood's trilogy presents to the reader is inspired by her present socio-economic and environmental context and operates as an "objective conversation … in which [contemporary] events and hypotheses [are] followed through to their logical conclusions" (Atwood, OC 79). The argument will maintain that Atwood's texts are able to dramatize the potential effects that humanity's current orthodox guiding narratives can have on the contemporary readers' future social and environmental context by demonstrating how the "intersubjective web[s] of meaning" (Harari 175) that these narratives weave bind contemporary human society together, structuring our worldview and regulating our interpersonal conduct. This thesis will go on to contend that Atwood's texts present her readers with a possible future that may occur should we, as a species, fail to re-imagine our orthodox guiding narratives so that they can properly respond to the unanticipated side-effects of a technologically-proficient, yet socially-inept society: rampant consumerism that, paradoxically, exists alongside ecological degradation and resource scarcity, overpopulation and the economic and social apartheid authorized and perpetuated by capitalism, the dearth of compassion, as well as how our scientific advancements are tied to and influenced by corporate interests. Atwood's trilogy ultimately asks her readers to consider what her possible future may look like should humanity "continue down the road we are already on? How slippery is the slope? What are our saving graces? Who's got the will to stop us?" (Atwood, "Writing *Oryx and Crake*" 2). It will maintain that the narrative strategy that Atwood employs in all three texts is suited to her graphic exploration and interrogation of the human norms, values and fictions currently in operation, and how their continued and unrevised existence may well give rise to the "uncanny" (Mosca 40) future presented by her fiction. The narrative past of Atwood's trilogy introduces the reader to a possible future that is based on her present context. The stratification of society in Atwood's trilogy is severe, as she takes the economic apartheid sanctioned by contemporary neo-liberal capitalism to its extremes and therefore splits her

[14] The in-text references to Atwood's works will appear as follows in this thesis: *Oryx and Crake* will be referenced in-text as (OC), *The Year of the Flood* will appear as (YF) and *MaddAddam* will be signified by (MA).

society geographically "into two parts: a technocracy and an anarchy" (Atwood, "Dire" 91). The natural environment has been decimated by overpopulation and ravaged by humanity's misuse of non-renewable resources; behaviours which are authorized by capitalism, compounded by the dominance of consumer culture and perpetuated due to the orthodoxy of capitalism's ecological refuge, the discourse of sustainability. Furthermore, Atwood's texts demonstrate in some detail the global tyranny of multinational corporations who, in the absence of democratic governments, dominate every aspect of the fictional world of the trilogy. In addition, her works present the reader with a world wherein the value and worth of the arts and the humanities have been completely erased by the corporate culture and the scientific mode of thinking reigns supreme. Atwood also draws the reader's attention to humanity's current obsession with genetic engineering which, in her world, has resulted in the production of a number of strange, genetically spliced animals, plants, materials and even foodstuffs (Atwood, "Dire" 91).

The narrative present of all three texts focuses on what happens to contemporary technological civilization and its human population after Crake, an enigmatic and genius scientist, bioengineers and releases a super-virus or plague that eradicates the majority of the human race. The narratives of the first two texts, *Oryx and Crake* and *The Year of the Flood*, "cover the same time period" and follow the journeys undertaken by the primary focalizers of these texts as they struggle to navigate their post-human and post-capitalist context (Atwood, "Dire" 93). I will be employing Valerie Mosca's sense of "post-human" when I use this term: she argues that Atwood engages with post-humanist discourse in her trilogy in order to "re-locat[e] humans from their self-assigned position of centrality in the world" (45) and question "the cultural constructs that contribute to the definition of the human" (46). The narrative present of *MaddAddam*, set immediately after the events that occur in the narrative present of the first two texts, details what occurs once the humans who survive Crake's cataclysm come together, and involves the reader in their endeavours as they attempt to create a functioning community out of the leftovers of human civilization. It is, however, important to note, that the kind of world that the humans must contend with following the collapse of contemporary civilization is not post-apocalyptic in the conventional sense. Gerry Canavan maintains that while the narrative present of the trilogy "situates us within the familiar ruined spaces native to the post-apocalyptic genre" (140), the pre-apocalyptic world presented to the reader in the narrative past is not a "longed-for object of nostalgia;" rather, it "turns out to be much worse than the post-apocalyptic, built as it is on a nightmare of murder, rape, exploitation and theft" (141). He further argues that Atwood's deliberate destabilization of the "typical affective co-

ordinates of post-apocalyptic fiction" (Canavan 141) gives the reader pause to question "if the human history that has been wiped out by [Crake's] apocalypse is actually worth being mourned at all" (Canavan 144).

The first chapter of this thesis will focus on *Oryx and Crake*, wherein the reader is first introduced to the world of the text through the eyes of Jimmy. In order to investigate how Atwood has constructed her fictional society, as well as describe the effect that Atwood's pre-plague world has on her readers, the argument will make recourse to Wolfgang Iser's 1978 work *The Act of Reading: A Theory of Aesthetic Response*. His critical work claims that "literary texts constitute a reaction to contemporary situations, bringing attention to problems that are conditioned through not resolved by contemporary norms" (3). Iser's concept of the "literary repertoire," which he defines as "all the familiar territory within the text," and which includes "references to earlier works … social and historical norms [and] the whole culture from which the text has emerged" (69) is indispensable to this chapter's investigation of the reality that informs Atwood's speculative fiction, the literary conversation with which she is engaged, as well as how her imaginary world evokes in the reader feelings of both familiarity and strangeness (Mosca 40).

Oryx and Crake also introduces the reader to the Crakers, a species of genetically engineered "quasi-humans" whom Crake designed to live in harmony with their environment and free "from the ills" of overpopulation, resource collapse, strife and warfare "that plague *Homo sapiens sapiens*" in the readers' present and in the narrative past of Atwood's possible future (Atwood, "Dire" 91). The chapter will contend that Crake's act of global genocide is motivated ultimately by what Hannes Bergthaller calls humanity's inability to temper its "destructive appetites" (733). The thesis will argue that the state of the natural environment as presented to the reader in the retrospective passages of *Oryx and Crake* (and in the other texts of the trilogy) is a direct result of the behavioural patterns which have been authorized jointly by the contemporary guiding narratives of capitalism – the belief that "more and better" (OC 348) is desirable and achievable – and sustainability, defined by Bergthaller as the wish to "preserve certain natural habitats or reduce the quantity of particular harmful substances in the environment … *while at the same time* allowing for further technological, economic, and social progress on a global scale" (730). Atwood's texts investigate the real-world implications of these mutually-exclusive myths by juxtaposing the life experiences of people like Jimmy and Crake, who inhabit the upper echelons of her technocratic and developed society, with the life of Oryx, an Asian woman from the global South who is forced into prostitution at a young age because her farming community is devastated by

climate change. The chapter will further maintain that general society's failure to acknowledge the cognitive dissonance that lies at the nexus of these fictions is primarily facilitated by the hegemonic corporations that dominate the landscape of Atwood's technologically proficient and profit-driven world. As I will demonstrate, the "mass co-operation networks" and "webs of meaning" (Harari 168) created by corporate capitalism regulate and structure the interpretation of reality in the technological age through their use of "Applied Rhetoric" (OC 217). In order to prove the veracity of this claim, the argument will examine closely three of Atwood's fictional corporations, "OrganInc Farm," (OC 25), "AnooYoo" (OC 288) and "HelthWyzer" (OC 247), to reveal how corporate rhetoric clouds and manipulates our perceptions of reality.

Oryx and Crake also draws the reader's attention to the incestuous and "sulphurous" (OC 19) relationship that exists between capitalism, science and the pursuit of profit in the technological age. *Oryx and Crake* is described by J. Brooks Bouson as an imaginative exploration of the "transformative and potentially dangerous powers of science and technology" in an increasingly "biotechnological world" ("Game" 140). The text's exploration of the future of genetic engineering, and its graphic representation of how scientific advancements have been transformed into consumable commodities by the capitalist system, will be demonstrated with reference to the "pigoons" (OC 25), genetically engineered porcine-human splices whose existence is premised on their ability to generate profits for the corporations that own them. The chapter will also refer to "The Street of Dreams" (OC 339), a shopping district that sells genetic enhancements to those who can afford them. The variety of the genetic wares that are on offer to the inhabitants of Atwood's society, as well as the sheer number of "body-oriented" (OC 339) corporations that exist in her world encourages the reader to consider seriously the implications of the rapid developments in genetic technologies in the twenty-first century. Bill McKibben's non-fiction text, *Enough: Staying Human in an Engineered Age* (2003), which explores the possible future of genetic engineering, will be referred to here: he argues that "if we [continue to] aggressively pursue any or all of several technologies now before us, we may alter our relationship not [only] with the rest of nature but with ourselves" as well (xi-xii).

The exploration of capitalism and corpocracy that Atwood undertakes in *Oryx and Crake* also includes a dramatization of how this narrative's "web of meaning" (Harari 175) organizes the social, political, economic and environmental lives of those who are inescapably caught up in it, but disenfranchised by the marginal position they occupy within the social order. Thus, whereas *Oryx and Crake* situates the reader within the "technocracy"

(Atwood, "Dire" 92) of corporate-controlled society, *The Year of the Flood* locates the reader in the anarchic underbelly of Atwood's world; the strata of society which lies beyond the pristine walls and sterile culture of the compounds and which bears the brunt of the resource-scarcity that characterizes our dying planet. Focalized through the character perspectives of two women, Toby and Ren, the retrospective passages of this text detail their personal histories and recount their navigation of the chaotic and forgotten neighbourhoods created by the capitalist social order. *The Year of the Flood* therefore offers the reader a "different perspective" of the world constructed in *Oryx and Crake* (Atwood, "Dire" 92).

The notion of alterity that *The Year of the Flood* explores is compounded by introducing the reader to the God's Gardeners, a small eco-religious community who form the focal point of the second chapter's argument. The second chapter of this thesis will argue that the alternative community created by the Gardeners is able provide the reader with an example of what it means to live a truly sustainable lifestyle in an age characterized by rampant consumerism and commodification, and a lack of "interspecies empathy" (YF 372). The Gardeners, whose worldview is the antithesis to that of the corporations whom they abhor, also live in defiant opposition to the doctrine of human exceptionalism. *The Year of the Flood* is involved in a direct conversation with the critique of capitalism and sustainability developed in *Oryx and Crake*, but chapter two of this thesis will argue that the second text in Atwood's trilogy is concerned fundamentally with the question of whether religious narratives – one of the primary fictions that structure our perception of ourselves and the world around us and which provide us with ethical guidelines that can regulate our interpersonal interaction – are capable of transforming human society's perception of our natural environment.

This section will begin its exploration of religion and religious thinking by investigating the claim made by Andrew Hoogheem in his article "Secular Apocalypses: Darwinian Criticism and Atwoodian Floods" that religion is essential to humanity and functions an evolutionary adaptation that "enhances fitness, the capacity to survive" (57). The veracity of Hoogheem's statement will be demonstrated with reference to the Crakers who, despite Crake's best intentions, generate their own religion spontaneously during the course of *Oryx and Crake*'s narrative.

The chapter will go on to contend that the guiding narrative upon which the God's Gardeners alternative community is founded, is a recontextualization of the orthodox guiding narrative of human exceptionalism that informs the theory and praxis of conventional religion. It will maintain that religion – the greatest myth humanity has ever created and one

which is responsible for creating the most influential and effective "mass-cooperation networks" (Harari 207) of our time – has been re-imagined by the Gardeners so that it can respond adequately to the environmental crisis the reader bears witness to in our own present reality, which is a precursor to the trilogy's narrative past. The chapter will further explore how the Gardeners introduce the reader to a novel way of confronting the ecocide humanity is currently perpetrating by splicing together the narratives of religion, science and environmentalism, which is distinct from the discourse of sustainability. Moreover, this chapter will endeavour to respond to the following question, inspired by J. Brooks Bouson: could the Gardeners' "eco-religion" ("Return" 9) be an effective means of combatting the current environmental crisis if it becomes an accepted and ubiquitous orthodox guiding narrative? In its attempt to answer this query, the argument will explore how "[o]rthodox narratives of any kind always try to eliminate their competitors" (Atwood, "Burning" 42) with reference to what Canavan calls the entrenchment of the capitalist worldview:

> the ideological assumptions of capitalism have now become so utterly naturalized, and our imagination of any possible alternatives to what currently exists so totally impoverished, that we cannot imagine even the mechanism by which some alternative might emerge. (138)

The chapter will maintain that while the Gardeners present the reader and Atwood's society with a viable alternative to the capitalist system and the social order it engenders, as well as a novel means of confronting the ecocide humanity is currently perpetrating, the difficulties of overcoming the belief system created by capitalism inhibit the Gardeners from effecting change on a global scale. This struggle is embodied by the minor character of Lucerne, who is a Gardener but leaves to return to the capitalist lifestyle she led previously.

The Year of the Flood's exploration of the religious narratives that inform the Gardeners' worldview also includes an investigation of the apocalyptic thinking upon which it is founded. The chapter will further contend that the Gardeners' re-imagined religious narrative posits that an event like Crake's genocidal plague is inevitable because of the way humanity conducts itself. The Gardeners call Crake's plague "the Waterless Flood" (YF 110) in reference to the purgative and pre-ordained catastrophe sent by God to punish humanity for its sin. In addition, they position themselves as a "plural Noah" (YF 110) whose primary behavioural objective is to "bear witness" (YF 300) to the destruction of God's "Creatures" (YF 300) and "guard the memories and genomes of the departed" (YF 300) so that once the Flood has come to pass and the world returns to their "longed-for Eden" (YF 443), they could

"replenish the Earth" (YF 56). The argument will make recourse to Hope Jennings, who argues that the Gardeners' belief that "the end is 'predetermined'" (Garrard qtd. in Jennings 13) demonstrates what she calls "tragic apocalypticism" (14). She maintains that this worldview effectively "allows them to negate all meaningful responsibility" (Jennings 14-15) towards actualizing their ideology in their broader environmental context. In order to investigate the "overall passivity" (Jennings 14) that is engendered by this perspective, the Gardeners' passive resistance to the corporations and the ecological destruction that they are surrounded by, will be juxtaposed against the assertive actions undertaken by the "schismatic and heretical group calling itself MaddAddam" (YF 327), an off-shoot of the Gardeners led by a man called Zeb who actively "battle … the corporate powers that are ruling and destroying the world" (Bouson, "Return" 20). The chapter will begin exploring how they present the reader with an assertive alternative to the Gardener's passive environmental strategy.

The final chapter of this thesis explores *MaddAddam*, the last text of Atwood's trilogy. Its narrative present is set immediately after the narrative present of the first two texts and shadows the human survivors of the Waterless Flood as they struggle to navigate their "brave new world" (MA 218). The argument will maintain that *MaddAddam* extends Atwood's investigation into why the recontextualization of our orthodox guiding narratives is pivotal to the survival of the human species by arguing that it is only those human characters who have succeeded in re-imagining their orthodox guiding narratives and who have taken the opportunity subsequently afforded to them to re-negotiate the boundaries of their human identities who are able to live and thrive in *MaddAddam*'s narrative present (Dunlap 2). It will explore how, while the Gardeners begin the re-education of the human in *The Year of the Flood* through their recontextualization of the orthodox guiding narrative of human exceptionalism and provide the human survivors with practical foundations and skills necessary to actualize the practise of environmentalism as a way of life and survive the post-capitalist landscape engendered by the Flood, "the MaddAddamites and the God's Gardeners" (MA 357) who come together to live at the "cobb-house enclave" (MA 18) continue this re-education. It will also examine how the gradual development of an interspecies community, as established towards the end of the trilogy's narrative, symbolizes the "transformation of society and subjectivity" (Canavan 152) required by humanity to avert ecocide and, subsequently, the complete extinction of the human race. Furthermore, it will maintain that this community represents the answer to the existential question that dominates Atwood's trilogy, which is "why (under what conditions) the survival of the human species

should be regarded as an ethical good" (Bergthaller 742).

To support these claims, the chapter will examine how the cobb-house community with whom the reader engages in *MaddAddam*'s narrative present is founded upon a more radical and thus more gradually achieved rejection of human exceptionalism. The Pigoons and the Crakers, who assist the human survivors of Crake's plague in truly overcoming their sense of superiority, are beings whom the human community finally learns to take seriously. Drawing on the work of the South African critic Alan Northover, the chapter will explore how the assertion by the Pigoons and the Crakers of both their "subjectivity and agency" (Northover, "Strangers" 133) is what enables the human survivors to slowly broaden their "intersubjective reality" (Harari 168) so that it includes other life forms and non-human animals.

Finally, in order to contextualize this thesis' argument within the boundaries of its investigation into the value of reading in the technological age, the conclusion will make the following observations: while the narrative arc of Atwood's trilogy has to remain unchanged while it is confined to the printed page, the reader, by virtue of her imaginative engagement with the "sterility and decay" (YF 15) engendered by this possible future, is gifted the opportunity to envision a fecund alternative to the "literary repertoire" (Iser 53) that informs Atwood's speculative fiction. This is what Bouson, taking his cue from Atwood, calls the "transformative – and ethical – potential of imaginative literature" (Bouson, "Return" 23) and a statement which reminds the reader of the claim made in Iser's authoritative work on reader response theory: that literary works are a "form of communication [that] impinges upon the world" (Iser ix). In the socio-political, economic and moral context of Atwood's work, this "potential" communicates to her readers the necessity of involving themselves in "meaningful political thought and action" (Bouson, "Return" 23) so that they, and the society of which they are a part, can begin moving towards actualizing an alternative way of living and being in the world. In an existential "universe [that] is a blind and purposeless process, full of sound and fury and signifying nothing" (Harari 234), the only option humanity has is the ability to choose what to do with its "freedom" (Le Guin par. 6).[15] Atwood's speculative fiction trilogy makes it abundantly clear that, should we continue to make the wrong choices

[15] The quotation used by Harari in his non-fiction H*omo Deus* is drawn from Shakespeare's *Macbeth* and Faulkner's *The Sound and the Fury* and emphasizes the impact literary narratives have on seemingly unrelated disciplines and subjects.

and ignore the necessity of re-imagining our contemporary myths, her possible future could become increasingly probable.

Chapter 1

"We understand more than we know": Reader-Response Theory and the Actualization of the Aesthetic Object in *Oryx and Crake*

Oryx and Crake, published in 2003, is the first text in Margaret Atwood's speculative fiction *MaddAddam* trilogy. As the opening act of her tripartite investigation into humanity's possible future, *Oryx and Crake* functions as the beginning of the dialogic conversation that takes place between Atwood's texts and her readers about what contemporary humanity's possible future could look like, should we fail to re-imagine our orthodox guiding narratives. Set in our "near-future" (Suvin 80), the narrative of *Oryx and Crake* introduces the reader to the world created by Atwood in her texts – one which is inspired by humanity's present socio-economic, political, technological and environmental context. Oscillating between the narrative past and narrative present, *Oryx and Crake* is focalized through the character perspective of Jimmy, this text's primary "protagonist" (Atwood, "Dire" 92). The narrative past of this speculative fiction text affords the reader the opportunity to engage imaginatively with the world in which Jimmy grows up, which is described by Canavan as a "hyper-exaggerated version of our present" (Canavan 140). The narrative present follows Jimmy – or "Snowman" as he calls himself in the present (OC 3) – as he struggles to comes to terms with a world whose human population has been decimated by a virulent epidemic created and distributed by his best friend Crake. The narrative present also introduces the reader to the Crakers, a population of genetically engineered human-animal splices whom Crake created as a replacement for humanity once it is wiped out by his plague.

The Reader and the Repertoire

Margaret Atwood states in her essay "Dire Cartographies" that "it is always the reader … who has the last word about any book" (93). In *The Act of Reading: A Theory of Aesthetic Response* (1978), Wolfgang Iser notes that "the study of literature arises from our concern with texts [and] there can be no denying the importance of what happens *to* [the reader] through these texts" (Iser x; my emphasis). Iser's phenomenological approach to the act of reading is concerned with the *communicative or dialectical relationship* that exists between a reader and the text with which she is engaged imaginatively (Iser x). He argues that "[a]s a literary text can only produce a response when it is read, it is virtually impossible to describe this response without also analysing the reading process" (ix). Iser's work positions the

reader not as a spectator who watches the meaning of the text unfold as she reads it, but as a participant who is intimately involved in formulating the text's meaning. The reader's contribution is essential, as, according to Iser, "[e]ffects and responses are properties neither of the text nor of the reader; the text represents a *potential effect* that is realized in the *reading process*" (ix; my emphasis).

The primary focus of Iser's theory of aesthetic response is the dialectical nature of the interactive relationship that exists between the "poles of text and reader" and how this communication is conditioned equally by the structure and strategies of the text and moulded by the disposition, experiences and context of the reader herself (Iser ix). Iser, along with Suvin, also argues that while literary texts are works of fiction, they draw their subject matter from the author's real world and can thus be conceived of as a record of the social and thought systems that produce the norms by which we live our lives (Iser 3; Suvin 31). These two critical observations – that literature is a form of communication that arises from the interaction between the reader and the text, and that literary works record and interrogate societal norms – will be used to provide the theoretical framework this thesis needs in order to argue that the genre of speculative fiction explores and interrogates the societal norms and values that currently exist by extrapolating them into a hypothetically possible future (Atwood, "In Context" 515).

To quote Iser directly, "literary texts constitute a reaction to contemporary situations, bringing attention to problems that are conditioned though not resolved by contemporary norms" (Iser 3). The attention of the literary text is therefore focused on critically investigating the "operational set of norms" (Iser 71) that stem from the dominant "thought system and social system" (Iser 70) responsible for creating the social world of the text with which the reader engages, in order to facilitate a fresh perspective of the social, intellectual, and moral customs that structure her perception of reality, as well as the guiding narratives from which they have sprung. Iser terms this a "restructuring of experience" (24), which results from the necessary "horizontal organization of norms" in a literary text (33). In a work of literature, Iser maintains that

> prevailing norms [are detached] from their functional context, thus enabling the reader to observe how such social regulators function, and what effect they have on the people subject to them. The reader is thus placed in a position from which [she] can take a fresh look at the forces that guide and orient [her], and which [she] may hitherto have accepted without question. (Iser 74)

In other words, in a literary text, society's orthodox thought and social systems are removed from their original context (the real world) and reorganized by the text so that the "reader [can] react to [her] own 'reality'" as presented to her by the text (Iser 85), thereby providing her with the opportunity to "see precisely what it is that guides" her when she acts (Iser 61). Iser deems this the primary value and purpose of literature and, by default, the imagination: "the reformulation of an already formulated reality, which brings into the world something that did not exist before" (x). The genre of speculative fiction can be viewed as an astutely appropriate textual embodiment of this "reformulation" (Iser x) because, as Atwood points out, speculative fiction functions uniquely as "an objective conversation in which [contemporary] events and hypotheses [are] followed through to their logical conclusions" (OC 79).

As the introduction has stated, Harari's analysis of humanity's possible future, *Homo Deus,* draws the reader's attention to the critical importance of understanding and acknowledging the orthodox guiding narratives that we have created for ourselves in our technological age, and emphasizes the necessity of untangling the web of fictions that constitute contemporary human culture so that we can understand how and why we have agreed to live as we do. Literature, as an investigation of the fictions that configure our reality, is thus indispensable in our present age, particularly when the reader concedes that the "intersubjective entities [of] money, gods, nations and corporations" created by our stories have tangible effects on the physical world and are capable of "shap[ing] our deepest anxieties and yearnings" (Harari 181). The first chapter of this thesis will explore how Atwood focusses on the primary fictions of capitalism, science, the paradoxical discourse of sustainability and the doctrine of human exceptionalism in *Oryx and Crake,* which graphically demonstrates how these orthodox guiding narratives have designed the horrifying possible future this text explores. It will maintain that *Oryx and Crake* presents Atwood's reader with a world premised on contemporary "social and cultural norms" (Iser 69) in order to draw her attention to "deficiencies of the prevailing system" (Iser 79) from which this work of speculative fiction has drawn its subject matter.

It is important to note, however, that the elements of reference that construct the world of the text are not a mere replica of the real-world reality from whence they have been drawn. Rather, normative conventions and real-life aspects familiar to the reader have been selected by the author and organized in such a way that "their presence … usually means that they undergo some form of transformation, [which is] an integral feature of … communication" (Iser 69), and it is the reader's task to "work out why certain conventions …

have been selected for [her] attention" (Iser 61). As outlined in the introduction, what Atwood is ultimately reformulating in her trilogy are the guiding narratives that regulate her society's behaviours and structure her characters' perception of reality. The nature of this inquiry is self-reflexive as the reader, by imaginatively exploring her possible future as presented to her in Atwood's speculative fiction texts is, by default, also analysing critically the guiding narratives or "neo-mythical structures" that configure her present and which are the architectural foundations of her lived reality (Atwood, "Burning" 53). Atwood's works' ability to destabilize the "validity" (Iser 61) of the accepted norms and orthodox conventions of the contemporary technological age invite her readers, *through their imagination,* to propose alternative ways of living and being in the real world from which her texts have drawn their subject matter (Iser 69). This effect is possible because fiction and reality are "linked" (Iser 53) and fiction – speculative fiction in particular – "is a means of telling us something about [the] reality" to which it is reacting (Iser 53). Atwood states in "*Oryx and Crake* and *The Handmaid's Tale* in Context" that "[l]iterature is an uttering, or outering, of the human imagination" (517), and that "[u]nderstanding the imagination" and using it to conceptualize of alternatives to the way we live now has become a "necessity, because increasingly, if we can imagine something, we'll be able to do it" (517). What makes *Oryx and Crake* such a harrowing experience for the reader is that this first text of the trilogy explores a possible future which is, in many respects, a highly probable extrapolation of humanity's present.

As noted in my introduction, Iser calls "all the familiar territory within the text" the text's "extratextual reality" or literary "repertoire" (Iser 69). Bouson maintains that the one of the "extratextual" (Iser 69) elements that inform the world of *Oryx and Crake* is the reader's "biotechnological world in which 'the boundaries between science fact and science fiction are fast collapsing"' in terms of exponential advances in technology, genetic engineering and scientific research (Best and Kellner qtd. in "Game" 140). As Harari observes in *Homo Deus,* and as Atwood dramatizes in *Oryx and Crake* through the experiments conducted by the scientific corporations that dominate her possible future, the day will come where "our knowledge will be so vast and our technology so advanced that we shall [attempt] to distil the elixir of eternal youth, the elixir of true happiness, and any other drug [or disease] that we might possibly desire – and no god will stop us" (Harari 235). The economic segregation that structures the lives of the main characters of Jimmy, Oryx and Crake does not seem far-fetched either, as our present social context is already organized around the systemic violence perpetrated by capitalism, and a system of trade which divides nations and people into those

who are wealthy and those who are poverty-stricken. In addition, the culture of consumerism is rife in the reader's contemporary capitalist context. We are, as Harari argues, and as Atwood consistently emphasizes in her text, in the age of "Coca-Colonialism" (Harari 303). The commodification of the poor, especially women, children and migrants like Oryx who feel as though they "have no choice" (OC 140) but to participate in their economic slavery is becoming all the more prevalent in an age defined by progressively neo-liberal capitalism and the loss of social consciousness. Contemporary democracy is becoming an increasingly suspect concept in the reader's present context, falling far short of the Grecian ideal on which it was modelled, and the subtle and insidious erosion of civil liberties that *Oryx and Crake* highlights is gradually increasing as the reader's technological age progresses. Atwood's graphic demonstration of the scale of environmental degradation and destruction caused by humanity is also eerily familiar to contemporary readers. In our own lived present, we are bearing witness to the beginning stages of the complete ecological meltdown presented to us in *Oryx and Crake*'s narrative past, and Atwood portrays it as the reasonable conclusion to a state of being marked by overpopulation, an over-dependence on fossil fuels, a gratuitous misuse of natural resources, and an inability to embrace alternative and renewable sources of energy.

This is one of the primary "deficiencies" (Iser 79) of the way in which contemporary technological age is organized: the manner in which we currently interact with our broader environmental context. In order to emphasize the magnitudinous effects and far-reaching consequences of our flawed behaviour, Atwood offers the reader a picture of what her natural environment could look like if modern society carries on travelling down the "slippery slope" of global ecocide that we are already on (Atwood, "Writing *Oryx and Crake*" 2). Atwood ensures that her readers understand that the kind of large-scale environmental destruction that humanity is currently perpetrating does not occur in the space between geological epochs, but in the "space-time" (OC 347) that exists between generations in order to convey a sense of urgency regarding just how quickly it can occur. In the time that separates Jimmy's childhood from his adulthood,

> the coastal aquifers turned salty and the northern permafrost melted and the vast tundra bubbled with methane, and the drought in the midcontinental plains regions went on and on, and the Asian steppes turned to sand dunes. (OC 27)

Sharon, Jimmy's mother, still has vivid recollections of when her "grandfather's Florida grapefruit orchard … dried up like a giant raisin when the rains had stopped coming,"

as it was "the same year Lake Okeechobee had shrunk to a reeking mud puddle and the Everglades had burned for three weeks straight" (OC 72). "Harvard" (OC 203), the educational institution that still exists in the contemporary reader's context, has been "drowned" (OC 203) by the rising sea in the years that separate today from our possible future, as have "quite a few of the eastern coastal cities" (OC 71). The advent of this flood of Biblical proportions is already being experienced in the reader's present context. According to the 2016 *National Geographic* documentary *Before The Flood*, the island nation of Kiribati has already had a sizeable portion of its land reclaimed by the ocean. Its President has already purchased land in Fiji in order to accommodate the exodus of the Kiribati people in response to rising sea levels. He hopes that by promoting what he calls a policy of "migration with dignity" (*Flood* 00:41:52), his people can circumvent being designated as "climate refugees," a fate that has already befallen the millions who inhabit increasingly fragile ecosystems (*Flood* 01:04:19).

Oryx, the woman whom both Jimmy and Crake love, is a "climate refugee" (*Flood* 01:04:19).[16] She cannot remember her given name, and when she joins Crake at "Paradice," she chooses to call herself Oryx after "ORYX BEISA," as she "liked the idea of being a gentle water-conserving East African Herbivore" (OC 365). In the reader's present, these animals are still alive; in Oryx's time, they are "extinct" (OC 365). Oryx's character can be said to be a composite of the "non-affluent masses in the third world" (Bouson, "Game" 147). The reader is never explicitly told whether she is the same child that Jimmy and Crake see on the child pornography site "HottTotts" when they are adolescents (OC 102) or the same teenage girl found in the San Francisco garage of a wealthy businessman in their young adulthood, even though there are similarities in their appearance and their origin. Jimmy explicitly wonders this when he asks himself "[w]as there only one Oryx, or was she a legion?" (OC 362). Oryx herself obscures her identity deliberately. Whenever Jimmy is trying to find out her history, Oryx puts on a "storytelling voice" when she tells Jimmy about

[16] NASA astronaut Piers Sellers has created a computer programme that combines all the information from the 22 satellites that constantly monitor the earth's health. These satellites collect data on oceanic and atmospheric temperatures, track rainfall, harsh weather systems and the size of the ice caps and observe the temperature and movement of the ocean currents that regulate the earth's surface temperature (*Flood* 01:15:41-01:19:00). The effects of climate change are not limited to observable ecological destruction, but also include flooding, droughts, water scarcity, heat waves, wildfires, hurricanes, food shortages, lost wages and the cost of disaster relief – estimated to be 44 Trillion dollars by 2060 (*Flood* 01:00:48-1:00:58). On this list is also the odd inclusion of the cost of air-conditioning, which will become absolutely necessary for people to survive the extremely hot temperatures that will plague increasingly larger tracts of land (*Flood* 01:00:52). Former US president Barack Obama says that climate change has become a national security issue, as increasingly temperamental climates will lead to famine, resource wars and increased migration. (*Flood* 01:14:05-01:15:15).

her past (OC 371). Jimmy suspects her of "improvising, just to humour him" (OC 105). He goes so far as to question whether her past "was his own invention" (OC 371). While Oryx may be indeed be "mak[ing] something up" in order to satisfy Jimmy's desire to know everything about her chequered past (OC 105), it is highly improbable that the story she tells him about her childhood is a lie. Oryx is "legion" (OC 362), as what she endured when she was young is daily life for the huge numbers of people who have been "reduced … to starvation-level poverty" by neo-liberal capitalism, commercialization and climate change (OC 210).

When Jimmy first sees Oryx on the internet, he says that "he felt culpable" (OC 104). This culpability is not limited to his morally-suspect voyeurism, but extends to the series of events that has ultimately culminated in Oryx's lived reality – one in which society as a whole has participated in actualizing, willingly or not. Oryx tells Jimmy that she was born in a "village with trees all around and fields nearby, or possibly rice paddies" (OC 133) in "Indonesia, or else Myanmar [or] Vietnam [or] Cambodia [but it] didn't matter" (OC 134) as her story could be anybody's story, and this village could be anywhere in the global South. She tells Jimmy that, in her childhood, "[t]here was only so much food to go around" (OC 135) because "the weather had become so strange and could no longer be predicted – too much rain or not enough, too much wind, too much heat – and the crops were suffering" (OC 136). Her mother therefore decided to sell her and her brother to a man called "Uncle En" (OC 142) so that they would have "a better chance in life" (OC 137). This man, thought of as their community's "bank, their insurance policy, their kind rich uncle, their only charm against bad luck" (OC 136), is the only person they could rely on for financial support following the abdication of any semblance of empathy, compassion or social welfare initiatives on the part of their government and the globe in general. When Jimmy approaches Crake in a state of outrage at Oryx's treatment at the hands of her parents, paedophiles and sexual predators, Crake pragmatically states that he has to "look at it realistically. You can't couple a minimum access to food with an expanding population indefinitely" (OC 138-139). Oryx shares Crake's realism, asking Jimmy whether "he would like it better maybe if we all starved to death?" (OC 138). Oryx – and the people she represents – are the first line of "chickenshit … soldiers" that fall in the global war for resources (OC 298); a war which the text suggests will soon engulf our entire species and affect every strata of society. As Crake remarks to Jimmy,

> [a]s a species we're in deep trouble, worse than anyone's saying. [The Corps] are afraid to release the stats because people might just give up, but take it from me, we're running out of space-time. Demand for resources has exceeded supply for decades in marginal geopolitical areas, hence the famines and droughts; but very soon, demand is going to exceed supply for *everyone*. (OC 347)

The contemporary reader is already familiar with the "baneful social and economic effects of global climate change" on the global South inhabited by people like Oryx (Bouson, "Game" 147). *Oryx and Crake,* as a text of speculative fiction, is able to explore how the "dusty famines" which appear to exist only in countries that are "far away," impinge upon the capital-rich countries as inhabited by *Oryx and Crake*'s primary characters (OC 302). Atwood's text presents this impingement in the form of foodstuffs: throughout its narrative past, the text references produce that is scarce in Atwood's possible future but readily available in the reader's present context. Presenting the reader with the visceral and extensive repercussions that environmental destruction would have on the variety and availability of food – one of humanity's primary needs – Atwood is able to bring climate change's "unintended consequences" (OC 267) to bear on both the micro-and-macro levels of *Oryx and Crake*'s affluent society – the strata of society that is the most well-protected against the effects of climate change by virtue of their wealth.

At Jimmy's father's wedding to his step-mother, Ramona, the appearance of cake made with "All Real Ingredients," including "fresh eggs," is an occasion worthy of "cackling" (OC 206). At "HelthWyzer High" (OC 203), Jimmy's Compound high-school, one of the lunch specials is a single "Special Fish Finger [made with] 20% Real Fish" (OC 68). In the reader's present, society still takes such foods and ingredients for granted. But Atwood asks her readers to imagine a world where staples such eggs, flour, sugar, milk, oil and fish will no longer be widely available to anyone, due to climate change. The cattle industry has also been decimated by global warming, drought and disease in the reader's possible future, evidenced by the proliferation of soya products used as substitutes for meat. For example, Jimmy and Crake eat "SoyOBoyburgers" at the mall because there was "no beef [available] that month" (OC 85). The dairy business has also not been exempted from the effects of climate change in Atwood's rendition of humanity's possible future. While the compounds have access to "real chocolate" (OC 245), the only product that appears to be generally available to the public is "SoYummie Ice Cream," which comes in "chocolate soy, mango soy, and roasted-dandelion green-tea soy" flavours (OC 203). Furthermore, "hard-to-

come-by-foods [like] a couple of lamb chops or a chunk of genuine Brie" can only be obtained by the masses if they acquiesce to the "the eating of live animals and birds" on a game show called the "Queek Geek Show" (OC 97). This live-action contest, a form of entertainment that harks back to the competitions shown on reality-tv shows like *Survivor* or *The Amazing Race* in the reader's present, re-emphasizes the scarcity of presently readily-available foods. These spectacles also have another function. They are able to call the reader's attention to the ambivalent attitude Atwood's society has towards the natural world. The fact that the situation depicted in *Oryx and Crake* is a recognisable but heightened version of the reader's contemporary context emphasizes that Atwood's speculative fiction text has merely extrapolated our current real-world perspective into her possible fictional future. The image Atwood employs to reinforce her rhetorical commentary on how human beings interact with their environment, and the effects that our unrestrained consumption has on the ecosphere, is incredibly powerful: eating a lizard or bird that is *still alive* in order to fulfil a desire, and not to satisfy a need, highlights an important aspect of human nature that Atwood critiques throughout *Oryx and Crake*. The text highlights the greed upon which the reader's contemporary technological age is founded (OC 348). Just like Jimmy, who constantly feels "jerked around" by his own avarice (OC 297), contemporary society is an "addict" (OC 319) which prefers the short-term gratification of the individual desire at the cost of the long-term survival of the global community. Contemporary human society is characterized in the text as

> a sort of monster, its main by-products being corpses and rubble. It never learned, it made the same cretinous mistakes over and over, trading short-term gain for long-term pain. It was like a giant slug eating its way relentlessly through all the other bioforms on the planet, grinding up life on earth and shitting it out the back-side in the form of pieces of manufactured and soon-to-be-obsolete plastic junk. (OC 285)

In *Oryx and Crake*'s narrative past, the reader is bearing witness to the death-throes of the monster that is contemporary human society. Its debris litters the world of Atwood's texts, whose oceans are tirelessly "grinding against the ersatz reef of rusted car parts and jumbled bricks and assorted rubble [so that it] sounds almost like holiday traffic" (OC 3). This sensory experience, one of the first that greets Jimmy as he awakens alone on a beach following Crake's apocalypse, bears testament to contemporary civilization's scale of production while also drawing the reader's attention to how humanity hides the reality of its appetites from its consciousness. We try and efface the consequences of our consumption by

concealing it in the ocean, in landfills, or other places where it cannot be seen. The nonchalant manner in which Jimmy equates the sounds made by the flotsam and jetsam with which we have polluted the ocean to the noises made by travellers' vehicles, stresses that the act of spoiling the natural world with faeces of the beast of human society is as normal as going on vacation. These behaviours are further emphasized by the vista that greets Jimmy as he travels by "bullet-train" from his pristine compound to "Martha Graham" (OC 217). This institution borders one of the "pleeblands" (OC 217), the geographically and economically ghettoized areas that are home to the disenfranchised within Atwood's technological autarchy, who live amongst

> vacant warehouses, burnt-out tenements, empty parking lots. Here and there were sheds and huts put together from scavenged materials … and inhabited no doubt by squatters. How did such people exist? Jimmy had no idea. Yet there they were, on the other side of the razor wire. (OC 217)

Their existence "at the very bottom of the social heap" (Atwood, "Dire" 91) means that they are forced to live amongst the "by-products" discarded by the enfranchised members of society (OC 285). Their poverty inhibits their access to space, security and cleanliness. The reader should, however, recognize, that the "pleeblands" in Atwood's possible future world (OC 271) mirror the living conditions of individuals and communities who exist in skewed societies at present. In South Africa, for example, the landscape that one observes when travelling from the Cape Town International Airport, which lies on the outskirts of the city, to the city centre, is disconcertingly akin to the "pleebland" vista that Jimmy witnesses from the safety of his "bullet-train" window seat (OC 217). As the author William Gibson notes, "[t]he future is already with us, it's just unevenly distributed," especially along economic lines (qtd. in Atwood, "Burning" 61).

It does, therefore, need to be seriously acknowledged that financial standing plays a decisive role in environmental degradation. *Oryx and Crake* is able to call the reader's attention to the structural violence inherent to the social order engendered by the orthodox guiding narrative of capitalism. As Atwood notes, in her non-fiction text *Payback: Debt and the Shadow Side of Wealth* (2008), the system is "screwed up" (194). This book explores how the capitalist economy functions in the contemporary technological age and draws the reader's attention to how this system is consistently prejudiced in favour of the wealthy:

> [t]he killing of the Earth is driven on by poverty on the one hand and greed on the other. Keep in mind also that many of the countries where the most destruction is going on are heavily in debt to the rich ones. So the killing is also driven by debt. (193)

Every member of modern society lives within the "web of meaning" authorized and perpetuated by the neo-myth of capitalism (Harari 175), and the possible future environmental context with which the reader imaginatively engages in *Oryx and Crake* is therefore the valid conclusion to contemporary ecological, business and social practices. The state of the natural world as depicted in Atwood's text is also a consequence of contemporary society's "willed … ignorance" of the magnitude of the ecological crisis it is currently facing (OC 216), as well as the apathy that characterizes our responses to it. With all of the knowledge, insight, technology and potential for global co-operation that the human race possesses at present, it is clear to the reader that in Atwood's possible future, we "listened … but [we] didn't hear" (OC 398).

In order to emphasize the complete lack of concern that characterizes humanity's interaction with that which sustains, feeds, protects and nourishes us, *Oryx and Crake* presents the reader with the deaths of two mothers. The first death that the reader is presented with is that of Crake's mother, who "picked up a hot bioform that had chewed through her like a solar mower" (OC 207). While the story that "HelthWyzer" (OC 81), the corporation for which she works, tells the public is that her death was an "accident" (OC 207), Jimmy's traumatic memories reveal that it is very likely that she was the first "trial run" for Crake's plague (OC 400) and was infected by Crake in retribution for the role that she played in the murder of his father. A year or so after Crake's mother dies, Crake tells Jimmy that his father was "going to do some whistle-blowing" (OC 249) on how "HelthWyzer" is creating new diseases, deliberately seeding them in their "over-the-counter premium brand [vitamin pills]" (OC 247) and "hold[ing] [the antidotes] in reserve" so that they can make "maximum profit" out of their consumers' "lingering illnesses" (OC 248). The only people whom he told were Crake's "mother and Uncle Pete" (OC 249), and Crake suspects that they informed on him, leading his death at the hands of the "CorpSeCorps," the corporations' law-enforcement body, who killed him for the "general good" of the corporations' profit margins (OC 249). Crake's mistrust is valid, especially when the reader learns that Pete is a company executive who becomes Crake's stepfather after his real father is murdered. He later dies in a manner resembling "pink sorbet [melting] on a barbecue" (OC 297), and Jimmy wonders whether he

too was infected by an early variant of the virus Crake later releases.

The suggestion that Crake deliberately committed matricide is chilling, and encourages the reader to reflect on the part that she is currently playing in the drawn-out, torturous death of Planet Earth. In the context of global participation in ecocide, the loathing that the reader feels towards Crake for murdering his mother is misdirected and should instead be felt for ourselves: should humanity experience an ecological collapse in the foreseeable future, the blame lies squarely at the feet of our species. Alternatively, should the reader feel that Crake's matricide is justifiable, she should reflect critically on whether the extinction of the human race is warranted as recompense for contributing to the murder of the other bioforms with whom we share our biosphere.

The second death with which the reader is confronted is that of Sharon, Jimmy's mother. A former scientist who was in the employ of the corporations, she defects from a compound owned and operated by "HelthWyzer" when Jimmy is an adolescent (OC 260). Thereafter, she "live[s] as an eco-terrorist in the pleeblands" (Mosca 41) before she is captured by the "CorpSeCorps" (OC 232) and summarily executed for crimes that include "membership in a banned [environmental] organization [and] hampering the dissemination of commercial products" (OC 337). These crimes actively violate the doctrine of capitalism and threaten the potential income of those who occupy the "levels of real power" in Atwood's possible future (OC 228). The reader's present is not lagging far behind, however, as between 2002 and 2017, 1558 environmental activists were murdered, a number which equates to half the number of American soldiers killed in action in Iraq and Afghanistan since 2001 (Watts, "Environmental Activist" par. 2). Most alarmingly, the majority of the two hundred activists who were murdered in 2016 were killed by hitmen "hired by state forces or corporations" (Watts and Vidal, "Environmental Defenders" par. 9). The deaths of the two mother-figures in *Oryx and Crake* therefore encourage the reader to recognize both her own complicity in causing the ecocide that she is currently bearing witness to, and also affords her the opportunity to acknowledge that, at the "decision-making levels" of society in both her present and her possible future (OC 229), environmental activists like Sharon are seen as guilty of committing "treasonable crimes against [capitalist] society" (OC 337). This perspective is rooted in "the creed of growth" that informs the orthodox guiding narrative of capitalism (Harari 249), as the capitalist economy finds any attempts to limit "the pace of progress" a "heretical idea. Instead, it suggests we should run even faster" (Harari 249).

While it can be successfully argued that the omnipotence of capitalism and the fear of corporate or governmental retribution for engaging in environmental activism are two

feasible explanations as to why contemporary society's response to environmental destruction is lacklustre, Harari posits that science is also to blame: the exponential rate of "scientific progress" in the reader's contemporary technological age (249), which has been magnified in the fictional world of *Oryx and Crake*, leads us to assume that "future scientists will make some unknown planet-saving discoveries" (253). If science is not able to achieve this ideal for every human being on the planet, Harari finds it extremely probable that "engineers could still build a hi-tech Noah's Ark for the upper caste, while leaving billions to drown" (253). These beliefs are, according to Harari, "the biggest threats to the future of humankind and of the entire ecosystem" (253). If we continue believe that we will be able to save our planet and ourselves through scientific and technological progress, we will not be motivated to change our present conduct or re-contextualize our orthodox guiding narrative of capitalism and its founding tenet of "economic growth" so that it can respond appropriately to the extremely serious threat of an "ecological meltdown," the human suffering that is a necessary consequence of prolonged resource-scarcity, and the collapse of modern human civilization (Harari 249).

Oryx and Crake devotes a large portion of its narrative to analysing the orthodox guiding narrative of science and its effects on the world. Of particular concern to Atwood is where genetic engineering is heading and what role it will play in the reader's future. Works of non-fiction, such as Bill Mckibben's *Enough: Staying Human in an Engineered Age* (2003), that deal with similar concerns associated with unregulated genetic engineering and the profits to be made from it, do not, as Atwood states in her review of McKibben's book, "go on to explore the ultimate hell this situation could produce" ("Arguing" 134). Atwood concedes that McKibben "addresses the greedy little Scrooge in all of us [that] want[s] more and more, and more, and, just to top it off, more" ("Arguing" 130), but suggests that his non-fiction text "doesn't go all the way down, into dark realms of envy, cheating, payoffs and megalomaniacal revenge" ("Arguing"134). In contrast, *Oryx and Crake* urges Atwood's readers to consider in vivid detail where genetic engineering may lead.

In *Oryx and Crake*, the "biolab hotshots" who work for the scientific corporations enjoy playing "create-an animal" as it "was so much fun [and] it made you feel like God" (OC 57). Some of the first experiments that are created by these genetic engineers are, however, questionable and had to be "destroyed because they were too dangerous to have around" (OC 57). For example, "a cane toad with a prehensile tail like a chameleon's," or "the snat, an unfortunate blend of snake and rat" (OC 57), are the fruits of the "practical" science types who populate the sterile laboratories of Jimmy's childhood environment (OC

41). These creatures are just two of the physical embodiments of Atwood's critique of the imprudent oddities that may be created once the doors to genetic experimentation have been opened by a macabre amalgamation of human ingenuity, creativity and amorality and which will only increase rapidly as this scientific discipline progresses. When Crake is showing Jimmy around "Watson-Crick," the first-rate scientific institution that he attends (OC 203), the reader is introduced to "Smart Wallpaper" which is composed of "a modified form of Kirilian-energy-sensing algae [that] would change colour on the walls of your room to complement your mood" (OC 237). In order to emphasize the unforeseen consequences that could arise when "interfering with the building blocks of life" (OC 64), Atwood has Crake relate to Jimmy that this wallpaper could not, however "tell the difference between drooling lust and murderous rage" and had the irritating tendency to turn "an erotic pink when what you really needed was a murky, capillary-bursting greenish red" (OC 237). The same student team is also "working on a line of bathroom towels that would behave in much the same way," but they have the tendency to absorb too much water and "the test subjects so far had not liked the sight of their towels … puffing up like rectangular marshmallows and inching across the bathroom floor" (OC 237). As darkly humorous as these examples may be, the reader is soon introduced to a more insidious experiment created by the students at "Watson-Crick" (OC 234) which emphasize that "biotechnology is [indeed] forging way ahead of biology, ethics [and] common sense" (McKibben 17).

During his tour of the institutions' "NeoAgriculturals" department (OC 237), Jimmy is confronted by "a large bulblike object that seemed to be covered with stippled whitish-yellow skin. Out of it came twenty thick fleshy tubes, and at the end of each tube another bulb was growing" (OC 237). The last thing that Jimmy and the reader expect this object to be is a "chicken" as it looks more like "an animal-protein tuber" (OC 238). This "horrible" creation is designed for maximum meat output and, as the scientist in charge of the project tells Jimmy, it can produce more product than "the most efficient low-light, high-density chicken farming operation so far devised" (OC 238). Its head comprises of "a mouth opening at the top [wherein they] dump the nutrients" that are required for the "high growth rate [that is] built in" (OC 238). Any brain functions that have "nothing to do with digestion, assimilation, and growth" have been removed, and the scientist who observes this grotesque parody of a battery chicken laughs at Jimmy when he asks "what's it thinking" (OC 238). She also informs Jimmy that "the animal-welfare freaks won't be able to say a word, because this thing feels no pain" (OC 238). Jimmy's encounter with this "chicken hookworm" is invaluable to the reader (OC 238), as his childhood was spent with another kind of "*sus*

multiorganifer," the pigoons at "OrganInc Farms" (OC 25). Even though he grew up in a scientifically-oriented compound wherein such genetic interference was normalized, he still feels that "this thing was going too far" (OC 238) and is unsure whether he would ever be able to eat "a ChickieNob. It would be like eating a large wart" (OC 239). Nevertheless, he does end up consuming them once "they are on the market" as they are cheap (OC 239).

Jimmy's tour of "Watson-Crick" (OC 234) is an integral part of the conversation *Oryx and Crake* has with its readers about genetic engineering. Bouson notes that it is becoming increasingly necessary to hold a dialogue about this discipline's possible trajectory, as those individuals and companies who hold positions of power in both Atwood's world and the contemporary reader's immediate context "see only positive benefits from contemporary technology" ("Game" 140). Furthermore, as *Oryx and Crake* dramatizes, it is becoming increasingly possible that this kind of technology will usher in a potentially "techno-eugenic agenda" (McKibben 14) due to the "'disturbingly comfortable fit between the techno-eugenic vision' and our consumer culture" (Darnovsky qtd. in McKibben 21). *Oryx and Crake* provides the reader with the opportunity to investigate the suitability of this fit on both the micro and macro levels of society so that she can experience how genetic engineering, when it is subsumed by the corporate agenda, can affect both the individual and the global community.

Atwood introduces the reader to the infant stages of the "techno-eugenic agenda" by exploring a process that is already familiar to contemporary readers – fertility treatments and IVF – in order to show her where this technology, and the science upon which it is based, could lead (McKibben 14). Jimmy's stepmother, Ramona, has been trying to fall pregnant with the help of fertility treatments. Jimmy goes on to say that if "nothing 'natural' happened soon, [Ramona said that] they'd try 'something else' from one of the agencies – Infantade, Foetility, Perfectababe, one of those" (OC 293). What Ramona is referring to here is "germline genetic engineering," in which "the cells of [an] embryo" are teased apart and then added to, deleted, or modified in order to genetically design the child that would grow from the embryo (McKibben 10). Doctors also use this method to "insert artificial chromosomes containing predesigned genes" into the cell, resulting in an undeniable designer baby (McKibben 10). James Watson, one of the "DNA pioneer[s]" alongside Francis Crick, has stated that the reasoning behind this technology is the pursuit of perfection – "Who wants an ugly baby?" (qtd. in McKibben 10). While this technology is currently possible in the reader's contemporary age, it is, at present, banned in over forty countries ("Human Genetic Modification" par. 4). What Atwood is asking the reader to consider by incorporating this

kind of genetic engineering into her textual repertoire is the following: how long until corporations and governments who stand to benefit decide to overturn this ban and fully open Pandora's Box? Atwood presents a possible answer to this question by having Jimmy relate what Ramona and Jimmy's father could do if they are not satisfied with the results of their designer child: "if the kids [from the trial runs] didn't measure up they'd recycle them for parts, until at last they got something that fit all their specs" (OC 293). The straightforward manner in which Jimmy contemplates this appalling prospect makes it clear that this kind of behaviour is normalized and, furthermore, expected by both the micro-and-macro levels of his technologically-proficient society.

The evolution of the "techno-eugenic agenda" (McKibben 10), which fully depends on the unrestrained commercialization of genetic engineering, is demonstrated graphically to the reader when she travels along the "Street of Dreams" (OC 339) with Jimmy and Crake:

> [t]he shops here were mid-to-high end, the displays elaborate. Blue Genes Day? Jimmy read. Try SnipNFix! Herediseases Removed. Why Be Short? Go Goliath! Dreamkidlets. Heal Your Helix. Cribfillers Ltd. Weenie Weenie? Longfellow's the Fellow! (OC 339)

This street is where the products produced by the "body-oriented Compounds … turn to gold" (OC 339) and Crake informs Jimmy that he has "no idea how much money changes hands on this one street alone" (OC 340). The global competition between countries is fierce and involves "the Russians … the Japanese, and the Germans of course. And the Swedes" (OC 340). The Americans, however, have a "reputation for dependable product," which encourages individuals to "shop around. Gender, sexual orientation, height, colour of skin and eyes – it's all on order, it can all be done or redone" (OC 340). It is after showing Jimmy around the "Street of Dreams" (OC 339) that Crake offers him a job at "RejoovenEsense … one of the most powerful Compounds of them all" (OC 269) where he is in charge of his own division called "Paradice" (OC 344). His "unit" is working on achieving "immortality" (OC 344) through "two major initiatives:" the Crakers and the "BlyssPluss Pill" (OC 345), a pharmaceutical drug marketed as an all-in-one miracle cure for the wanton and desirous. It has three overt and inter-related functions, namely the prolongation of feelings of youth, protecting individuals from all sexually-transmitted diseases, and providing its users with an "unlimited supply of libido and sexual prowess" (OC 346). Crake believes that this drug will reduce the feelings of sexual frustration that lead to interspecies violence and feelings of romantic jealousy (Dunalp 8). The fourth function is not, however, advertised. Crake's pill

will also "act as a sure-fire one-time-does-it-all birth-control pill, for male and female alike, thus automatically lowering the population level" (OC 347). The Pill also have a fifth effect, which will not be publicised either: it is the vehicle through which Crake disseminates the virus that wipes out the majority of the human race.

Jimmy, drugged up both on addictive substances and the hedonism of the moment, does not remember acquiescing "but he must have. He would have taken any job … He wanted to move, move on" (OC 341). Like Jimmy, the reader's contemporary technological age is caught up in the desire to start "a whole new chapter" of our lives without necessarily comprehending what exactly we are agreeing to (OC 341). In an age where technologies are increasingly in the service of corporate, political and social desires, it is necessary to recognize that contemporary society is not only on teetering on the edge of a "post-human" future in the sense that our natural "capabilities are constantly enhanced by scientific and technological means" (Mosca 45), but also guiding itself into an "age of biological control" (Bouson, "Game" 139). As Atwood notes in "Writing *Oryx and Crake*," it is "not a question of our inventions – all human inventions are tools – but what might be done with them" (2).

The Crakers represent one possible outcome of what may be produced if the skills, expertise and knowledge possessed by scientists and researchers are controlled and manipulated by socio-political and corporate "desires" (OC 349). Mosca suggests that these genetically-engineered beings are "post-human," both "literally and chronologically, since they are supposed to be become the 'new' humans once the 'old' ones have disappeared" (Mosca 45). They are also, as Crake observes, the "result of a logical chain of progression" (OC 356). He explains to Jimmy that

> [o]nce the proteonome had been fully analysed and interspecies gene and part-gene splicing were thoroughly underway, the [Crakers] or something like [them] had only been a matter of time. (OC 356)

Most insidiously, the coupling of the "desire" (OC 349) to design and manufacture the 'ideal' human being with commercial and political interests could very easily create the extremely unnerving situation wherein the covert socio-political, economic and psychological control of populations that is currently being performed by contemporary governments through the perpetuation of propaganda and divisive socio-economic and political policies, could morph into overt biological control. In Atwood's possible future, consumers and governments alike will be able to

> create totally chosen babies that would incorporate any feature, physical or mental or spiritual, that the buyer might wish to select. The present methods on offer were very hit-or-miss, said Crake: certain hereditary diseases could be screened out, true, but apart from that there was a lot of spoilage, a lot of waste. The customers never knew whether they'd get exactly what they paid for; in addition to which, there were too many unintended consequences. But with [Crake's] method, there would be ninety-nine percent accuracy. *Whole populations could be created that have pre-selected characteristics*. Beauty, of course; that would be in high demand. *And docility; several world leaders had expressed interest in that*. (OC 357-358; my emphasis)

While the "RejoovenEssence" executives are excited to "hit the market" (OC 357) with this final stage of the "techno-eugenic agenda" because it would exponentially increase their income (McKibben 10), Crake is driven by a different impulse. He too wants to usher in an age of biological control, but he is, according to Bergthaller, "motivated not by greed [or power] but by a genuine desire to change" the world (735). Crake is fully aware that the environmental and social catastrophe to which the reader bears witness in the narrative past of *Oryx and Crake* is a result of humanity's "inability to cut [it]self off at the supply end. [It is] one of the few species that doesn't limit reproduction in the face of dwindling resources" (OC 139). As a biological determinist, Crake believes that human nature is inherently flawed and, furthermore, that it is solely responsible for the havoc being wrought on the environment by the human species in the reader's present and in Atwood's possible future (Bergthaller 737). Furthermore, he is convinced that human nature cannot be steered "in a more beneficial direction than the ones hitherto taken" (OC 346), which is why he is intent on leaving the planet to the Crakers, who he has engineered to live in harmony with their broader environmental context. The Crakers are Crake's ideal hominid species.

When Jimmy first lays eyes on these preternaturally beautiful people in the artificial habitat Crake has created for them inside "Paradice" (OC 344), Crake tells Jimmy that "[w]hat had been altered was nothing less than the ancient primate brain" (OC 358). He, and the team of scientists working for him, target and remove "the features responsible for the world's current illnesses" (OC 359), which Crake organizes into the following categories: racism, hierarchy, agriculture, territoriality, sexuality, patriarchy, consumption and symbolic thinking (OC 358-359). According to Ingersoll, the Crakers are the logical end-point of Crake's "hypothetical scenario" (OC 267) premised on the following 'what-ifs' that he proposes: "What if our species is doomed to extinction? If life can survive only in the form of

the Children of Crake, doesn't that survival outweigh the loss of some of [our] humanity?" (Ingersoll 167).

Crake has purged the Crakers of "[r]acism" and "[h]ierarchy" by "switching the bonding mechanism" and removing the "neural complexes that would have created it" (OC 358). Any feelings of "territoriality" are also eliminated (OC 358), which, in a "lateral-jump solution" (OC 247), jettisons the creation of imperialism. In addition, because the Crakers are vegetarians whose diet is supplemented by their caecotrophs, they have no need to develop agriculture nor consume animal protein (OC 358). They also come "into heat at regular intervals" (OC 359), which is a biological characteristic that Crake incorporates into their physiology as a means of overcoming the problem of human "sexuality" which he sees as the source of romantic "torment" (OC 359), and one of the prime contributors to interspecies violence (Dunlap 8). Most importantly, the Crakers are "perfectly adjusted to their habitat, so they would never have to create houses or tools or weapons or, for that matter, clothing" (OC 359). In short, through his creations, Crake hopes to circumvent the creation of capitalism, consumerism and industry – the forces which drive the destruction of humanity's broader environmental context – by creating a community of "quasi-humans" that has no need for them (Atwood, "Dire" 91).

Crake also understands that once modern civilization and its "elaborate systems of cooperation" have been destroyed (Harari 203), they "could never be rebuilt" (OC 261), primarily because "all the available surface metals have already been mined" (OC 261). Furthermore, even if "there were any people left with the knowledge" that could allow them to begin anew, they would be "few and far between, and they wouldn't have the tools [or the] electricity" to recreate contemporary technological society (OC 261). The "elimination of one generation" (OC 261) is all it takes for it to be "game over forever" (OC 262), which is why Crake covertly engineers the extinction of the human race and the consequent collapse of human civilization. Crake wants to put an end to the "game" (OC 262) humanity is currently playing with its ecosphere (OC 262); a game whose only rational outcome is the decimation of the environment and the human race's subsequent suicide-by-ecocide.

Although Crake's plan to wipe out the human species can be characterized as immoral and unethical, the reader would, however, find it difficult to refute the logic that lies behind his "literalist" attempt to save the world from humanity (Bergthaller 737). Canavan offers the reader an unorthodox perspective of Crake's agenda when he describes the release of Crake's genocidal pathogen as "the truest form of love" (150) in an age where ecological collapse would result in "economic ruin, political turmoil, a fall in human standards of living" (Harari,

249), and the exponential suffering of both human and non-human life forms that inhabit the planet (Canavan 150). Crake sees his plague as the only viable and effective means of averting the social and environmental catastrophe that seems the only logical corollary to the "Anthropocene," which is the "name for the geological epoch marked by the largely unintended and mostly negative consequences of human civilization" (Canavan 151). It is significant that Atwood was inspired to write *Oryx and Crake* when she saw a critically endangered bird called the red-necked Crake while visiting a community of Aboriginals in Australia who, in Atwood's words, "had lived continuously in harmony with their environment, for tens of thousands of years" ("Writing *Oryx and Crake*" 1). When she spotted them flourishing, "Oryx and Crake appeared to [her] almost in its entirety" (Atwood, "Writing *Oryx and Crake*" 1). She has given the creator of the plague that wipes out humanity the name of one of the animals whom humanity is currently exterminating (and who has been wholly exterminated in humanity's possible future) as a means of encouraging her readers to consider seriously the implications of society's present actions, and what consequences could plausibly arise.

Oryx and Crake therefore presents the reader with a world that has "disquieting similarities with their own everyday reality" (Mosca 38). She need not end up like Jimmy, asking herself retrospectively, "[w]hat could [we] have said or done differently? What change would have altered the course of events?" (OC 373) Does our future have to be one in which humankind's "dream steals from its lair towards its prey" (OC 354)? Is Crake's plague an act of love and the only way to save humanity and the environment from continued suffering? Or is there a viable alternative to what Atwood depicts in her imaginative exploration of our possible future? Reading Atwood's speculative fiction grants the reader the opportunity, and the motivation, to change by involving her in asking 'what if.'

The Function of the Literary Allusions in *Oryx and Crake*

The "social and historical norms" that *Oryx and Crake* incorporates into its "repertoire" (Iser 69) present Atwood's readers with the "deficiencies of the prevailing system[s]" (Iser 79) of capitalism, sustainability and science from whence they were drawn, and urge her to analyse critically the "whole culture from which the text has emerged" (Iser 69). The "literary allusions" apparent in *Oryx and Crake* help the reader generate "an answer to the problems" presented by this speculative text (Iser 79). The allusions that this chapter will concentrate on exploring are the "whole traditions of past literature" with which Atwood's speculative fiction is conversing (Iser 79), as well as the direct excerpts that preface *Oryx and Crake*, and

which are lifted from their original works.

Ingersoll argues that *Oryx and Crake* belongs to a literary tradition which includes George Orwell's *1984* and Aldous Huxley's *Brave New World* (170). Atwood's own critical writings support this observation, and she states that these works and their authors have heavily influenced her own conception of the genre of speculative fiction and the subject matter that she explores in her own texts (Atwood, "In Context" 516). In two of her longer critical essays, she credits Orwell with "alerting [her] early to the danger flags [she has] tried to watch out for" since she was a child ("George Orwell" 141), and states that *Brave New World* "made a deep impression on [her]" when she read it at the age of fourteen, "though [she] didn't fully understand some of what [she] was reading" ("*Brave New World*" 186).[17]

All three of these works explore "the great potential for change that Science is offering/threatening" (Ingersoll 170), and the manner in which *1984* and *Brave New World* present possible human futures mirrors *Oryx and Crake*. Atwood's first work of speculative fiction, *The Handmaid's Tale*, should also be kept in the critical reader's mind as she engages with Atwood's more recent speculative works. Atwood states that *The Handmaid's Tale* is constructed as "classic dystopia, which takes at least part of its inspiration from … *1984* – particularly its epilogue" ("In Context" 516). Both epilogues are, ironically, utopic in the sense that they present the reader with hope: the totalitarian societies explored in *1984* and the theocracy of Gilead have both "ended, and [have] thus become a subject for conferences and academic papers" (Atwood, "Dire" 91). *Oryx and Crake,* in contrast to the grim societies presented to the reader in *1984* and *The Handmaid's Tale,* is "dystopic in that almost the entire human race is annihilated" by Crake's virus (Atwood, "Dire" 91). As noted in my introduction, Canavan observes that Atwood constructs her trilogy in contrast to the usual status quo that governs the literary forms of dystopia and utopia (Canavan 141). Atwood's pre-apocalyptic world is not at all "a lost Golden Age to be mourned" but a dystopic nightmare which is far worse than the post-apocalyptic world of the final novel (Canavan 141). The utopic element in *Oryx and Crake* comes in the form of the Crakers, who represent the hope that the human race could survive in some form (Ingersoll 167). They are also utopic in the sense that they symbolize an ideal that humanity can never achieve – they are "designer people" as they have been created for a specific purpose by Crake and are his interpretation of perfection (Atwood, "Dire" 91). The Crakers are also "designer" in the sense

[17] Atwood's essay on *Brave New World,* which is found in *In Other Worlds* (pp. 184-193) also appears as one of the introductions to the 2007 Vintage edition of Huxley's work.

that Atwood has created them in order to perform a hypothetical though experiment ("Atwood, "Dire" 91). As Canavan argues, the Crakers "allegorize the radical transformation of both society and subjectivity that will be necessary in order to save the planet" from ecological collapse (152), thereby offering the reader an opportunity to "glimpse … the kinds of revolutionary changes" that need to occur if the reader wishes to experience a possible future that differs from the one Atwood presents in *Oryx and Crake* (152). This idea will be expanded upon in the third chapter, which will explore what the human survivors of Crake's plague learn from the Crakers during the course of *MaddAddam*'s narrative present.

The contextually-relevant "social and cultural norms" (Iser 79) explored by *1984*, *Brave New World*, *The Handmaid's Tale* and *Oryx and Crake*, and the utopic and dystopic elements shared by all four of these works of speculative fiction, as well as their examination of how human society could operate in the future, lead me to posit the following analogy: Atwood's *The Handmaid's Tale* is to *Oryx and Crake* as Orwell's *1984* is to Huxley's *Brave New World*. *1984* and *The Handmaid's Tale* explore what Atwood describes as "control by terror" in the respective climates of dogmatic communism and Puritanical theocracy (Atwood, "Dire" 90). *Brave New World* and *Oryx and Crake* explore the possibility of controlling the general population "through conditioning and consumption" in the context of burgeoning consumerism and commercialization (Atwood, "Dire" 90). *Brave New World*, written in 1932, looks forward to the golden age of this form of socio-economic and psychological control. *Oryx and Crake*, published in 2003, is written at its height. The possible future world it imagines immerses the reader fully in the hellish society created by what Bouson calls "the 'virus' of Americanism – that is, the American culture of violence and corporatization and commodification and unbridled consumption" ("Using" 15).

In Atwood's introduction to the 2007 Vintage edition of Huxley's "visionary book" (vii), she comments that that the kind of world that exists at present – one following the start of the global "War on Terror" in 2001 – can be seen as an amalgamation of the two kinds of futures that Orwell and Huxley envisioned befalling humanity (vii). She asks the reader to consider whether "it would be possible for both of these futures – the hard and the soft – to exist at the same time, in the same place? And what would that be like?" (Atwood viii). The pre-plague world of *Oryx and Crake* – one which is dominated by totalitarian corporate control over all state functions, commercialization and propaganda – explores the junction of Orwell and Huxley's possible futures.

David Bradshaw, who wrote an introduction to the 2007 Vintage Books edition of *Brave New World* alongside Atwood, states that the "theme" of Huxley's book is "the

advancement of science as it affects human individuals" (Bradshaw xliv); an observation which is also applicable to *Oryx and Crake*. Bradshaw argues that Huxley's "urge to parody a fictional future [was inspired by] his horrified engrossment in the urgent non-fictional problems of [his] present" (xx), which include the "grotesquerie of America" and the probable dominance of its hedonistic and consumerist culture after the end of War One (xix), the rise of propaganda as a form of psychological control, and "the possible use of eugenics as an instrument of political control" (Bradshaw xxii). In "Writing *Oryx and Crake*" Atwood notes that she wrote the text because, like Huxley, she too wanted to explore "what worries [her] right now:" where humanity's present may lead (2). *Oryx and Crake* draws on the historical and literary significance of *1984* and *Brave New World* as two definitive works of speculative fiction in the early technological age as a means of situating itself within the boundaries of the literary conversation in which both these texts are engaged. These classic speculative fiction texts are able to present the readers of *Oryx and Crake* with "a form of orientation" that could allow them to formulate contextually-appropriate responses to the concerns raised by all three works (Iser 79): should the reader wish to avoid the possible futures presented to her by Orwell's *1984* and Huxley's *Brave New World* – futures which are becoming increasingly probable in her contemporary context – she needs to be able to see "what precisely it is that guides [her]" in her present (Iser 69). *Oryx and Crake* is capable of providing Atwood's readers with this opportunity.

The two epigraphs to the text prime the reader's reception of the commentary that Atwood's work is making on the contemporary reader's context by highlighting or "foregrounding" specific issues that *Oryx and Crake* explores in its narrative (Iser 93). Their placement at the beginning of the text means that they are omnipresent in the reader's mind as they experience this text and, furthermore, they are able direct the reader's interpretation of the subject matter Atwood has chosen to interrogate in all three works of her speculative fiction trilogy. As they are situated at the beginning of the first text in her trilogy, they also form the "background" to the reader's critical analyses of all three texts (Iser 93). These literary allusions, which have been "lifted from [their] original context and transplanted into the [new] literary text [so that] new meanings come to the fore [also] drags its original context in its wake" (Iser 93), thereby encouraging the critical reader to reflect on the broader conversation the "original" literary works have with each other and the new one into which they have been transposed (Iser 93). Moreover, a cognizance of the literary traditions, genres and ideological preoccupations of the original books will support the reader in discerning and navigating the philosophical and conceptual webs that tie these texts and the new context in

which they are used, together (Iser 79).

The first epigraph to *Oryx and Crake* comes from Jonathan Swift's *Gulliver's Travels*, and reads as follows:

> I could perhaps like others have astonished you with strange improbable tales; but I rather chose to relate plain matter of fact in the simplest manner and style; because my principal design was to inform you, and not to amuse you.

Ingersoll and Canavan draw the reader's attention to the similarities between the "unmistakably satirical" tone of *Gulliver's Travels* (Canavan 152) and the rhetoric Atwood employs when she is describing "her world's transparently illegitimate and utterly irrational institutions [and] her scientist's cartoonishly irresponsible experiments" (Ingersoll 165). This is a connection to which Atwood herself draws attention in her critical writings when she confirms that the construction of her scientific genii and the "Watson-Crick Institute chapters of *Oryx and Crake*" are inspired by the "Laputa or floating Island portion of *Gulliver's Travels*" ("In Context" 517). Bouson argues that the target of Atwood's critique of science is the "dangerous one-dimensional, reductionist mind-set [of scientists] that is blind to the social and historical context of science" ("Game" 139) and maintains that the primary reason why Atwood begins her trilogy with a quotation from Swift is to draw the reader's attention to the way in which her text "conducts a dialogue with – and provides a parodic retort to – scientists" ("Game" 140). Bouson further notes that Crake is Atwood's contemporary version of "the well-worn stereotype of the mad – and impersonal-amoral – scientist" and the technocratic component of her society that he initially appears to represent ("Game" 145). While I would agree that Atwood's critique of the science of genetic engineering in her trilogy works through satire, sarcasm, parody, and "spoofing the ridiculous ends to which engineering could be put" (Ingersoll 165), I would also suggest that critical engagements with *Oryx and Crake*, the text in which Atwood's criticism of science is at its zenith, have downplayed the second-most important thematic connection between Atwood and Swift, and one which can be extrapolated to the trilogy as a whole. As the introduction to the Collins Classic edition of *Gulliver's Travels* notes, Swift "was primarily interested in the nature of the human condition, so he used his fantastical imaginings as a way of satirising and revealing the underlying failings of humanity" (vii). Atwood concurs, in an essay she wrote on *Gulliver's Travels*, stating that "the heart of Swift's matter [is] what it is to be human" ("Madness" 209). When the reader is reminded of the primary allegorical purpose of Swift's novel and the coterminous philosophical boundaries of Atwood's speculative fiction trilogy,

the reader needs to acknowledge that Atwood's use of the "Menippean satire – the literary form that deals in intellectual obsession" – in *Oryx and Crake* (Atwood, "In Context" 517) to probe scientific thinking is not, as Bouson suggests, employed to simply indict science, but is her way of analysing "the nature of the human condition" in a technologically-proficient society ("Introduction" vii). Furthermore, the manner in which many of Atwood's scientists are unsuccessful in their attempts to actualize their intended results parallels Swift's strategic "satire on [his] 'philosophers' failure to achieve their much-advertised practical results" (Patey 809). The scientific endeavours of both the Atwoodian and Swiftian scientists also foreground humanity's flirtation with the desire to achieve 'the ideal'.[18] As Atwood notes in her essay on *Gulliver's Travels*, "under the influence of the projectors the utopian pie is visible in the sky, but it remains there" ("Madness" 201).

Moreover, the way in which Atwood pits two kinds of knowledge acquisition or "two orders of knowledge" against each other (Atwood, "Madness" 202) – the arts and the sciences – harks back to Swift's characterization of his scientists as "proponents of 'progress' who arrogantly depreciate 'the knowledge of antiquity'" (Patey 809). Atwood dramatizes this conflict through her contrastive characterization of Jimmy and Crake: Jimmy is defined as a "word person" (OC 273), whereas Crake is a described as one of the practically-minded "numbers people" (OC 28). The societal value accorded to these two seemingly distinct methods of knowledge acquisition is mirrored by the state of the tertiary institutions they attend: "[c]ompared to Martha Graham, Watson-Crick was a palace" (OC 234). The value-laden division that society has relentlessly propagated between the arts and sciences and their orthodox guiding narratives of humanism and science since the 1700s has been consistently emphasized by the technological age (Patey 810). In actual fact, they should be perceived as complementary. Atwood highlights the holistic attitude that should be adopted in her use of the phrase "*Ars Longa Vita Brevis*" (OC 220) as the Latin motto of the Martha Graham Academy – "Art is long, life is short." Attributed to Hippocrates, the father of modern medicine (Blackburn 167), Atwood's deliberate use of this aphorism hints at the kind of relationship the arts and the sciences should have with each other: they should be

[18] All of the experiments premised on the manipulation and prolongation of life fail in Atwood's texts, partly because of Crake's engineered apocalypse which means that none of these technologies can come to fruition, and partly because we are over-reaching our human limits. From the ridiculous examples of algae bath mats and wallpaper that refuse to work according to their creators specifications, to the epidermis-revitalizing technologies proposed by the beauty outfit "Nooskins" that result in volunteers coming out of the procedure "looking like the Mould Creature from Outer Space" (OC 63), to "CryoJeenyus", which promises bodily resurrection once a method has been found to reanimate frozen corpses (OC 264), and culminating in Crake's project on immortality, which, instead of promising "not death," removes "the foreknowledge of it and the fear of it" in his Crakers, thus making their immortality a consequence of a linguistic ambiguity (OC 356).

thought of as a harmonized whole, symbolized by the serpentine staff associated with Asklepios, the Greco-Roman God of healing (Fontana 81). This sign has been known as the "badge of physicians since antiquity" (Fontana 81) and is intimately associated with the practice of medicine and the Hippocratic oath (Blackburn 167).

Acting as "objective correlatives" in T.S. Eliot's sense of the term (Abrams 234), the pristine façade of "Watson-Crick" (OC 231) versus the neglected exterior of "Martha Graham" (OC 220) is representative of the arts' perceived futility in the technological age. Atwood herself draws the reader's attention to how, in literature, "every landscape is a state of mind, but every state of mind can also be portrayed by a landscape" ("Dire" 75). The way in which Atwood describes the appearance of each institution makes it clear that Atwood's technocratic society believes that "a lot of what went on [there] was like studying Latin, or book-binding: pleasant to contemplate in its way, but no longer central to anything" (OC 219). Those who occupy the positions of "real power" within the society feel that the arts are "an archaic waste of time" (OC 229) in comparison to the intellectual rigour required to create the "[w]ave[s] of the future" produced by the scientists at "Watson-Crick" (OC 236).

The job opportunities available to the graduates of these establishments also speaks to the places the arts and the sciences occupy in the symbolic order of Atwood's society. Jimmy's only option of employment is "decorating the cold, hard, numerical real world in flossy 2-D verbiage" (OC 273). Crake's future, as well as those of his colleagues, is "assured" (OC 203), bright, prosperous and full of "potential" due to their natural affinity for the sciences (OC 86). The experiments conducted by Atwood's scientists, however, encourage the reader to question "the potential for what" (OC 86)? In Atwood's world, and increasingly in ours, the arts are in service of the sciences and they truly losing their "reserved seat in the big red-velvet amphitheatre of the beating human heart" (OC 220). In "Writing *Oryx and Crake*," Atwood explicitly states that what concerns her most about "the world of *Oryx and Crake* is what humanity will choose to do with its scientific "inventions" in the immediate future (2). Implicit in her argument is the question of what could be achieved without the "interior road map[s] of experience" (Campbell and Moyers xvii) that the arts (and mythical thinking) provide humanity:

> [f]or no matter how high the tech, homo sapiens sapiens remains at heart what [s]he's been for tens of thousands of years – the same emotions, the same preoccupations. (Atwood, "Writing *Oryx and Crake*" 2)

Thus, it is much more than a simple satire on science that links the themes and motifs of *Oryx and Crake* and *Gulliver's Travels*. Both works probe the role scientific thinking has played in the creation of the "conventions that regulate [the] society and culture" (Iser 61) of the worlds to which these texts are responding (Patey 810). As with Swift, who wanted to compose a pedagogical allegory that would present the reader with the "depragmatiz[ation]" (Iser 61) of the scientific norms of his society in the Laputa episode of his work in order to critique them, so Atwood draws on Swift's text, allowing the reader to properly contextualize Atwood's work within the boundaries of the literary conversation with which she is engaging in *Oryx and Crake*, and encouraging her to view Atwood's plight as similar to Swift's. Atwood, following Swift, has chosen to hyperbolize the heights to which science aspires by dramatizing the ridiculous lengths to which her scientists will go (Patey 810). The "academy of projectors in Lagado" (Swift 169), the capital city of the flying island of Laputa, focus their energies on superficial and unnecessary experiments that defy common sense: one individual, for example, "had been eight years upon a project for extracting sunbeams out of cucumbers [to] warm the air in raw, inclement summers" (Swift 169). As discussed above, in *Oryx and Crake,* instead of the scientists at "Watson-Crick" channelling their prodigious intellect into endeavours that are more worthwhile than creating "Smart Wallpaper" (OC 237), the scientific minds in Atwood's texts, like their Swiftian counterparts, fail to take the practicalities and demands of their context, as well as the value of other categories of knowledge, into consideration. Like their literary predecessors, the scientists in Atwood's world prefer "their own ease and sloth before the general improvement of their country" (Swift 168), focusing their energies on the elite "pursuit of aerial vanities and extravagances" instead of on that which can help the human race survive and thrive in an environmentally-damaged wasteland (Patey 810). It is, however, important to note that both Swift's and Atwood's satire on science is not directed "against the whole tribe of chymists, projectors, and mathematicians in general; but against those, and those only, who despise the useful branches of science" (Patey 810) and whose obsession with trying to achieve an impossible ideal "blind[s] them to all else" (Atwood, "Madness" 204). In Atwood's own words, Swift's (and her) "intention" ("Madness" 200) is draw the reader's attention to the "tunnel vision" ("Madness" 201) of his "projectors – so called because they are absorbed in their projects," and her scientists ("Madness" 200).

Although the "professors" of Swift's academy and the scientists of Atwood's compounds "contrive new rules and methods of agriculture and building, and new instruments and tools for all trades and manufactures" (Swift 167), the scientists who inhabit

the flying island of Laputa and the "numbers people" (OC 28) who are segregated from the general population in the compounds are "too much taken up in their own speculations to have regard to what passed below" their island or outside their walls (Swift 167). In both worlds, the "whole country lies miserably waste, houses in ruins, and the people without food or clothes" (Swift 167), and those individuals, like Jimmy and Munodi, who still see the significance of "the old forms" of knowing and being in the world (Swift 167) are "looked on with an eye of contempt and ill-will, as enemies to art, ignorant, and ill commonwealth's men" by those who champion progress for progress's sake (Swift 168).[19] In addition, both Swift and Atwood's scientists embody "a very common infirmity of human nature, inclining us to be more curious and conceited in matters where we have the least concern, and for which we are least adapted, either by study or nature" (Swift 154-155). In *Oryx and Crake,* these "matters" (Swift 155) refer to the search for the acquisition of omnipotence, omniscience, immortality and physical perfection – the ideal – which, as Atwood dramatizes in her trilogy through the products and promises made by the "body-oriented Compounds" (OC 339), is a dangerous journey to attempt: "we should probably not try to make things perfect, especially not ourselves, for that path leads to mass graves" (Atwood, "Dire" 95).

The philosophical and conceptual deliberations – the role of science, the acquisition and use of knowledge, the fallibility of human nature and how we conceive of progress – are thus concerns "foregrounded" in Atwood's use of *Gulliver's Travels* as a "background" to her trilogy (Iser 93). Atwood is engaging with the concerns Swift highlights in his "'bite' – a tall tale presented as the straight-faced truth" (Atwood, "Madness" 196) to ask the questions she poses to the reader in *Oryx and Crake*: the imagined and perpetuated division of scientific and artistic knowledge and the role this division plays in broader societal power relations, humanity's fascination with progress and modernity, and our continued belief in the sovereignty and secularism of science. The requirements of listening to another, of engaging in debate and deliberation, of broadening the scope of one's mind, of the necessity of "[i]magination, fancy, and invention" (Swift 154) and, most importantly, of not discounting the value of past knowledge and ways of thinking and being in the world, as proposed by Swift, Munodi and Jimmy, are a means of resolving the intellectual and philosophical conflict that has emerged as a result of the autocracy of science in our contemporary, technological age (Patey 823). In short, Swift's "answer" (Iser 79) is the necessity of cultivating what

[19] Please note that this characterization of Jimmy, and his literary relationship to Munodi, is derived from Patey's article: see especially pp. 810 and 823.

Wayne C. Booth calls "sensibility" (143). This is a characteristic that is "foregrounded" in second epigraph with which Atwood has chosen to begin *Oryx and Crake* (Iser 93), taken from Virginia Woolf's *To The Lighthouse.*

If *Gulliver's Travels* operates as a "background" for the trilogy as a whole (Iser 93), by virtue of its placement, it also acts as a "background" for the second epigraph (Iser 93). While the extract taken from *Gulliver's Travels* focuses the reader's attention on the pedagogic purpose of Atwood's trilogy in the context of science's ideological implications, the extract from Woolf's *To the Lighthouse* encourages the reader to question how we currently relate to and navigate our broader context in the technological age, as well as draw her attention to how far removed we are from it:

> Was there no safety? No learning by heart of the ways of the world? No guide, no shelter, but all was miracle and leaping from the pinnacle of a tower into the air?

Booth's *The Rhetoric of Fiction* argues that *To The Lighthouse* is a "novel of sensibility" and that Woolf places "the value of 'sensibility' at the core of things" (Booth 143). Abrams notes that the "literature of sensibility" developed as a response to "seventeenth-century Stoicism," the philosophical tradition which "emphasized reason and the unemotional will as the sole motives to virtue" (326). According to Blackburn, Stoicism acknowledges that "the eternal course of things passes through returning creative cycles" (350). Its proponents therefore practice identifying "with the impartial, inevitable, moral order of the universe" and consciously attempt to temper their emotional responses to "poverty, pain, and death" in order to emulate the "spiritual peace of God" (Blackburn 350). The "stark insensibility" advocated by this philosophy, however, has led to the criticism that Stoics do not respond to the suffering of others and that pursuing the ideal of "Stoical indifference becomes a celebration of apathy" (Blackburn 350). Crake, the progenitor of the genocidal virus that wipes out the majority of humanity, can be said to represent the extreme indifference to human suffering encouraged by Stoicism if the immediate effects of his plague are looked at in the context of short-term human suffering. All those who are infected die a horrible death that involves "screams … dissolving skins [and] ruptured eyeballs" (OC 401). The reader should, however, question if his "Stoical indifference" is a necessary evil that is required in order to avert the prolonged human suffering that will necessarily result from an "ecological meltdown" (Harari 249). Canavan argues that, in this context, Crake should be seen as the embodiment of "Derrida's famous *pharmakon* – he is that which kills … but also, perversely, that which cures" (154).

Crake explicitly aligns himself with the Stoics in a conversation he has with Jimmy just after his mother, Sharon, flees from the "HelthWyzer Compound" (OC 61). Crake remarks that "a person could be in your life and then not in it anymore," clearly drawing on the cyclical cosmology that informs Stoic philosophy (OC 69). He further invokes Stoicism's denigration of an emotional investment in others when he urges Jimmy to "read up on the Stoics" (OC 80) as a means of divesting himself from his sentimental and emotional attachment to his mother and Killer, his pet rakunk and best friend, whom Sharon "liberated" during her escape (OC 69). When Crake's own mother dies, his only commentary is that her death was "impressive" (OC 207). Jimmy cannot comprehend how Crake "could be so nil about it" (OC 208), and convinces himself that Crake's nonchalance is "just an act. It was Crake preserving his dignity, because the alternative would have been losing it" (OC 208).

Atwood deliberately contrasts Crake's stoical cynicism with Jimmy's sentimentality in order to interrogate and critique these different ways of interacting with others. Jimmy is positioned as sentimental in both the narrative past and narrative present of *Oryx and Crake.* In the past, he is allied with the arts – the home of sensibility – when he attends "Martha Graham" (OC 229). While there, he spends "hours in the more obscure regions of the library, ferreting out arcane lore" (OC 229), and compiles "lists of old words … that no longer had a meaningful application" in his technological and scientific society (OC 230). In the narrative present, he tries to "[h]ang on to the words … odd words, the old words, the rare ones" (OC 78), and is terrified by the "dissolution of meaning" (OC 43) and self that losing these words would cause him, as his identity as a human being is intimately connected to language: "[w]hen they're gone out of his, these words, they'll be gone, everywhere, forever. As if they had never been" (OC 78). While Jimmy's continued appreciation for the arts is laudable in an age wherein their value has been consistently eroded, his inability to deal with the emotional distress he experiences in both his narrative past and narrative present points to the insufficiency of sentimentality as the only way of relating to others.

In a deft conceptual twist on the part of Atwood, sentimentality, when taken to the extreme, is a form of apathy. Jimmy's behaviour in both timelines is governed by his mostly negative feelings: he drinks and drugs himself into a stupor whenever he feels unable to confront reality, and characterizes himself as "being jerked around by his own dick" (OC 297). Furthermore, Jimmy is oversensitive and perceives any sleight as a deeply personal attack on his character. He also uses the emotional trauma of his mother's abscondment and subsequent murder at the hands of the state as a means of manipulating women into pitying him, thereby fully focussing on his "original and selfish" feelings without taking the

emotional or psychological needs of others into account (Blackburn 340). He fails to practice benevolence, sympathy and empathy – the hallmarks of sentimentality – and is thus not exempt from Atwood's critique on the lack of compassion that has become a defining characteristic of our increasingly technological society wherein humanity interacts more with the "hyperreality" of screens and machines than with reality and other people (Baudrillard 6). Jimmy is, in many respects, more indifferent to the suffering of his immediate others than Crake is. While Jimmy and the reader question what "right" Crake had, "sitting in judgement on the world" (OC 398), it is necessary to acknowledge that, within the context of humanity's inability to effect change in the face of the knowledge that it is unequivocally required, Crake is the only person in Atwood's ecocidal world who has "the heart to stand there and say: *Nothing can save you*" if you do not decide to save yourself (OC 403).

The close relationship that the reader has with Jimmy as the primary focalizer of *Oryx and Crake* encourages her to reflect on her own sensibility as she engages with Jimmy's consciousness, and provides her with the opportunity to contemplate whether her own emotional responses to others are truly benevolent. The "problem of other minds" (Nussbaum 732) with which Woolf engages in *To The Lighthouse* – one which is emphasized by her use of "stream of consciousness" (Abrams 345) and a difficulty which Jimmy dramatizes in his failure to consider how the others he engages with are feeling – is, according to Martha Nussbaum, an

> ethical problem, a problem produced by the motives and desires with which we approach beings who are both separate from us and vital to our projects. (732)

Like Woolf, Atwood is masterful in her "portrayal of characters" (Booth 188). Jimmy and Crake are simultaneously "complex mixtures of good and bad, of the admirable and the contemptible" (Booth 188), and Atwood's speculative fiction texts embody the ability of "an art that can give form to moral complexities" and engage the reader in an interrogation of what good moral conduct is in our technologically-proficient age (Booth 188).

Atwood makes it clear that, in the context of sensibility, the "problems" human society has to contend with in the present (Iser 79), and which may result in a world like the one depicted in all its horrific detail in *Oryx and Crake*, spring from humanity's learned indifference, our lack of empathy, compassion and sympathy and the resulting ingrained selfishness with which we conduct our interpersonal and interspecies relationships. We, like Jimmy initially does, strive to be "alone, unique, self-centred and self-sufficient" (OC 206), without realizing that, as social animals we "need … to be listened to [and] heard [and]

understood" (OC 120). The complete indifference to the suffering of others is represented viscerally by the kinds of internet entertainment available for mass consumption and the dispassionate responses they elicit from viewers. In Atwood's future, the menu of daily entertainment includes "animal snuff sites, Felicia's Frog Squash and the like" (OC 94), as well as websites that allow spectators to watch "live coverage of executions in Asia" and videos of "supposed thieves having their hands cut off … in dusty enclaves … in the Middle East" (OC 94). On offer are also "real-time coverage [of] electrocutions and lethal injections" which are now "legal" to stream (OC 95). The "best" websites on which to watch them are caustically called "Shortcircuit.com, brainfrizz.com, and deathrowlive.com" (OC 95). These monuments to human pleasure in another's suffering, however, "quickly grew repetitious: one … was much like another" (OC 93-94).

In juxtaposition, a culture promoted by an emphasis on sensibility seeks to foster "'benevolence' – wishing other persons well" and an appreciation of empathy, sympathy and compassion; traits that should be seen as "central elements in morality" (Abrams 327). The kind of consciousness exemplified by "the literature of sensibility" (Abrams 326) draws on the "the human capability for sympathy and wishing others well" instead of conceiving of "a human being [as] innately selfish" and driven by "self-interest and the [desire] for power and status" (Abrams 327) – the way the inhabitants of Atwood's society view each other. In Atwood's textual representation of humanity's possible future, what is clear to the reader is that sensibility is needed to "develop social consciousness and a sense of communal responsibility in an era of expanding commercialism and of an economy based on self-interest" (Abrams 327). While a certain amount of emotional divestment is necessary in order to respond ethically to other people – as Jimmy's character shows – the apathy encouraged by Stoicism needs to be moderated by joining "the most perfect command of … original and selfish feelings [with] the most exquisite sensibility both to the original and sympathetic feelings of others" (Blackburn 340). Atwood's society and, by extension, ours, is one that has largely forgotten the values of the latter. *Oryx and Crake* therefore presents the reader with a world that is characterized by the death of compassion: this is one of the issues interrogated by Atwood's text and its resolution, drawn from Woolf's work but re-imagined by Atwood so that it remains contextually relevant, is to revive a sense of sensibility in contemporary culture. This solution necessitates an investigation of the rhetoric that is used by our orthodox guiding narratives, however, so that the reader can discern how the "fictions" that help her interpret reality (OC 9), regulate her interpersonal interaction and configure her worldview influence the way she lives her life.

The Role Rhetoric Plays in Structuring Society's "Intersubjective Reality"

Atwood interrogates the role rhetoric plays in guiding humanity's thoughts and actions in the contemporary technological age by emphasizing in *Oryx and Crake* how the corporations are able to control and manipulate behaviours through the narratives they disseminate to the public. As Abrams points out, however, the use of words to "persuade audiences to think and feel or act in a particular way" is one of the major roles of rhetoric (Abrams 311). Thus, Atwood's endeavour, in prompting certain responses from her readers when they are engaging with and responding to the world of her text, can be defined as metatextual. Atwood is using language to interrogate its use and function on both the micro and macro levels of society. As Paula López-Rúa states in an article that investigates Atwood's "lexical creativity" (150), words function as "bridges between reality and thought" (150). In the context of the overarching theme of this thesis – the role that guiding narratives play in the formation of society's "intersubjective web of meaning" (Harari 175) – the language that Atwood employs in the construction of her fictional world therefore also speaks to society's state of mind and the discourses currently in play. The most prominent way in which Atwood helps the reader imagine her fictional world's mental state is through the names of the corporations.

The first corporation to which the reader is introduced is "OrganInc Farms" (OC 25), which is where Jimmy spends his childhood. This corporation masquerades as a farm and manipulates its consumers into believing the nostalgic connotations that follow on from the deliberate use of the word 'farm' to describe the manner in which it operates. The romanticism associated with pastoral living and farm-life is evident in the wistfulness with which adult characters like Jimmy's father feel when they are living on this faux-farm, particularly because way in which this compound has been constructed leaves its inhabitants with a sense of "the supposed peace and simplicity of life" longed for by the "urban poet[s]" with whom this literary tradition began (Abrams 240). This compound shields its inhabitants from the "unpredictable" urban decay of the "pleeblands" outside its walls (OC 31), and "[i]nside, [things] were the way it used to be when Jimmy's father was a kid, before things got serious" (OC 31). Here, "[y]ou could walk around without fear [or] go for a bike ride" (OC 31), or contemplate the "rural muse" (Abrams 24) whilst sitting "at a sidewalk café [and] eat an ice-cream cone" (OC 31-32). But as Sharon, Jimmy's mother, observes, "it was all artificial, it was just a theme part and you could never bring the old ways back" (OC 31). The compounds are, in essence, trying to recreate an ideal past within their microcosmic societies

– one that is associated with tranquillity and apparently unadorned by the contemporary worries that plague the narrative present of *Oryx and Crake.* As Sharon's observations make clear, however, the reality they inhabit is one which is, in Baudrillard's terminology, "hyperreal" (1). The pastoral environment that "OrganInc Farms" (OC 25) has created is a "simulation [that] threatens the difference between the 'true' and the 'false,' the 'real' and the 'imaginary'" (Baudrillard 3) and, as Atwood's world makes clear, "OrganInc" (OC 25), and its idyllic (mis)representation of the "happier days" of the past is there to hide the fact that it can no longer exist (Abrams 240). Jimmy, however, is able to acknowledge that this place dissolves the boundaries between the "'true' and the 'false'" through the rhetoric it employs (Baudrillard 3). He notes that "OrganInc … wasn't really a farm anyway, not like the farms in pictures" (OC 25), even though it too is premised on the production of livestock for consumption. This consumption, however, takes the primary form of growing "an assortment of foolproof human-tissue organs in a transgenic knockout pig host" for paying customers (OC 25), a method for prolonging life that is "much cheaper than getting yourself cloned for spare parts … or keeping a for-harvest child or two stashed away in some illegal baby orchard" (OC 27). Thus, while the name "OrganInc Farms" brings with it the connotations associated with a farm (OC 25), it also tailors its associations to refer solely to the kind of animal that this corporation's success is based on: pigs. The name tends towards an onomatopoeic reading due to the placement of the capital letters – "O … Inc – and the mind can skim over the letters between them, thereby reducing the name to the sound most associated with swine – "[o]ink" (OC 25). Residents also sometimes jokingly refer to the corporation as "Organ-Oink Farms" (OC 25), a playful allusion to the corporations' means of producing organs for human transplant. These onomatopoeic sounds further heighten the 'farm' association that the corporation is trying so hard to cultivate, as well as add a light, humorous and childish dimension to the name; one that is reminiscent of nursery rhymes like "Old McDonald Had A Farm." This perception is deliberately invoked by the "standard design" of the "e-birthday card" that Jimmy receives from his father every year: "five winged pigoons doing a conga line and *Happy Birthday Jimmy, May All Your Dreams Come True*" (OC 56). In addition, in his childhood, Jimmy associates these creatures with "balloon[s]" due to their increased size (OC 30), necessary to "leave room for all of the extra organs" (OC 29), which reinforces the flippant caricature these pigs have become.

Most insidiously, however, "OrganInc" sounds like 'organic' (OC 25), as the pronunciation of the letter 'n' gets lost in speech. The deliberate use of this pseudo-homophonic name as an adjective used to describe the way in which this corporation rear

animals for consumption serves to manipulate consumers into subconsciously believing that this faux-farm should be associated with the connotations the word ‘organic’ brings to the rhetorical table in the context of livestock farming: no anti-biotics or deliberate genetic interventions, and free-range animals who lead good lives and who are treated ethically by those in charge of their welfare. This is not the case at “OrganInc Farms” (OC 25). The pigs are referred to in language that befits the description of inanimate objects devoid of consciousness: they are a “host animal [that] could be reaped” of its extra organs and “rather than being destroyed” once it has been utilized (OC 26), “it could keep on living and grow more organs” (OC 26), thereby increasing the efficacy of this method to extend the human life-span. Furthermore, because “[a] great deal of investment money had gone into” developing this product (OC 29), these creatures must be “kept in special buildings, heavily secured” to prevent rival corporations from “kidnapping … a pigoon and its finely honed genetic material” (OC 29). They thus spend their lives in pens under the guise of safety and security, but the truth is that the farmer-scientists employed by “OrganInc Farms” do not care about their welfare (OC 25). Jimmy draws the reader’s attention to the lack of compassion that characterizes our interaction with animals that benefit us in the technological age when he comments on the state of these creatures and the habitat in which they have been forced to exist: they “live in a [small] pen, where [they] lie around in poop and pee” all day, have “runny noses and tiny, white-lashed pink eyes” and spend “far too much time doing nothing” (OC 30). The kind of lives that these pigs lead thus do not live up the ethical standards the word ‘organic’ insinuates. Furthermore, the pigoons are subject to genetic experimentation: their cell receptors have been “modified” to increase immunity and their DNA has been “spliced” with a “rapid-maturity gene” to facilitate the faster and more efficient growth of organs (OC 30). They are also pumped full of “drugs that would act as blockers [for any] bioforms unhealthy to [them]” (OC 33). In addition, pigoon organs can also be “customized” by “using cells from individual human donors” (OC 27). The loudly advertised claims to ‘natural’ nature that this corporation shouts from the tops of its towering profits are not true, but its lie has been shielded by the ability of rhetoric to cloud perceptions and influence thought. “OrganInc Farms” is (OC 25), like the other company names with which the reader engages: an extended exercise in “Applied Rhetoric” (OC 221). This corporation, like all the others in the text, is intentionally manipulating the fears and desires of consumers with the connotations associated with their choice of language and the narratives they tell their consumers about their company.

“HelthWyzer” (OC 247), the primary pharmaceutical corporation in Atwood’s world

– and a name that alludes to one of the companies that controls the legal drug trade in the reader's present, "Pfizer" – purports to be the 'wise' choice for one's health. Their product range is vast, as are their profits, and they advertise themselves as being able to provide "drugs and procedures that cure sick people, or else – better – that make it impossible for them to get sick in the first place" (OC 246). In reality, this company is making wise choices for their financial health. As Crake points out to Jimmy, the company would fail if they actually succeeded in curing "everything" (OC 247). They therefore have a strategy in place that maintains their corporate image while simultaneously increasing their profit-margin. This scheme takes the form of a "whole secret unit [within] HelthWyzer" that has been tasked with creating "new diseases" (OC 247). These "hostile bioforms" are concealed in the company's "over-the-counter premium brand" of vitamins (OC 247). The unit concurrently develops "antidotes [to these] customiz[ed] bugs" which are held "in reserve" and then distributed according to the laws of the "economics of scarcity, so they're guaranteed high profits" (OC 248). In a further bastardization of medical ethics, "HelthWyzer" (OC 247) murders Crake's father when he wanted to expose their "elegant concept" (OC 249), as his act of "whistle-blowing" would have "wrecked" the saleability of every product, "torched the entire scheme [and] caused financial havoc" (OC 249). "HelthWyzer" (OC 247), however, is not the only Machiavellian corporation whose financial success is premised on selling the "hope" (OC 65) of a cure to its customers.

"AnooYoo" is a "minor compound" that also owes its existence to the strength of its rhetoric (OC 288). It focusses its ability to sow "fear [and] desire" (OC 291) into those customers who feel as though they have been ravaged by time and gravity and experience "[g]rief in the face of inevitable death" (OC 344), which is the currency preferred by all the big "body-oriented Compounds" (OC 339). This company is where Jimmy gets his first marketing job after graduating from "Martha Graham" (OC 220) with a degree in "Problematics" (OC 221). Jimmy is able to relate to the reader how rhetoric is used by corporations to essentially stage-manage their customers, as he familiar with language's ability to manipulate interpretations of reality. His awareness is particularly evident when he goes for his job interview at "AnooYoo" (OC 288). His assessors are mightily impressed with his "senior dissertation on self-help books of the twentieth century" (OC 288), subtitled "Exploiting Hope and Fear" (OC 230), as it feeds well into "one of their core products" (OC 288), which are personal "improvement items … needed in order to get the optimal effect" of creating 'a new you' promised by this corporation (OC 288).

Fluent in the rhetoric of "[h]ope and fear, desire and revulsion" (OC 291), this

corporation promises its clients the ability to achieve "the art of the possible. But with no guarantees, of course" (OC 289).[20] Emotionally and psychologically manipulated through the "positive" tone of the promotional materials and the "simple order" of the steps that need to be taken in order to achieve "perfection [in] themselves" (OC 289), customers flock to this promised land, which pledges to "cure depression, wrinkles and insomnia all at the same time" (290). Those in charge know the power wielded by scientific rhetoric and encourage Jimmy to use these kinds of words in his promotional material because they "had a convincing effect" (OC 292). He would, on occasion, "make up a word – *tensicity, fibracionous, phermonimal* – but he never once got caught out." (OC 292). Even Jimmy, who has himself "written enough package copy not to believe" (OC 296), is not immune to the assurances that this company makes through the application of rhetoric. He purchases a "six-week AnooYoo follicle-regrowth course" that vows to fill in the hair "around [his] temples," even though he knows "it was a scam – he'd put together the ads for it himself" (OC 296).

The rhetoric which Atwood employs when describing these corporations, and her utilization of Jimmy's character to dramatize what goes on behind the veil of rhetoric that these corporations hide behind, is, in itself, an exercise in "Applied Rhetoric" (OC 221). Jimmy is able to offer the reader an insider's view of how these companies operate – a perspective which is necessarily seen as more trustworthy than an outsider's – when his childhood at "OrganInc" is dramatized by Atwood (OC 25). Atwood's detailed staging of his conversation with Crake about "HelthWyzer" (OC 247) and his interview with "AnooYoo" (OC 288), instead of summarizing the dialogue offers the reader an opportunity to glimpse the rhetorical and psychological machinations that drive the financial success of these enterprises. By encouraging the reader to reflect on how rhetoric manipulates by demonstrating who these companies use it to target, and to what effect, Atwood is able to show the reader how these entities are able to make their consumers malleable. Analysing the

[20] Jimmy's senior dissertation is based on one of the term papers he submitted for his "Applied Rhetoric course" (OC 230). His essay "supplied him with a great stand-up routine for use in the student pubs." (OC 230) Using humour to mask the truth of what these books actually promote, Jimmy "quotes snatches of this and that – *Improve Your Self-Image … How to Make Friends and Influence People … You Can Have It All; Entertaining Without a Maid; Grief Management for Dummies*" to elicit laughter from his audience (OC 230). Some titles will be familiar to contemporary readers and some are invented, but still believable. Commenting on the kind of narratives and lives these types of books endorse, Jimmy's comic routine is simultaneously contemptuous and tragic, culminating in a darkly sardonic critique of the fragility and ridiculousness of the lives we lead and the rhetoric with which seduces us into believing that we are not good enough and desperately require the aid these texts so generously bequeath to us. Furthermore, as Amanda's friend's demise shows us, these books, the methods and technologies they advertise and the businesses they support can function as a "*Twelve-Step Plan for Assisted Suicide,*" one of the possibly made-up self-help texts Jimmy uses as inspiration for stand-up routine (OC 230).

dissonance that exists between the company names and the reality that they purport to signify enables Atwood to show the reader that rhetoric, in both her world and ours, is not confined to simple "adjectives" (OC 289), but also involves "Applied Logic … Medical Ethics and Terminology, Applied Semantics, Relativistics and Advanced Mischaracterization, [and] Comparative Cultural Psychology" (OC 221), as evidenced by the courses Jimmy must complete in order to receive his degree. By encouraging her readers to reflect on how rhetoric functions in *Oryx and Crake,* the reader is able gain a new perspective on how the companies of her world operate and influence her when she engages with the "hyperreal" reality that they disseminate (Baudrillard 1).

Literature as an "Anthropotechnology"

Wolfgang Iser states that because "something happens to us by way of the literary text and that we cannot do without our fictions … the question arises as to the actual *function* of literature in the overall make-up of man" (xi). This observation draws critical attention to what he terms the "anthropological side of literary criticism" (Iser xi) – the role literature plays in society – and provides the primary theoretical link between Iser's theory of aesthetic response and the overall focus of this thesis: the value of reading in a technological age. While Iser's *The Act of Reading* does not elaborate on the role or function of literature, he hopes that his work will "draw attention to an important and as yet very open field of study" (xi).[21] Bergthaller's essay, entitled "Housebreaking the Human Animal," analyses the anthropological function of literature with reference to the first two texts in Atwood's trilogy, *Oryx and Crake* and *The Year of the Flood.*

Inspired by Peter Sloterdijk's essay, "Rules for the Human Zoo: a Response to the Letter on Humanism," Bergthaller contextualizes his discussion on the function of literature and its socio-cultural value within the conceptual boundaries of contemporary humanism – one of the orthodox guiding narratives responsible for structuring humanity's "intersubjective web of meaning" through the doctrine of human exceptionalism it perpetuates (Harari 175), and a school of thought that can be broadly defined as the study of human nature in its potentialities. Humanism traditionally conceptualizes of the human being as a "rational animal … enriched by a spiritual supplement" (Sloterdijk 17). It posits that humans are distinguished from other animals through the "powers of human reasoning" (Blackburn 171) and assumes that this capability guarantees "the dignity and central position of human beings

[21] Iser went on to elaborate this approach in *Prospecting: From Reader Response to Literary Anthropology.*

in the universe" (Abrams 144). Bergthaller and Sloterdijk, however, argue against this notion, stating that humans should instead be characterized as "evolved, biological creatures" who require "anthropotechnologies, defined as technologies of self-domestication … so as to make them governable" (Bergthaller 729). When the human being is conceived of in this way, humanism therefore becomes, at its heart, "an issue of anthropodicy: that is, a characterization of [the human] with respect to [her] biological indeterminacy and [her] moral ambivalence" (Sloterdijk 16). The "rationale" underlying this discourse is therefore "the commitment to save [the human] from barbarism" and this is from where their conception of the anthropological function of literature stems (Sloterdijk 15).

Bergthaller and Sloterdijk argue that, in the context of humanism as defined above, literature should be understood as an "anthropotechnology" (Bergthaller 729; Sloterdijk 23). According to Bergthaller, Atwood's texts, when looked at through this lens, suggest that "[m]odern society" and the environment "is collapsing because it has failed to produce workable strategies for taming the human animal" (732). He further claims that these works of speculative fiction are "principally concerned with the question of what role language, literature and, more generally, the human propensity for symbol-making can play in our attempts to deal with the ecological crisis" that defines our technologically-proficient age (Bergthaller 729). Ultimately, he is asking the reader to consider if engaging imaginatively with Atwood's works, and the possible future world she begins exploring in *Oryx and Crake*, might offer any guidance when dealing with the beginning stages of the ecocide she is currently witnessing in the present. Implicit in Bergthaller's argument is the question as to whether a recontextualized version of the orthodox guiding narrative of humanism, to which contemporary humanity adheres, could be one potential way to respond to the challenges Atwood identifies in *Oryx and Crake*, as well as its "sibling book" *The Year of the Flood* (Atwood, "Dire" 92), which offers the reader an alternative imaginative experience of the world of *Oryx and Crake* through the eyes of those who exist at the very bottom of the stratified society she depicts.

The viability of re-imagining humanism as a contextually-relevant and effective response to the ecocide and social distress to which the reader bears witness in the narrative past of both of these speculative fiction texts will be explored in the second chapter of this thesis, which will concentrate on Atwood's depiction of the God's Gardeners in *The Year of the Flood*. The chapter will maintain that this environmentally-friendly and religious community has re-interpreted humanism within the conceptual boundaries of religion and science as a means of unseating humanity from its assumed position of dominance in order to

situate our species of animal within a broader environmental context. The efficacy of this novel means of confronting the ecological crisis will also be discussed, as the Gardeners' attempt at averting ecocide is an additional and unorthodox strategy that can be employed, seeing as the approach of "[b]usiness as usual" is clearly neither appropriate nor effective (Edwards, "Ecological Culture" par. 4).

Chapter 2

Religion as an "Anthropotechnology" in Margaret Atwood's *The Year of the Flood*

The Year of the Flood (2009) occupies a special place within the narrative framework of Margaret Atwood's *MaddAddam* trilogy, as it is the textual space wherein its narrative, and the narrative of *Oryx and Crake*, converge. Characterized by the South African critic Alan Northover as a "parallelquel" to *Oryx and Crake* ("Ecological" 88), *The Year of the Flood* covers the same time period, in both the narrative past and narrative present, as the first text of Atwood's trilogy, but offers the reader an alternative imaginative experience of the fictional world introduced to her. Whereas *Oryx and Crake* foregrounds the "technocracy" of Atwood's corporate-controlled society (Atwood, "Dire" 92), *The Year of the Flood* is situated in the "pleeblands" that lie beyond the pristine walls and sterile culture of the Compounds and relays to the reader the experiential reality of the politically and economically disenfranchised communities who exist at "the very bottom of the social heap" (Atwood, "Dire" 92*).*

The Year of the Flood is focalized through the character perspectives of two women, Toby and Ren, who, in the narrative past, are members of the God's Gardeners, a "small environmental cult dedicated to the sacred element in all Creation" who lie at the centre of this text (Atwood, "Dire" 93). The retrospective passages of *The Year of the Flood* detail their personal histories, expand on and "revision" Atwood's pre-plague world (Northover, "Ecological" 88), as well as provide the reader with further information about certain characters and groups to whom she was introduced in *Oryx and Crake*, and who are central to the narrative of *MaddAddam*, the third text in the trilogy. These characters include Amanda, who is Jimmy's girlfriend shortly after he graduates from "Martha Graham" (OC 283); "MaddAddam" (OC 352), a group of ex-Gardeners who split from their parent organization due to ideological differences; and the MaddAddam scientists – "the splice geniuses" (OC 352) – whom Crake tracked down and captured through the on-line game "Extinctathon" so that he could use them to create the Crakers (OC 352). The passages situated in the narrative present of *The Year of the Flood* detail Toby and Ren's survival of the immediate aftermath of Crake's genocidal and virulent epidemic, which the Gardeners refer to as "The Waterless Flood" (YF 509), and further explore the post-human and post-capitalist landscape introduced to the reader in the narrative present of *Oryx and Crake*.

The Significance of Religious Thinking in *Oryx and Crake* and *The Year of the Flood*

The Crakers' reappearance towards the end of *The Year of the Flood* – the only text of the trilogy wherein they are largely absent – prompts the reader to recall the preliminary investigation into "the nature and function of religion" that Atwood undertakes in *Oryx and Crake* (Hoogheem 57). The first text in her trilogy posits the claim, in the form of the Crakers, that religious thinking and sacred narratives are intrinsic to humanity and share an intimate relationship with the symbolic imagination. Although these genetically engineered "quasi-human[s]" cannot be defined as fully human as they have been created by splicing plant and animal DNA together with human DNA (Atwood, "Dire" 92), the inclusion of the latter means that they can be designated as *Homo Craker*, a subspecies of hominid like *Homo Sapiens*. In addition, Crake's failure to delete the "cluster of neurons" (YF 271) wherein the Crakers' concept of God and their ability to think symbolically resides, and the Crakers' subsequent and spontaneous development of religious narratives and the rituals that accompany them, also makes them more human-like than previously anticipated or expected (Canavan 147).

The Crakers begin to develop "reverence" (OC 186) while they still reside in "Paradice" (OC 344), the womb Crake created for their gestation and the place where Oryx teaches them about what to expect from the outside world and how to navigate it. They ask Oryx "who made them" (OC 366), a question which heralds the birth of their religious imagination. The Crakers also hunger for a religious mythology which can explain the place they now occupy in the strange and empty landscape to which Crake's plague gives rise. The "story" (OC 110) Jimmy concocts for them *at their urging* states that "Crake made the Great Emptiness … For us!" (OC 119). Moreover, they begin to "converse … with the invisible" (OC 186), *unbidden* by Jimmy, their prophet and guide. The Craker women commune with Oryx, whom Jimmy positions as mistress of the animals in the Craker's "mythology" (OC 120), in the form of a "prayer or invocation" when one of the Craker children is bitten by a "bobkitten," as they want Oryx to "tell her children not to bite" them (OC 185). In addition, the Crakers also *spontaneously* create rituals and symbols that can diffuse the anxiety they feel when faced with the unknown, which is one of the hallmarks of religious ideologies according to Hoogheem (57). They create a "scarecrowlike effigy" (OC 418) of Jimmy to guide him home from the journey he undertook back to "Paradice" (OC 350) in order to glean material supplies, foodstuffs, and weaponry: "We made a picture of you, to help us send out our voices to you" (OC 419). They also chant "*Amen*" to the accompaniment of music (OC

419); ritual actions which are meant to allay their fears that Jimmy will not return. Therefore, within the context of Atwood's investigation into "the nature of religion" and whether it is inherent to humanity (Hoogheem 57), the Crakers provide evidence in favour of Karen Armstrong's claim in *A History of God* that

> *Homo Sapiens* is also *Homo Religious*. Men and women started to worship gods as soon as they became *recognisably human*; they created religions at the same time they created works of art [that] expressed the wonder and mystery that seems always to have been an essential component of the human experience of this beautiful yet terrifying world. Like art, religion has been an attempt to find meaning and value in life. (3; my emphasis)

The religious behaviours exhibited by the Crakers prompt the reader into exploring the following question: are religious narratives and symbolic thinking an evolutionary adaptation that "enhances fitness [and] the capacity to survive?" (Hoogheem 57). Despite Crake's certainty that these "traits" are "superfluous" and play no discernible part in the genetic make-up or evolutionary heritage of the human animal (Hoogheem 57), as Hoogheem suggests – and the narrative arc of the trilogy shows – Crake and Atwood's readers "may be surprised by which [traits or] adaptations ultimately confer survival" (Hoogheem 70). As Brian Boyd suggests:

> the human proclivity for storytelling, and for art in general, is an adaptation, an evolutionary extension of animals' play that enables us to command attention, make sense of the world around us, and develop skills and test hypotheses in safe, low-key settings. (qtd. in Hoogheem 56)

Atwood herself argues for the evolutionary heritage of narratives – and the arts – in her essay "Burning Bushes: Why Heaven and Hell Went to Planet X." She states that for the arts to have been "selected" as a trait that supports humanity's capacity to survive, evolve and adapt as a species, they "would have had to have conferred some noteworthy benefits" from when these attributes first emerged about "two million years" ago (43). Drawing on Denis Dutton's *The Art Instinct,* Atwood argues that for this selection to have occurred in the past, individuals who "demonstrated such abilities as singing, dancing, the making of images – and, for our purposes – the telling of stories" must have had "a better chance at survival than those without" these characteristics (43).

Thus, while *Oryx and Crake* introduces the "nature" of religious and symbolic

thinking to Atwood's readers through the hypothetical thought experiment of the Crakers (Hoogheem 57), *The Year of the Flood* extends the narrative scope of Atwood's investigation by encouraging her readers to consider what role religious narratives play in human society – that is, its sociological "function" (Hoogheem 57). More specifically, *The Year of the Flood* asks the reader whether religious narratives – specifically those employed by the Gardeners' "eco-religion" (Bouson, "Using" 9) – are a viable and effective means of confronting the environmental catastrophe that confronts the characters who populate Atwood's feasible future world.

The Value of The God's Gardeners in Atwood's Text

The God's Gardeners, around whom the narrative of *The Year of the Flood* pivots, play a multifaceted role within this text: they re-introduce, re-contextualize, and revise both the environmental and religious themes that *Oryx and Crake* begins to explore, as well as offering the reader, through their re-imagination of orthodox religious narratives, novel ways to approach the ecological crisis that we are currently facing. They are, first and foremost, an environmentally-friendly religious community who collectively resist the corporate agenda introduced to the reader in *Oryx and Crake* by eschewing capitalism and commercialism and embracing a self-sustainable lifestyle which is manifested in their "Edencliff Rooftop Garden" (YF 13). This space, wherein "[e]ach petal and leaf [is] fully alive" (YF 52), is the symbolic expression of the Gardeners' attempts to rise above the "untrammelled capitalism" that characterizes the world that encircles them (Hoogheem 62). They recognize that the fiction of capitalism and its insistence on unsustainable production and consumption are the primary contributors to the current ecological crisis, which is why they passively resist the capitalist economy through non-participation. Their creed also opposes humanity's unethical and amoral treatment of non-human animals, which is why their doctrine focusses on promoting an interpersonal relationship with our "Fellow Creatures" based on the ideal of "loving-kindness and kinship" (YF 15). According to their re-interpretation of orthodox Christianity, this sentiment characterized Adam's first interactions with the "Animals" in the Garden of Eden on that "unrepeatable Day [in which] every living entity on the Earth was embraced by Man" (YF 15).

The tenets of self-sustainability and compassion that underlie the Gardeners' ideology and praxis are communicated to the reader through the sermons spoken by Adam One, an ex-scientist who is their founder and spiritual leader, as well as the hymnal liturgy in which both the members of the group and Atwood's readers participate (Hoogheem 64). Atwood states in

the Acknowledgements to *The Year of the Flood* that readers can use "any of these hymns for amateur devotional or environmental purposes" (517); a pronouncement that addresses the "environmental consciousness-raising" impetus of these texts (Bouson, "Using" 23). Readers have responded to her invitation, which further speaks to the impact these texts are having on the collective imagination. Like *The Handmaid's Tale*, Atwood's more recent works of speculative fiction have begun to "impinge" upon the world (Iser ix), especially after she designed her book tour to introduce not only *The Year of the Flood* but also a deeper ecologically conscious way of living to the popular consciousness in 2009, the year of its publication.

Orville Stoeber, a well-known composer, wrote music to accompany the hymns of the Gardeners shortly after the publication of *The Year of the Flood*, and subsequently released a CD, entitled *Hymns of the God's Gardeners*, which is available for purchase from Atwood's websites (YF 517). The book tour included live choral renditions of these hymns, as well as "theatrical version[s]" of Atwood's text, which were filmed by the Canadian film director and documentary maker Ron Mann ("In the Wake" par. 1). He also made a movie about the book tour called "*In the Wake of the Flood*," which was released in 2010. According to the company that distributes this movie across Canada, *Films We Like,* Mann made the film with the intention of creating awareness in the popular consciousness about the environmental message that Atwood is communicating to her readers and to the spectators of the dramatic renderings of her text, which is "how humanity must respond to the consequences of an environmentally compromised planet before her work of speculative fiction transforms into prophesy" (*Films We Like*, "In the Wake" par. 1). One the performances that Mann filmed took place at DePaul University, where Atwood, along with students from the English Department, performed an excerpt from *The Year of the Flood* to an audience ("Excerpt of Author" 00:00-06:38).

In addition, all who took part in Atwood's book tour pledged to live as environmentally-friendly as possible for its duration in order to emulate the behaviours of the God's Gardeners as far as possible, and to sensitize Atwood's fans to what it means to live with ecological awareness in an unsustainable age. All of the individuals who organized and participated in the tour took the Gardeners' "VegiVows" ("Greening" para. 4), and supported local, eco-friendly businesses and organic farmers whenever possible, instead of contributing to corporate profits and large-scale, pesticide-ridden agricultural consortiums ("Greening" pars. 3; 9). They also used public transportation like trains, instead of relying on private vehicles to haul them and their equipment from one location to the next as a means of cutting

down their carbon footprint ("Greening" par. 5). The members also vowed to avoid plastic and bottled water in order to minimize waste ("Greening" par. 10), and only used paper that had been declared "Ancient Forest Friendly" for the tour's programs – a small and seemingly inconsequential decision that has far-reaching consequences and which speaks to the kinds of behaviours that need to be adopted in the reader's current context ("Greening" par. 7). The critical and lay attention that *The Year of the Flood* has received and how it has affected the behaviour of those whom have come into contact with the text clearly shows that Atwood's works of speculative fiction are meant to "prod her readers to meaningful political thought and action" (Bouson, "Using" 23).

Exploring the Gardeners' Eschewal of Human Exceptionalism: How to Achieve an Interpersonal Relationship With the Biosphere

The Year of the Flood opens with a Gardener hymn titled "The Garden," which is the term they use to reference Earth – they view it as God's Garden and themselves as His gardeners. This hymn, which is presented to the reader before the narrative of the text formally commences, functions as a poetic invocation of the text's environmental concerns – the destruction wrought on the biosphere by the human animal – and also introduces the reader to the three primary objectives that the God's Gardeners hope to achieve through the recontextualized religious narrative that informs their green religion. These are the restoration of the Earth's biosphere (their ecological objective), the reinvigoration of compassion into our interspecies relationships (their ethical objective), and the necessity of reminding humanity of its environmental responsibility and the "debt" contemporary technological civilization owes the Earth for all that it has wrenched from the planet (their moral objective) (Atwood, *Payback* 179).

The hymn opens with a question set in the present tense: "Who tends the Garden / The Garden oh so green?" ("The Garden" 1-2). This rhetorical question gives the reader pause to consider who is currently responsible for the fecundity of the environment. The following four lines of the hymn draw the reader's attention to the decimation experienced by the environment in the historical past:

> 'Twas once the finest Garden
> That ever has been seen
> And in it God's Creatures
> Did swim and fly and play. (4-6)

This decimation is emphasized through the use of the contracted form of 'it was' that begins the third line of the hymn, as well as the employment of the past tense of the verb 'do' to describe these animals' behaviour. While this part of the hymn can be interpreted as a reference to the previous fertility of the earth, the use of the past tense in "has been seen" (4), combined with the present tense forms of the verbs "swim", "fly" and "play" (6), also allows the reader to interpret these lines as indicating that the destruction of the biosphere is ongoing and emphasizes the loss of life that necessarily accompanies the death of the environment that humanity shares with these "Creatures" (5). The next phrase highlights the magnitudinous scale of the acts of violence that humanity has perpetrated against non-humans: "But then came greedy Spoilers, / And killed them all away" (7-8). In the imagined future world of *The Year of the Flood*, humanity has totally annihilated "God's dear Creatures" in order to satisfy their avarice and gluttony (5). The following lines indicate that not even the flora is safe from the consequences of humanity's appetites:

> All the Trees that flourished
> And gave us wholesome fruit,
> By waves of sand are buried,
> Both leaf and branch and root. (9-12)

The last two phrases of these lines also allude to the desertification that is the necessary consequence of climate change, large-scale agricultural practises and overgrazing. The following lines stress the enduring effects of polluting the finite resource of water in the present: "And all the shining Water / Is turned to slime and mire" (13-14). The use of the word "is" (14), coupled with the past tense of "turned" (14) as well as the use of the collective pronoun "all" (13) emphasizes the extent of this behaviour. The hymn's subsequent lines are suggestive of the overwhelming silence that necessarily characterizes a sterile environment: "And all the feathered Birds so bright / Have ceased their joyful choir" (15-16). The incorporation of the sense of sound, and its terrible absence, into this hymn encourages the reader to immerse herself completely in the experiential reality that is engendered by the ecological degradation that this hymn describes.

The first sixteen lines of this ecological lament therefore elucidate clearly the lack of compassion with which humanity treats the biosphere, as well as drawing the reader's attention, through this hymn's visceral description of the absences that our behaviours have created, to the moral responsibility that we have towards redeeming the planet. While the last

four lines of "The Garden" continue to illustrate the sense of grief that accompanies bearing witness to the prolonged death of the environment, they are also a space of hope:

> Oh Garden, oh my Garden,
> I'll mourn forevermore
> Until the Gardeners arise,
> And you to Life restore. (17-20)

The Gardeners believe ardently that they will be able to restore the globe's environment from the destruction that has been wrought upon it by humanity if "all were to follow [their] example" of living a truly sustainable and compassionate lifestyle in a technological age characterized by unnecessary consumption and an impoverished sympathetic imagination. (YF 13).

The last phrase of this hymn is vital to the Gardeners' overall message, as it draws the reader's attention to the way they conceive of their broader environmental context: they address the "Garden" as "you" – a pronoun whose use necessitates a recognition of personhood and subjectivity. The Gardeners acknowledge that humanity is in an interpersonal relationship with the biosphere, unlike the "Exfernal World" (YF 71). A play on the adjective "external," this is the term they use to reference the outside world and those who do not follow their doctrine. The kind of relationship that the Gardeners see themselves as having with their broader environmental context by definition, means that the "moral laws and values" which govern humanity's social interactions with other humans should automatically apply to the environment at large (Harari 203). This is their primary ethical objective and the way in which they hope to achieve both their moral and ecological aims. They believe that the cultivation of a compassionate and respectful relationship with humanity's non-human context will ideally lead to a recognition of the moral "debt" humanity owes the planet (Atwood, *Payback* 179). This acknowledgement should ideally prompt us to change the dynamics of our engagement with our broader environmental context and adopt truly eco-friendly behaviours that support the planet's health. In order to catalyse the necessary "transformation of subjectivity" that these three interrelated goals require (Canavan 152), the Gardeners rely on an eccentric collection of "philosophy" (Hoogheem 62), scripture and aphorisms as a means of dismantling the conceptual boundaries that exist between human and non-human animals and which are responsible for the "assumption that human beings are somehow more deserving of love and respect than animals" (Dunlap 2). This necessitates

engaging critically with the orthodox guiding narrative of humanism and its founding tenet of "human exceptionalism" (Dunlap 5) in order to re-imagine the human identity and draw the reader's attention to "the deficiencies" inherent to the humanist worldview (Iser 79).

Adam One constantly targets humanity's belief in its own exceptionalism by drawing attention to the paradox that lies at the centre of our conception of the human identity in the technological age. In his first sermon, "Of the Creation, and of the Naming of the Animals" (YF 13), Adam tells his followers and Atwood's readers that humanity should not think of itself as superior to other life forms by virtue of our supposed rationality and ostensibly unique ability to communicate intelligibly through language: two "self-referential … tools that humans employ to mark their separation from animals" (Mosca 46). Adam argues that God spoke to the animals in the Garden of Eden "directly … in their own languages" (YF 15). Here, Atwood, through Adam, is covertly drawing the reader's attention to the fact that animals do communicate, albeit in a language that humans may not be able to comprehend. This observation will be expanded upon in the third chapter. If God's "Creatures" do possess language in order to communicate (YF 14), then, by following the same self-referential argument scientists and philosophers use to distinguish humans from non-humans, animals must therefore also possess rationality, even though it may be one that humans do not understand. The first line of the hymn "God Gave Unto the Animals," sung after Adam's sermon "On the Importance of Instinctive Knowing" articulates this observation with such clarity: "God gave unto the Animals / A wisdom past our power to see" (YF 281).

Adam's second sermon, "Of God's Mythology in Creating Man," spoken on the day the Gardeners celebrate "The Feast of Adam and All Primates" (YF 61), begins with "an affirmation [of our] Primate Ancestry" which, as Adam observes, is a tenuous statement to make to those who "arrogantly persist in evolutionary denial" (YF 61). His homily targets not only the religious believers who take the book of Genesis literally, but also those who deny that "[o]ur appetites, our desires, our more uncontrollable emotions – all are Primate" because they "do not find it pleasant to their self-esteem" (YF 62). He does, however, admit in the hymn "Oh Let Me Be Not Proud" that "[w]e cannot always trace [our] path / Through Monkey and Gorilla" (YF 65), thereby pre-empting the assertion sceptics would make that science has still not been able to discover the 'missing link' between humans and our primate cousins and we are, therefore, a separate and superior species. In a later sermon, simply titled "Of Persecution" (YF 371), Adam One targets the conviction that humanity's ethical and moral conduct is superior to that of other mammals and that humans act towards other humans and non-human animals with a kindness and benevolence that only humanity

possesses. He reminds the reader and his followers that the Human Species has proven that we can act with a deliberate mercilessness that far surpasses the predators whom we abhor for their apparent cruelty. He suggests that we should "reflect on our own brutal history" instead (YF 372), and question "[w]hat is it about our own Species that leaves us so vulnerable to the impulse to violence? Why are we so addicted to the shedding of blood?" (YF 372).[22] Indeed, it is our proclivity for viciousness and the undeniable fact that, as history shows and as the hymn "The Earth Forgives" describes in graphic detail:

> Man alone seeks Vengefulness,
> And writes his abstract laws on stone;
> For this false Justice he has made
> He tortures limb and crushes bone. (YF 510)

These actions should humble us and force us to question our narcissism.

The Re-Imagined Religious Scaffolding of the Gardeners' Belief System

The Gardeners' belief system, as Hoogheem points out, is constructed around a prototypical Christian framework (60). The Gardeners, however, interpret the Bible as a "green text" (Bouson, "Return" 18), which leads to an environmentally-conscious recontextualization of the orthodox guiding narrative of Christianity; a re-imagination which is in conflict with Christianity's traditional "description of the world" and the place humans occupy within its symbolic order (Harari 214). The Gardeners' creed is founded upon the rejection of "the Domination Assumption," which, according to the environmental philosopher Val Plumwood, advocates that

> it is permissible to manipulate the whole earth and what it contains exclusively in the human interest, that the value of a natural item is entirely a matter of its value for human interests, and that all constraints on behaviour with respect to nature derive from responsibilities to other humans. (qtd. in Edwards, "Ecological Culture" para. 15)

[22] The brutality of our history is neatly summed up by Jimmy in a striking passage found in *Oryx and Crake*. Jimmy, in an attempt to buttress his human identity, recites a list of "human achievements" whilst making his way through the debris left behind by the Flood (OC 90.) It is, however, terrifyingly short when compared to the dizzying number of "atrocities" committed by humanity (OC 91).

Instead, the Gardeners have a "profound conviction that all life – human, plant, and animal – has been created by God and is therefore sacred" (Hoogheem 61), which necessarily means that they do not subscribe the human exceptionalism on which the "Domination Assumption" is founded: "[w]e pray that we may not fall into the error of pride by considering ourselves as exceptional, alone in all Creation in having souls" (YF 63). Their hymn, "Oh Let Me Not Be Proud," warns humanity against its tendency to "rank [ourselves] above / The other Primates" and "vaunt and puff ourselves / With vanity and pride" (YF 65); a sentiment that manifests itself in the conviction that "we are set above all other Life, and may destroy it at our pleasure, and with impunity" (YF 63-64).

This attitude, which the Gardeners deem responsible for our wilful destruction of almost "every living entity on the Earth" (YF 15), contravenes directly what they see as humanity's God-given and "sacred task of stewardship" (YF 63), which is "keeping God's beloved Species safe" (YF 108). They believe that our failure to carry out our divine duty is further compounded by an inaccurate interpretation of God's commandment to "increase and multiply, and to replenish the Earth" (YF 63). Blinded by our faith in our own exceptionalism, we fail to comprehend that He "did not mean that we should fill it to overflowing with ourselves, thus wiping out everything else. How many other Species have we already annihilated?" (YF 63). Adam One believes that the "humiliating and aggressive and painful means [by which] this replenishing frequently takes place" is the source of the "sense of guilt and disgrace" (YF 63) that is attributed traditionally to our "original sin of desiring too much knowledge" (YF 123). What orthodox interpretations of the Fall fail to consider, however, is that the "original sin of desiring too much knowledge" can, according to Adam One, also be interpreted as the desire for "too much power. Because the two were connected" (YF 123). Perhaps what he is trying to convey through this statement is that our innate sense of shame springs from our attempt to exert our power over all other life forms, even if this assertion comes at the cost of breaking our "Fellowship / With murder, lust and greed" (YF 16), as the hymn "When Adam First" puts it.

Adam One therefore reinterprets the "Fall of Man" existentially (YF 224), instead of viewing it as a "primordial act of [deliberate] rebellion" (Hoogheem 61). According to him,

> the Fall of Man was multidimensional. The ancestral primates fell out of 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 incessant sexual twitching. Then they fell from a joyous life in the moment into the anxious contemplation of the vanished past and distant future. The Fall was ongoing, but its trajectory led ever downward. (YF 224)[23]

Adam's re-imagining of humanity's fall from innocence also highlights the Gardeners' primary theological goal, which centres around "reconciling the findings of Science with their sacramental view of life" (YF 287). Adam recognizes that science, as a guiding narrative and origin story which maintains "that we're an experiment animal protein has been doing on itself – is far too harsh and lonely for most, and leads to nihilism" (YF 287), which is why he wants to splice science and religion together in order to achieve the Gardeners' ecological and ethical goals. He knows that scientific knowledge lends him credence in the face of religious sceptics, but he understands that religion, as will be shortly discussed, is a more psychologically "comforting" story that is able to bring with it the morality that scientific discourse lacks (Atwood, "Burning" 55). As Harari notes,

> [s]cientists study how the world functions, but there is no scientific method for determining how humans ought to behave … Only religions provide us with the necessary [ethical] guidance. (219)

The Gardeners recognize that religion and science, like all other orthodox guiding narratives, are fictions that humanity has created in order to make sense of and navigate the world that surrounds them. They also understand that religion and science are two different, although not mutually exclusive methods of knowledge acquisition or ways of interpreting the same phenomena, which is why Adam One reinterprets the Big Bang in scientific terms:

> The Human Words of God speak of the Creation in terms that could be understood by the men of old. There is no talk of galaxies or genes, for such terms would have confused them greatly! (YF 13-14)[24]

The Gardeners also practice "New Age Visualization" techniques (Hoogheem 62), as they believe, like Milton's Satan and Marlowe's Faustus, that an individual's mindset influences their perception of reality: "[y]ou create your own world by your inner attitude"

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[23] The critical reader can discern the clear links that exist between Adam's interpretation of humanity's fall from the grace of God, and Crake's views regarding the dangers of symbolic thinking.

[24] The reader should recall that Adam's conception of the relationship that exists between these seemingly distinct ways of thinking harks back to Atwood's characterization of the arts and the sciences in *Oryx and Crake*, symbolized by the original Latin motto of "Martha Graham" (OC 217).

(YF 376).[25] Ren, for example, while dealing with the negative emotions she feels towards Amanda, her best friend, for dating Jimmy, her ex-boyfriend from high school, tries to

> visualize [her] jealousy as a yellowy-brown cloud boiling around inside [her], then going out through [her] nose like smoke and turning into a stone and falling down into the ground. That did work a little. But in [her] visualization a plant covered with poison berries would grow out of the stone, whether [she] wanted it to or not. (YF 363)

The adults are also not averse to using psychedelic and hallucinogenic substances like "psilocybins" (YF 120), commonly called 'Magic Mushrooms,' "for religious purposes" (YF 86). They believe that they can foster an "illumination" (YF 200) of the "Wholeness of Being" (YF 278) that Adam speaks of in his sermon, "On The Importance of Instinctive Knowing" (YF 277), an indication of the "Shamanism" that also informs their alternative and esoteric belief system (Armstrong, *God* 251). The Gardeners also utilize these psychoactive substances to "ease people through their Fallow States, when the Soul was refertilizing itself" (YF 120).[26]

Hoogheem further observes that "self-help maxims" form a core part of their creed (62). Although he does not elaborate on exactly how they are incorporated in the Gardeners' doctrine, he does observe that what they have gleaned from non-Christian religions and philosophies has been chosen to support their "sustainable, reverent lifestyle" (Hoogheem 62). The reader, through a close analysis of *The Year of the Flood*, can see that the proverbial sayings reiterated throughout are used to bolster the Gardeners' resilience in the face of adversity: "it is better to hope than to mope!" is a key example (YF 107). Toby also remarks early on that "[t]he Gardeners loved their instructive rhymes" (YF 23), which act as concise aphorisms and reinforce key aspects of their pedagogy. Toby remembers one whilst at the Spa, which reminds her of the constant vigilance she needs to practice in order to stay alive in the post-human landscape the Flood has created: "*An Ararat without a wall isn't an Ararat at*

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[25] Atwood's use of Milton's most famous passage from *Paradise Lost* – "The mind is its own place, and in itself / Can make a heaven of hell, a hell of heaven" (1.253-254) – as part of her "literary repertoire" is also obvious in *Oryx and Crake* (Iser 53). The name of Crake's laboratory, "Paradice" (OC 350), is a clear reference, as well as when Oryx tells Jimmy, at various times and in different forms throughout the narrative that "*Paradice is lost, but you have a Paradice within you, happier by far*" (YF 362).

[26] This is the term the Gardeners use to reference depression. Scientific studies currently being conducted show that psilocybin is an effective treatment for depression and anxiety as this psychoactive compound can reset the brain circuits of depressed patients. See *The Guardian* article, "Magic Mushrooms Reboot Brain in Depressed People," published in 2017, for further information.

all … A wall that cannot be defended is no sooner built than ended" (YF 23). Another "basic Gardener credo" is "*The No Cup is bitter, the Yes Cup is Yummy – Now, which one would* you *rather have in* your *tummy?*" (YF 135). This chant-like saying is used to encourage the Gardeners, especially the children, to approach life with positivity: "For drinking Life there are two cups … What's in each of them might be exactly the same, but oh my, the taste is so different!" (YF 135).

Hoogheem's excavation of Gardener theology posits that the reader can also discern the influence of "Taoist ideals" on their worldview (62). Blackburn defines Taoism as a "philosophy [that is] a combination of mysticism, philosophical reflection, and poetry" and which "stresses the unity of humanity and the universe" (Blackburn 358). The Gardeners insistence on living in harmony with the universe, especially nature, is evident in their conviction that they "all belong to the Matrix of Life" (YF 214). This belief is also continually reinforced by their communal living arrangements: the community lives, eats and worships together and every individual participates in tasks which contribute to the well-being of the group, such as tending to their shared garden (Hoogheem 63). Adam One's sermon, "Of the Importance of Instinctive Knowing" (YF 277), re-emphasizes the Gardeners' belief that they are in a holistic relationship with nature. Given on the day the Gardeners celebrate "The Feast of Serpent Wisdom" (YF 277), this festival commemorates "the wisdom of *feeling* directly" (YF 277). It draws on the image of the serpent, which, as Adam One correctly observes, is a "complicated symbol" which has had different connotations throughout history (YF 278). Instead of interpreting the serpent biblically, Adam One prefers to view it as a figure representing "the intertwined nature of the Dance of Life" (YF 277). This symbolic rendition of the "eternal cycles of the cosmos, the transcendence of duality, and the union of opposites" is called the "ouroboros" (Fontana 81). Tending towards Hinduism and Buddhism's belief in re-incarnation – in Hinduism it is called "*moksha*" (Coogan 518) and Buddhism refers to it as "*samsara"* (Coogan 519) – Adam One also sees the serpent as a symbol of "Renewal – the Soul casting off its old self, from which it emerges resplendent" (YF 278). Many cultures have viewed the serpent's ability to shed its skin as testament to its "extraordinary powers of transformation" and thus associate it with rejuvenation (Fontana 81).[27] Toby's transformation into Tobiatha, the person whom she has

[27] For further insight into the image of the snake in Buddhism and Hinduism, see the relevant chapters in Coogan's edition of *Eastern Religions* (2005). In addition, David Fontana's *The New Secret Language of Symbols* (2010) provides additional insight into how the image of the serpent has been interpreted by different cultures and mythologies.

to become when Blanco and his cronies raid the Garden in an effort to avenge the humiliation he felt when she kicked him during her escape from "SecretBurgers" (YF 42), the place where she worked before being "providential[ly] rescue[d]" by the Gardeners (YF 53), takes place shortly after this sermon.[28] When Toby is reflecting on this stage of her life whilst sequestered in the "AnooYoo Spa," she remarks that she felt like a "whole new me, fresh as a snake" (YF 282). In addition, the Gardeners' passive resistance to the capitalist economy is supported by the Taoist tenet of "non-interference" (Fontana 90). Taoism also advocates the "suppression of [material] desire in favour of natural simplicity and tranquillity" (Blackburn 358). This is the way Lao-Tzu, Taoism's founder, believed that "a completely satisfying and harmonious human existence" could be achieved (Blackburn 358). These tenets significantly influence the Gardeners' lifestyle choices and behaviours.

They reside in abandoned buildings so "they didn't have to pay rent" (YF 76), a choice that ensures their non-participation in the capitalist economy's housing market and limits their dependence on the products and materials associated with purchasing, furnishing and renovating houses. Families share "a big room," divided into "cubicles" whose "curtains" are made from "woven … plastic-bag strips and duct tape" (YF 76).[29] Ren notes that an old door has been repurposed to make her family's dining room table and that the majority of their "dishes and pots and pans were salvaged – gleaned, as the Gardeners said" (YF 76), an illustration of their belief that "useless and discarded [items] may be redeemed from uselessness" through our "God-given powers of creativity" (YF 192). Her bed is made out of an old "futon stuffed with husks and straw" and covered by a "quilt sewed out of blue jeans and used bathmats" (YF 77). Furthermore, any children's toys must be gleaned from recycled materials: "the only toys they approved of were sewn out of leftover fabric or knitted with saved-up string" (YF 78). Dominoes were allowed, though, "because they carved the sets themselves" (YF 78). The Gardeners also abhor the misuse of natural resources and "didn't believe in wasting water" (YF 77), which means that Ren only gets "clean [clothes] every seventh day" and is discouraged from taking daily showers (YF 77), even though their "shower water came down a garden hose out of a rain barrel and was gravity-fed, so no energy was used" (YF 77). These actions are examples of the Gardener's non-participation in

[28] Toby undergoes cosmetic surgery to disguise her physical appearance from Blanco: her skin is made darker, she gets a hair transplant, new fingerprints and a new "voiceprint. Plus a bit of recontouring" (YF 311). She also wears green contact lenses – her eyes become the same colour as Crake's and his Crakers.

[29] Hoogheem argues that this also discourages the Gardeners "from seeking privacy of any kind" - a characteristic of communal living – whilst, at the same time reinforces their view, through their living arrangements, that "we are all in one another's hands" (YF 257) and that humanity "exist[s] in communion not just with each other but with the whole cosmos" (Hoogheem 63).

the capitalist economy and their eco-friendly lifestyle, and are capable of demonstrating to the reader the kinds choices that need to made in order to live sustainably in the age of consumerism and commercialism.

The "Utopia" Represented by the God's Gardeners: The Faith That Humanity Can Change

Atwood maintains in her essay "Dire Cartographies: The Roads to Ustopia" that the Gardeners and their rooftop garden should be viewed as a "utopia embedded within a dystopia" (93); an ideal physical and symbolic alternative to the dystopic corporate society presented to the reader in *Oryx and Crake* as well as the dismally seedy underbelly of capitalist society that Atwood expands on in *The Year of the Flood*. Atwood "made up" the term "ustopia" because, "in [her] view, each contains a latent version of the other" ("Dire" 66). To her, a utopia always contains within it a dystopic element, as those "people who don't fit into [the] high standards of perfection" envisioned by the utopic society would view it as dystopic. Atwood's neologism also applies to the Gardeners' community, as will be discussed shortly in reference to the limitations of the Gardeners' religious thinking.

Atwood also states in this essay that "[i]n literature, every landscape is a state of mind [and] every state of mind can also be portrayed as a landscape" ("Dire" 75) and, in the context of her presentation and description of the fecund and fertile "landscape" that the Gardeners create in their rooftop garden ("Dire" 75), this space makes it clear that, unlike Crake and the "Exfernal World" that surrounds them (YF 71), the Gardeners have not lost "faith in the possibility of revolution[izing]" (Canavan 138) the technological age's "social and moral order" (Bouson, "Return" 17). This is the Gardeners' utopic element. Although they recognize, like Crake, that the environmental crisis is a consequence of humanity's inherently destructive behaviour (Bergthaller 735), the Gardeners have faith that humanity is capable of modifying its behaviour and transcending the "destructive features" that Crake identifies as the causes of "the world's current illnesses" (OC 349) *if* humanity is presented with a contextually relevant orthodox guiding narrative. Their Garden symbolises their hope that it is possible to live differently; that there is that "there is [an] alternative to the system" (Jameson qtd. in Canavan 139) created by the narratives of capitalism, human exceptionalism, the discourse of sustainability, and the "webs of meaning" that they collectively weave (Harari 175). The value of the Gardeners and Atwood's texts in our technological age therefore stems from their ability to provide the reader – and their "Exfernal World" (YF 71) – with an imaginative space in which alternative ways of living

and being can be conceptualized and imaginatively executed. Within this context, the Gardeners perform a "radical break," defined by Frederic Jameson as the "reopening of possibility … the strident insistence that things might yet be otherwise" (qtd. in Canavan 156). This is why the Gardeners' "Edencliff Rooftop Garden" (YF 13) can be characterized as an "objective correlative," defined as "a set of objects, a situation, a chain of events which shall be the formula of [a] *particular* emotion" and which "evoke the same emotion from the reader" (Abrams 234). Their garden is the physical manifestation of the Gardeners' hope and faith that "a change [can] be wrought on our beloved Planet" (YF 13); a conviction the reader feels when they are involved imaginatively in this space of alterity. The Gardeners ardently believe that as a community, they will be able to act as a "beacon of hope" to the rest of the inhabitants of Atwood's possible future world (YF 296). As Adam One tells Toby, "if you tell people there's nothing they can do, they will do worse than nothing" and return to the status-quo (YF 296), thereby exacerbating the problems created by the unsustainable environmental behaviours authorized and perpetuated by humanity's contemporary orthodox guiding narratives.

Religious Narratives as Humanist "Anthropotechnologies"

As the first chapter of this thesis has argued, in the context of humanism, orthodox guiding narratives should be viewed as "anthropotechnologies" (Sloterdijk 23). The use of this term is premised on understanding the discourse of humanism as a form of "bio-political control" (Bergthaller 729); a social strategy whose thesis is premised on the need to "tame the human animal" (Bergthaller 732). The Gardeners are confident that their strategic recontextualization of religious fictions within the boundaries of truly environmental discourse and premised on human inexceptionalism would be able to achieve what humanity's other "anthropotechnologies" have not: the domestication of the human animal's rapacious appetite for natural resources (Sloterdijk 23).[30]

The narrative of *The Year of the Flood* thus asks the reader to question whether the Gardeners' "eco-religion" (Bouson, "Using" 9) can function as a more effective "anthropotechnology" (Sloterdijk 23) than the one currently employed as a response to the ongoing environmental crisis – the paradoxical discourse of sustainability. This orthodox

[30] For the conceptualization of humanism as drawn on in my discussion, see Sloterdijk's essay "Rules for the Human Zoo: a response to the *Letter on Humanism*," Bergthaller's "Housebreaking the Human Animal: Humanism and the Problem of Sustainability in Margaret Atwood's *Oryx and Crake* and *The Year of the Flood*," as well as Harari's conceptualization of Humanism in *Homo Deus*: see pp. 268 – 274.

guiding narrative maintains that we can simply tweak our approach to the unrestrained use of natural resources we term "progress" in order to

> alleviate poverty and foster individual liberty in what used to be called the Third World while holding on to the good life we have created for ourselves in the First, at the same time that we preserve the integrity of the natural world for future generations. (Bergthaller 730)

Bergthaller's description itself reveals how unsustainable the discourse of sustainability is. Atwood's text therefore also implicitly asks the reader to consider whether the Gardeners' re-imagined religious narrative is able to offer the reader with a viable alternative to both the discourse of sustainability as well to the logical, though morally questionable, strategy Crake employs to save the environment from collapse and avert the human suffering that is the necessary consequence of environmental collapse. The rest of this chapter will endeavour to provide answers to these questions. In order to do so, an alternative and secular definition of religion will be offered as a means of interrogating the social and political uses of this primary "anthropotechnology" as a means of probing how religious fictions function as orthodox guiding narratives (Sloterdijk 23). Re-contextualizing religion in this way will be able to illuminate whether the religious environmentalism practised by the God's Gardeners would prove to be an effective response to the current ecological degradation humanity is facing.

While the God's Gardeners' doctrine is premised on the belief in a monotheistic God, Adam One's use of religious narratives in *The Year of the Flood* draws the reader's attention to how religion is capable of providing humanity with the socio-cultural tools that regulate the behaviour of the human animal (Harari 214). The Gardeners' belief that their re-imagined eco-religious narrative will prove to be an effective orthodox guiding narrative in the contemporary technological age is premised on the implicit argument that the concept of God and the religious narratives created in His name are humanity's first and most enduring "anthropotechnologies" (Sloterdijk 23). This is evidenced by their hymn "Oh Let Me Not Be Proud" wherein they invoke God to "keep [them] far from worser traits, / Aggression, anger greed" (YF 65). Their goal of redeeming the environment from its deplorable state hinges on the use of the concept of a punishing God as a tactical means of confronting the ecocide humanity is currently perpetrating: they wish 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" of the world (YF 288). They hope that the inclusion of a "penalizer" will

encourage humanity to reflect on the cruelty and brutality with which its acquisition of natural resources take place (YF 288), thereby reminding us of our moral obligations towards the planet. As "the Spirit of Earth Day Past" (177) notes in Atwood's *Payback*,

> [i]n ancient societies, the debt we owe to the Earth was remembered at all seasons. Each religion paid tribute to the sacredness of the Earth, and acknowledged with gratitude that everything people ate, drank, and breathed came from it through providence … The prevailing ethos was that there was a debt, and it had to be repaid, and repaid regularly, or the benefits that were given would be withheld. (179-180)[31]

Furthermore, the Gardeners' hope that religion's established focus on the "overriding duty of compassion" will emphasize the necessity of treating non-humans and with respect and kindness, encourage humanity to show concern for their broader environmental context and urge the contemporary reader to question the ethically-skewed relationship that we currently have with the natural world (Armstrong, *God* 56).

The Concise Oxford Dictionary (1976) defines 'religion' as a "particular system of faith and worship" which is premised on the

> human recognition of superhuman controlling powers esp. of a personal God or gods *entitled to obedience and worship* [and] *the effect of such recognition on conduct and mental attitude*. (946; my emphasis)

When religion is conceptualized as a systematized collection of structured beliefs founded upon the acceptance of a supernatural controlling deity, it posits the claim that humanity is "subject to a system of moral laws that we did not invent and cannot change" (Harari 211). This is because religious narratives are able to provide believers with a symbolic order or imaginative framework "within which [their] actions can appear as meaningful and 'good'" according to the deity in question (Bergthaller 738). Harari, however, offers the reader an alternative way of conceiving of religion when he argues against its supernatural element.

Within the sociological context of his argument, Harari interprets religion as a fiction that creates an "intersubjective web of meaning: a web of laws, forces, entities and places that

[31] This non-fiction text contains a chapter wherein Atwood modernizes the story of Ebenezer Scrooge and recontextualizes it so that it can respond properly to the environmental crisis. In her version, Scrooge owns multiple corporations and taken on journeys by the "Spirit of Earth Day Past" (179), the "Spirit of Earth Day Present" (190) and the "Spirit of Earth Day Future" that make him rethink the way he perceives of and behaves towards the environment.

exist purely in [humanity's] common imagination" (175) and which has been created with the express purpose of "preserving social order [and] organising large-scale co-operation" (214). He reasons that "religion is created by humans rather than by gods. And it is defined by its social function rather than by the existence of deities" (Harari 211). Harari's argument does not engage with whether religious beliefs are 'true' or 'correct' as his primary concern lies in the use of religion as a socio-political tool. Jared Diamond and Richard Dawkins, co-hosts of a conversational lecture titled "The Use of Religion," share Harari's view of religion and religious ideology, and their definition similarly emphasizes the social and political utility of religious ideology (the relevant sentence is italicised). These two critical thinkers delineate the socio-political boundaries of the term when they explain religion as

> a set of traits distinguishing a human social group sharing those traits from other groups not sharing those traits in identical form. Included among all shared traits is one or more, often all three, out of three traits; namely supernatural explanation, diffusing anxiety about uncontrollable dangers through ritual, and offering comfort for life's pains and the prospect of death. *Religions after early ones became co-opted to promote political obedience, tolerance of strangers belonging to your religion, and justification of wars against groups holding other religions*. (Diamond and Dawkins, "Use of Religion" 1.20.37-1.21.19; my emphasis)

Recontextualizing the practise of religion within a sociological framework highlights the primary role religious ideologies – and the narratives through which they are communicated – play in the socio-political sphere of human civilization: they enable humanity to create societies or "elaborate systems of cooperation" which can then be "harnessed to serve [certain] aims and interests" (Harari 203). The social systems that religious fictions engender necessitate the inclusion of a moral order – a set of ethical guidelines, moral norms and values which reciprocally affect our perceptions of ourselves and others and structure the dynamics of our interpersonal relationships – in order to foster interpersonal collaboration through the regulation and prescription of acceptable social behaviour (Harari 210-214). Atwood concurs with Harari in her essay "Burning Bushes: Why Heaven and Hell Went to Planet X," when she states that religious narratives are capable of making a "collection into a collective" (50). According to the conceptual boundaries delineated by this argument and the observation that religious fictions are concerned overtly with the prescription of good behaviour and the maintenance of the social order, these stories should be viewed as distinctly humanist "anthropotechnologies," as they are one strategy

society employs in order to make those who comprise it "governable" (Sloterdijk 23). Taking this secular view of religion into consideration, the reader can comprehend that Atwood has placed this orthodox guiding narrative at the heart of *The Year of the Flood* in order to investigate whether it would prove more effective in curtailing the destructive behaviours that lead to ecological degradation than the discourse of sustainability or the discourse of scientific ingenuity – the belief that humanity can save itself from the consequences of its behaviour through scientific innovation and technological progress (Harari 248).

Bergthaller and Hoogheem's articles draw the reader's attention to the controversy generated by Atwood's decision to place the Gardeners and the practise of religion at the heart of *The Year of the Flood*. One of the reasons is the distinctive contrast that exists between the way in which the Gardeners are presented by *Oryx and Crake* and *The Year of the Flood*. Bergthaller points out that in the first text, they are "mentioned only in passing as a religious cult hovering somewhere on the lunatic fringe and eliciting little sympathy" (739), and, as Hoogheem observes, in *The Year of the Flood* it is clear that "Atwood evinces a distinct fondness for her ragtag band of religious fundamentalists" (66). He asks how the reader should "make sense of this shift?" (Hoofheem 66). Hoogheem posits that the scepticism surrounding the positive presentation of religion in this text also springs from Atwood's unsympathetic treatment of religious ideology in *The Handmaid's Tale,* the only other full-length speculative fiction text in which she blatantly interrogates the social function of religion (Hoogheem 66). I will contend that the reason Atwood's choice has garnered criticism is because of the narrow and orthodox definition of religion, which leads to the misinterpretation of the rationale behind her choice. Conceptualizing of religion as an "anthropotechnology" (Sloterdijk 23), however, frees up the reader's critical engagement with both the orthodox guiding narrative of religion and the Gardeners' re-imagination of religious ideology. This shift in perspective encourages the reader to explore the *value* of religion and, in particular, religious narratives in our secular and technological age, as well as allows auxiliary layers of meaning to emerge from interacting imaginatively with the Gardeners' doctrine. A short pause is, however, necessary so that the reader can comprehend exactly how religion, as an orthodox guiding narrative, an ideology and an evolutionary adaptation, relate to the Gardeners' practice of religion.

In positioning environmentalism as a religion and presenting it as a potential means of confronting the environmental crisis elucidated by the narrative past of *Oryx and Crake* and *The Year of the Flood*, Atwood is working from the following philosophical hypothesis: if humanity has evolved to believe in gods, then we are therefore also predisposed to accepting

religious ideology and the behaviour it prescribes. If this is true, then recontextualizing environmentalism within the conceptual boundaries of religious ideology should lead to the acceptance of environmental ideology and the performance of eco-friendly behaviour. Furthermore, within religion's "symbolic order" (Bergthaller 738), the primary co-ordinate is God: actions are admissible if they align with the behavioural and moral edicts handed down by God through the vehicle of religious narratives. According to environmentalism's "symbolic order" (Bergthaller 738), the environment is the primary co-ordinate: actions are admissible if they are "good" for the environment (Bergthaller 738). The Gardeners' doctrine endeavours to splice environmental and religious tenets together in order to conflate their "symbolic order[s]" (Bergthaller 738). Their creed ultimately posits that God and the environment should be thought of as different manifestations of the same essence, akin to how the Christian doctrine holds that the Holy Spirit, the Godhead and the Son of God are three expressions of the "ineffable" quintessence humans call God (Armstrong, *God* 139).[32] Conceiving of the environment as the physical materialization of God, coupled with the ethical guidelines transmitted by religion but re-imagined so that they apply to the biosphere as a whole, including the fauna and flora of which it is comprised, is how the Gardeners manage to turn environmentalism into a religion or, to put it another way, into a religious denomination, in *The Year of the Flood*.

It must be noted, however, that the longevity and omnipresence of religious narratives throughout recorded human history, as well as their efficacy in facilitating large-scale social co-operation, brings with it questions surrounding religion's potential evolutionary heritage (Harari 203; Armstrong, *Myth* 28). As the Crakers show the reader in *Oryx and Crake* and Adam One tells the reader in *The Year of the Flood*, "[w]e've evolved to believe in gods, so this belief bias of ours must confer and evolutionary advantage" (YF 287). In order to investigate the claim that religion is an evolutionary adaptation and further prove that religious narratives can be conceived of as "anthropotechnologies" (Sloterdijk 23), this argument will make recourse to what Hoogheem calls "the adaptive traits religion has evolved to confer" (58). To illuminate what these characteristics are and whether religious thinking and religious narratives influence survival capabilities positively by encouraging good human behaviour, Hoogheem's observations will be applied to Gardener ideology and praxis.

[32] Please see Armstrong's chapter "Trinity: The Christian God" (pp. 126-154) for a clearer understanding of the philosophical and religious evolution of this conception of God.

The Adaptive Traits That Religious Narratives Have Evolved to Confer

Hoogheem is working within the critical context offered by "evolutionary literary criticism" (55) when he posits that religion is a "seemingly superfluous but ultimately advantageous trait [that] enhances [humanity's] fitness, [our] capacity to survive" the world we find ourselves having to navigate (Hoogheem 57). He supports this claim by arguing that certain socially-beneficial behaviours arise from the practice of religion as an orthodox guiding narrative, all of which are premised on what Boyd calls religious fictions' unparalleled ability to facilitate "social cohesion – the cooperation necessary for social life" (qtd. in Hoogheem 57). Hoogheem's argument is premised on Boyd's observation that is much easier to survive – and flourish – if a community of individuals is capable of "strik[ing] a balance between self-interest and self-sacrifice for the group" (qtd. in Hoogheem 57). Hoogheem also notes that collaboration fosters a sense of purpose: the individual is a part of the collective and her contribution therefore matters.[33] Social co-operation also promotes a sense of futurity and hope. If a community is working together with the intention of surviving today, they must have the hope that they will experience a tomorrow (Hoogheem 65). Even Crake, the quintessential individualist, acknowledges the necessity of feeling as though you are a part of a community when he tells Jimmy that "we're doomed without hope [but] [o]nly as individuals" (OC 139). Hoogheem maintains that the social co-operation facilitated by this "sense of belonging" (65) is the primary "adaptive trait religion has evolved to confer (57). This sentiment is shared by Atwood in her essay "Burning Bushes," which critically investigates the role stories, and religious narratives in particular, play within the human construct of society: they "gather in and circumscribe their target audience" (50).

Hoogheem, following Boyd, states that one of the crucial ways in which religious fictions promote social unity is through "the invisible surveillance" provided by the omniscience and omnipresence of God, gods and/or other spirits (Hoogheem 57). These qualities give rise to the idea of a "secret spirit police" (Boyd qtd. in Hoogheem 57), and members of society subsequently feel obliged to uphold the moral norms and values

[33] Evolutionary literary criticism, or "evocriticsm" (Hoogheem 56), incorporates a "biocultural perspective to bear on the field of literary studies" (Hoogheem 55). Abrams defines it as a group of "critical writings which explore the relations between literature and the biological and physical environment, conducted with an acute awareness of the devastation being wrought on that environment by human activities" (Abrams 87). This critical lens endeavours to analyse human nature as presented in literary texts and is concerned with identifying "human universals rather than cultural particulars" (Hoogheem 55). While I have begun a critical investigation into "the actual function of literature in the overall make-up of [humanity]" (Iser xi) by viewing fictions as "anthropotechnologies" (Sloterdijk 15), further investigation into "the anthropological side of literary criticism" (Iser xi) through the critical lens of evocriticism would prove valuable, particularly in our technological age wherein the humanities are increasingly devalued.

stipulated by religious fictions.[34] In the context of survival, this is designed to prohibit us from engaging in "selfish behaviours" that could prove detrimental to the group, as we could incur the wrath of supernatural deities by reneging on the preordained and fixed binding moral contract that we have with them (Hoogheem 57). This thinking is evident in Adam's decision to re-imagine the well-established and enduring strategy of a punitive God in order to draw his society's attention towards "the hazards of annoying God" with the egocentricity that defines the way we currently behave towards the environment (YF 288). He is convinced that by returning to and reiterating "the idea of a fed-up deity sending a purgative catastrophe" (Hoogheem 63) as retribution for humanity's failure to take care of their broader environmental context, would give us pause to consider the visceral consequences of our actions, as God would, once again, hold us responsible for what we have wrought and chastise us accordingly:

> But what if it's God doing to the caring?" [said Adam] "What you mean is, that with God in the story, there's a penalty," said Toby. "Yes," said Adam One. "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*. (YF 287-288; my emphasis)

The italicised sentence in this exchange between Adam One and Toby also draws the reader's attention to the primary mental support religious fictions are capable of providing: they can offer "additional, agential levels of explanations for events that impact our lives" (Hoogheem 58). Humanity looks to anthropomorphic religious fictions when we search for reasons as to why certain events occur, particularly when our life experience fails to provide us with satisfying explanations (Hoogheem 58). As the section that discusses the Crakers has claimed, this pursuit of causation focuses on allaying feelings of anxiety, thereby offering its believers psychological and emotional comfort. For example, when Toby finds out that her psychopathic boss, Blanco, has been released from "Painball," Adam One tells her that "[n]othing bad will be done to [her]" in an effort to calm her fears (YF 301). While she does not find this pronouncement necessarily "reassuring" in the moment (YF 301), her belief that her safety may be guaranteed, coupled with Adam's pronouncement that "even the most terrible things happened for ultimately excellent though unfathomable reasons" provides

[34] Even individuals who do not necessarily believe in the religiosity of the narrative through which these behavioural edicts have been disseminated usually live according to the norms and values stipulated by the "web of meaning" that their community exists within (Harari 175). If they do not, they will avail themselves to "some kind of censure," whether it is social, political, familial or financial (Blackburn 254).

Toby with a psychological safety-net, buttressing her resilience and fortitude when she confronts her adversary (YF 301). In a passage immediately following Adam's remarks, Toby finds herself "looking for weapons" to defend herself instead of passively waiting to be "cornered" by Blanco (YF 302). Furthermore, she calls on her "bees" to "[s]tand by [her]" in her moment of tribulation (YF 302). This request simultaneously attributes "agency" to these non-human insects (Hoogheem 58) and provides Toby with the additional psychological encouragement she needs to win, physically and mentally, her "battle" against Blanco (YF 304). Her faith that the bees (and possibly God) are there to assist and defend her negates any defeatist attitude that she may still possess, and Toby succeeds in overpowering and defeating her former nemesis. In the context of this argument, Toby proves the claim that the psychological support offered by religious fictions heightens "our capacity to survive" as these stories supply us with reasons that can explain the causation of events that appear arbitrary and inane (Boyd qtd. in Hoogeem 57). Even though the reasons may be logically unsound, humanity requires stories that are "comforting" in nature (Atwood, "Burning" 55).[35] Atwood perceives the importance of this human need when she explores the reasons why science, as a story that is "central to our self-understanding" ("Burning" 54), has not "become widely popular" even though, as a method of knowledge acquisition, it is generally accepted by the populace:

> we human beings prefer stories that have a central role in them for us, that preserve some of our mystery and thus some of our dignity, and that imply there might be help at hand if we really need some. ("Burning" 55)

While religious narratives are able to provide comfort and reassurance to humanity, they also offer us "engaging examples of good conduct and right belief" (Hoogheem 58) which are able to provide us with exemplary patterns of interpersonal behaviour that we should try and emulate (Sloterdijk 23). In the context of the Gardeners' ethical objective of reinvigorating a sense of compassion into the way in which we interact with our natural environment, the lessons gleaned from these "anthropotechnologies" should also extend to the way in which humanity conducts their interspecies relationships (Sloterdijk 23). The Gardeners' reliance on this characteristic is clearly evident in the ecological saints that that

[35] Hoogheem suggests that the human proclivity to personify or "over-attribute agency" to events, inanimate objects and, as Toby's example shows, to non-human animals as well, originally functioned as a survival tactic premised on the recognition of potential danger (58). Atwood concurs in "Burning Bushes" (43).

their ideology invokes.[36] They see Dian Fossey as a paragon whose behaviour they should try and emulate because she "embodies an ideal [they] hold dear: loving care for all other Creatures" (YF 372). The story of her life, wherein she "laboured for a Peaceable Kingdom in which all Life would be respected" and showed humanity that all "Creatures" were deserving of "the same love and tenderness we would show to beloved friends and kinfolk" (YF 372), is a tale that offers the Gardeners a behavioural "model" which they attempt to echo in their daily lives (YF 372). There are, however, also specific skills that the Gardeners have learnt from their religious practices which would prove beneficial for the contemporary readers' society to perform.

The Gardeners' Orthopraxis

The Gardeners' skills are related intimately to the final "adaptive trait that religion has evolved to confer" (Hoogheem 57), which are the "rituals [that] reinforce group solidarity" (Hoogheem 58). It is important to note, as Hoogheem, Boyd and David Sloane Wilson do, that it does not matter whether the Gardeners' religious beliefs are "rooted in fact" (Hoogheem 58); rather, what is crucial is whether they "motivate behaviours that are adaptive in the real world" (Wilson qtd. in Hoogheem 58). Hoogheem refers to these adaptive behaviours as the Gardeners' "orthopraxis" (62) – the practical application of their belief system and a term which denotes how the Gardeners' ideology is continually reinforced through their performance of ritualistic actions. Practically speaking, the "skills" (64) that the Gardeners have cultivated as a result of their "orthopraxis" (62) have facilitated their capable endurance of the narrative past's wasteland of a world. Furthermore, the knowledge and expertise they have learnt from their ideology and the rituals that inform and support their eco-friendly and sustainable lifestyle play an integral part in the Gardeners' initial survival of the Flood and influence significantly Toby and Ren's ability to efficiently and effectively navigate their post-Flood context. In order to prove these claims, it is necessary to investigate the contextual relevancy of the practical skills to which the Gardeners' religious ideology

[36] If the Gardeners were to update their "pantheon of (mostly secular) saints" since publication (Hoogheem 62), they would surely include Greta Thunberg, who, at the time of writing, is a sixteen-year old Swedish schoolgirl who has galvanised the world's youth to fight against climate change (Watts, "Greta Thunberg" par. 2). Watt's article also states that she has been diagnosed with Asperger's (par. 6), a developmental condition which affects one's ability to interact socially and communicate with others, but affords a different perspective of the world ("What Is Aspergers" par. 2). In light of this, it would prove interesting to compare her views and actions with Crake's as, according to Atwood, he also has Asperger's (Bouson, "Game" 155). Conservative journalists in America have lambasted Thunberg and her character because of her Asperger's in an attempt to discredit her and her movement – the orthodox response to climate change activists who threaten the profit margins of corporations (Chakrabortty, "The Hounding of Greta Thunberg" par. 3).

gives rise in the narrative past of this text, which will provide the scaffolding that will enable this thesis to examine, in the third chapter, how Toby and Ren manage to re-imagine the Gardeners' "orthopraxis" so that their behaviours can remain relevant in their new context (Hoogheem 62). With the intention of providing satisfactory answers to these questions, this chapter will first explore Hoogheem's assertion that "the Gardeners are better equipped than most to survive – not just because of the skills they have cultivated, but because of the religious context in which they have done so" (64). The example that will be used to investigate the relevancy and accuracy of Hoogheem's above claim will also be able to illuminate the symbiotic relationship that exists between the Gardeners' belief system and the ritualistic behaviours that support and reinforce it.

On "Saint Farley of Wolves" day (YF 82), the Gardener community honour the contributions the Canadian author and naturalist Mowat Farley has made to their ideology and praxis (Austen, "Mowat" par. 1). His study on the wolves of the Artic, collected in his book *Never Cry Wolf* (1946), provides invaluable insights into how these animals are able to endure their harsh, unforgiving and resource-scarce winter environment (Austen, "Mowat" par. 6). Farley concludes their survival is premised on their ability to operate as a community – adult wolves babysit others' pups when the parents go hunting, for example – and they "never killed more than they could eat" (Austen, "Mowat" par. 13). Moreover, in the depths of winter when the wolves are confined to their dens, they survive on what subsistence they can find, which is usually mice (Austen, "Mowat" par. 12). To the Gardeners, Mowat Farley, like Dian Fossey, embodies the ideal of "interspecies empathy" that they admire (YF 372), and by invoking him as an ecological Saint they hope to emulate his attitude. In addition to his contribution to Gardener ideology, his study on how wolves thrive provides the Gardeners with practical guidelines on how to survive their challenging, resource-scarce and discordant environment: they need to operate consistently as a community, subsist on what is available and avoid unnecessary excess.

With a view to emphasize these ideological convictions, on "Saint Farley of Wolves day" (YF 82), the Gardener children are taught that

> [n]othing should be carelessly thrown away, not even wine from sinful places. There was no such thing as garbage, trash or dirt, only a matter of putting it to proper use. And, most importantly, everyone, including children, had to contribute to the life of the community. (YF 83)

This belief is reinforced through praxis: the children must become "Young Bioneers" and scavenge materials for the Gardeners "recycled-material crafts," as well as "go out gleaning" for discarded items such as "soap ends" which can be re-used and recycled (YF 82). They also collect leftover wine, which can be "fermented into vinegar [and] used for household cleaning" (YF 83). Performing these ritualistic and artistic behaviours thus stresses the importance of the core behaviours which recommend the wolves to the Gardeners as paragons of survival. They also "reinforce group solidarity" (Hoogheem 58), as the children have to go foraging in "groups" (YF 82).

In a comment that speaks to how these ritualistic behaviours can also be conceived of as "anthropotechnologies" (Sloterdijk 23), Ren remarks that this "work was supposed to teach [them] some useful lessons" (YF 82) that will stand them in good stead once the Waterless Flood hits "and all buying and selling will cease, and we will find ourselves thrown back upon our own resources" (YF 151). Indeed, once the Flood has come to pass, Ren, Amanda and the three former 'child' Gardeners whom they encounter once Amanda emancipates Ren from the "Sticky Zone" at "Scales and Tails" (YF 9), find themselves having to be completely self-reliant in order to survive in their post-capitalist world. Unlike Jimmy, who finds himself in a destitute situation in the narrative present of *Oryx and Crake*, Ren, Amanda, Shackie, Crozier and Oates are able to endure the resource-scarcity that necessarily follows from the collapse of the capitalist economy because of the practical survival skills they learnt during their time spent with Gardeners, the optimistic mindset these competencies engender, as well as the sense of community they feel when they are together. Instead of despairing about their lack of food, as Jimmy does, Ren and her friends scavenge for any available sustenance in an abandoned supermarket and, in a moment of inventiveness, resolve to use "lighters" that they have found to cook the foodstuffs that they glean (YF 406). This example provides evidence in favour of Hoogheem and Boyd's claim that the skills the Gardeners learn within their religious context positively influence their "fitness" to survive in their secular, post-Flood environment (57). It also makes it clear to the critical reader that the Gardeners' subtly incorporate the basic premise of humanism – the belief that the right kinds of education can positively influence behaviour (Sloterdijk 15) – into their "orthorpraxis" (Hoogheem 62).

The subjects the Gardener children are taught when they attend the Gardener school further support these observations. Their educational syllabus is comprised of additional "anthropotechnologies" (Sloterdijk 23) that are used to guide the behaviour of the youngest members of their community, as well as teach them the skills required to be able to contribute

to the life of the community when they are adults. The Gardener children therefore "undergo years of rigorous schooling … in what amounts to a survival skills curriculum" instead of being subject to an educational system that reinforces society's dependence on the current social and moral order informed and controlled by corporate rhetoric and behaviour, as Jimmy is (Hoogheem 62). In contrast to Jimmy's vastly deficient life skills syllabus, which includes "[d]ouble-entry-on-screen bookkeeping, banking by fingertips, using a microwave without nuking your egg and filling out housing [and] job applications" (OC 47), the Gardener children attend classes on "Fabric Recycling … Culinary Arts … Sewing … Bees and Mycology … Holistic Healing with Plant Remedies … Wild and Garden Botanicals [and] Emergency Medical" techniques (YF 74). These are the life skills – the right kinds of education – that need to be taught, cultivated and widely disseminated in the contemporary technological age. Should humanity wish to live outside capitalism, as the Gardeners do, or survive beyond the end of the capitalist economy, these are the types of skills and the variety of knowledge we would require (Canavan 139). Conversely, should humanity fail to adapt and re-imagine our orthodox guiding narratives of capitalism, sustainability and human exceptionalism in order to avert the ecological catastrophe that is a probable conclusion to the Anthropocene, we will need to rely on the kinds of competencies and expertise valued by the Gardeners in order to endure the scarcity of material resources that will necessary follow the collapse of contemporary human civilization. This observation will be expanded upon in the third chapter in reference to how Toby, Ren and the MaddAddamites, on whom they stumble towards the end of *The Year of the Flood,* are able to survive and flourish in their truly post-capitalist and post-human landscape.

In the context of the state of the environment presented to the reader in the narrative past of *The Year of the Flood,* the Gardeners' belief system and the genuinely environmentally-friendly behaviours that they advocate and perform do, as Bergthaller proposes, "emerge as a credible response to the crises" that they face (737). As their "orthopraxis" makes clear (Hoogheem 62), the Gardeners are equipped with the means and the will to be self-sufficient and resourceful. Although their intentions are laudable, however, the Gardeners find it difficult to influence the wider society's perception of the environment. This is due to two reasons: the entrenchment of corporate rhetoric and capitalist ideology (Canavan 138) and what Jennings calls the "tragic apocalypticism" that underlies the Gardeners' belief in the inevitability of the Flood (13).

The Entrenchment of Capitalism as a Primary Obstacle to Accepting Environmentalism

Within the conceptual boundaries of Iser's theory of aesthetic response, the treatment of environmentalism in *Oryx and Crake* can be said to act as a "background" to the reader's engagement with this guiding narrative in *The Year of the Flood* (Iser 92). The Gardeners' ideology is introduced to the reader in *Oryx and Crake* when this group's name is briefly mentioned towards the middle of the story and the reader is already fully immersed in the corpocracy of Atwood's possible future world. The structuring of this first contact is important to the narrative framework of Atwood's trilogy as a whole, as it draws the reader's attention to the general perception Atwood's commercialized and technocratic society has of environmentalism and thus of the Gardeners as a group: they are viewed as idealists who fail to "understand the reality of the situation" (OC 60). Atwood's satirical and erudite portrayal of corporate rhetoric and her exposure of the machinations of capitalist society's propaganda machine in this first text makes the reader aware that the corporations that dominate her fictional world rule through the "manufacture of consent." This term, which originates with Noam Chomsky, is defined by *Oxford Reference* as a "propaganda model in which the mass media selects material in relation to the values of those in power" ("Manufacture" par. 2).

As the first chapter of this thesis has argued, the attitudes and perceptions held by those who occupy positions of power within society filter down to the lower strata of society whom they manipulate and control through the rhetoric that sustains the corporate symbolic order: any actions are admissible as long as they contribute to the attainment of the corporations' goal, which is the accumulation of profit at any emotional, moral or ecological cost. This is the reasoning behind the evacuation of morality required by capitalist discourse and one of the primary contributors to the environmental and ethical crises with which Atwood's characters – and her contemporary readers – must contend.

The narrative past of both *Oryx and Crake* and *The Year of the Flood* makes it evident that society's unwillingness to re-imagine the orthodox guiding narrative of capitalism and embrace the necessary transformation of both our "society and subjectivity" (Canavan 152) that is required to prevent the complete collapse of our environment and humanity's subsequent extinction can be traced back to "the tide of human desire" on which greed floats (OC 348). Atwood makes this clear in *Payback*, when she notes that

> there are a lot [of] people who are actively opposed to any attempts to help clean up the global mess – a mess that in real terms is costing trillions of dollars a year – because they're making too much money out of the situation as it is. (199-200)

The reader's first contact with environmental discourse in *Oryx and Crake* is facilitated by the actions of Jimmy's mother, Sharon, and Bernice, his roommate at "Martha Graham" (OC 218). As the first chapter has detailed, Sharon leaves the compound because she is no longer able to participate in the consumer-oriented and "immoral" lifestyle advocated by corporate ideology (OC 64). The reader assumes that she subsequently joins a community which is the conceptual antithesis of the one from which she has escaped. In *Oryx and Crake*, the reader's only point of reference in discerning what this group could be is Bernice, Jimmy's "fundamentalist vegan" neighbour who wears "a succession of God's Gardeners T-shirts" (OC 221), eschews commercial practices, burns his imitation leather sandals in protest "of his carnivorous ways," and is anathema to the corporations that wield control over her world (OC 221). Bernice's confrontational attitude to those who do not share her environmentalist worldview, combined with Sharon's "act of sheer ideological callousness" in releasing Killer, Jimmy's pet rakunk and a tame animal, into the wild (Bergthaller 739), support the orthodox view of environmental activists as zealous idealists whose eco-friendly behaviours are imprudent and ill-advised. While the reader cannot deny that Bernice's actions can be characterized as extreme, nor find it difficult to sympathize with Jimmy over the loss of his pet, as the first chapter has maintained, Jimmy's antagonism does not mean that he is uncritical of corporate business and scientific practices.

Jimmy occupies a marginalized position within his society: he is affiliated with the powerful and influential strata of society due to his compound upbringing, but he is also disenfranchised by his inability to conform to the scientific mould held in esteem by those who control Atwood's commodified world.[37] His visceral childhood experiences with the "pigoons" at "OrganInc Farms" (OC 25), as well as the transgression of ethical boundaries he feels has taken place when he is confronted with the "ChickieNobs" at "Watson-Crick" (OC 238), demonstrates that he is able to acknowledge both the environmental and ethical cost of his way of life whilst also being subsumed by it. This allows him to provide the reader with a certain critical distance which should draw her attention to what Atwood calls "The Shadow Side" of the capitalist economy in our technological age (*Payback* 121). Jimmy's character can "show" the reader rather than "tell" her (Booth 53) that the reason why those who are in

[37] Whilst a child, he witnesses a bonfire, in which hundreds of animal carcasses are burnt following an outbreak of disease (OC 18). Jimmy feels that "all of this … was his fault, because he'd done nothing to rescue them" (OC 20). Later, when he sees Oryx for the first time on the child pornography site "HottTotts" (OC 102), he feels "culpable" for participating in her sexual commodification as he acknowledges that his desires are partly responsible for creating her lived reality (OC 104). He is able to recognize his complicity, but is unable and, to a certain extent, unwilling to secede from it.

possession of financial (and therefore) political power are reluctant to acknowledge the cost of wealth accumulation in a technologically and scientifically proficient, yet environmentally inept world is because their concern with the size of their profit margins is all-consuming. In addition, the critical distance Jimmy's character provides, encourages the reader to interrogate judiciously the assumptions held by the technocratic elite of Atwood's society regarding environmental discourse and environmental activists, and further analyse the orthodox guiding narratives that have led to the creation of Atwood's possible future.

In order to re-emphasize the common stance taken by consumerist-oriented societies apropos eco-friendly ideologues, and the necessity of interrogating our contemporary orthodox guiding narratives critically, Atwood selects the character of Lucerne to recount the orthodox view of environmental movements. This decision is significant, as although Lucerne plays a minor role in *The Year of the Flood,* she can be viewed as Toby's foil: "a character in a work who, by sharp contrast, serves to stress and highlight the distinctive temperament of the protagonist" (Abrams 256). The dyad of Lucerne and Toby is important, as the interaction of their characters and the juxtaposition of their beliefs and behaviours introduce three, interrelated concerns that are pivotal to Atwood's speculative fiction trilogy as a whole: the difficulty of transforming one's individual views and conduct in the face of globally accepted orthodox guiding narratives, the necessity of broadening one's "intersubjective reality" so that it is no longer premised on human exceptionalism (Harari 175), and the effect this transformation of subjectivity can have on conceptions of identity. This discussion will be continued in the third chapter, which will analyse how Toby and Ren, as well as the members of MaddAddam, are able to overcome the sense of human exceptionalism that lies at the heart of the conception of the human identity and how this enables them peacefully co-exist with their broader ecological context in their post-Flood landscape YF (327).

Within the narrative framework of the first two books, it can be argued that Toby and Ren attempt to complete what Jimmy began in *Oryx and Crake*. Jimmy's narrative illuminates and elucidates the environmental and ethical cost of capitalism and consumerism, even though he is unable to glimpse or even offer an alternative because he still desires and is thus (emotionally and symbolically) yoked to the ways of life they engender (Bergthaller 733). Toby and Ren have both been literal participants in the culture of instant gratification that characterizes the corporate world of *Oryx and Crake* (Bouson, "Using" 13). In contrast to Jimmy, however, they been privy to a "sunburst of a wholly different state of affairs," as Suvin would put it (221), in the form of the Gardeners, who present the reader with a novel

means of confronting the issues Jimmy's narration raises.[38] As Lucerne's character shows, however, changing one's views in the face of our orthodox guiding narratives – even when faced with a "credible" alternative – is challenging (Bergthaller 738).

Lucerne makes a half-hearted attempt to live according to Gardener credo, but ultimately fails to follow through with the intentions she voices. She exclaims to Toby that she does "want to be a responsible person" and "she really did believe that Adam One was right about so many things" (YF 136), but her cynical attitude towards certain foundational principles that she finds perplexing dissuades her from critically engaging with the Gardeners' worldview and rationale on a deeper intellectual and emotional level:

> nobody loves animals more than she did, but really there was a limit and she did not believe for one instant that slugs had any central nervous system, and to say that they had souls was to make a mockery of the whole idea of souls, and she resented that, because nobody had more respect for souls than she did, she'd always been a very spiritual person. (YF 136)

Lucerne is also dismissive of the way of life that the Gardeners' philosophy advocates, as she believes that their actions are an ineffectual and misguided attempt to save the environment from collapse. Lamenting the inconvenience and privation of the Gardeners' eco-friendly lifestyle, Lucerne piously announces that

> [a]s for saving the world, nobody wanted to save the world as much as she did, but no matter how much the Gardeners deprived themselves of proper food and clothing and even proper showers, for heaven's sake, and felt more high and mighty and virtuous than everyone else, *it wouldn't really change anything*. (YF 136; my emphasis)

What Lucerne fails to recognize, however, is that what the Gardeners' eschewal of materialism is targeting is the capitalist greed that has created the wasteful world Atwood introduces in horrifying detail to the reader in *Oryx and Crake* and expands on in *The Year of the Flood*. Like most of us, Lucerne lacks the self-reflectivity necessary to recognize the absurdity and inconsistency of her self-aggrandizing pronouncements. She looks at the state

[38] Toby is used as a sex-slave by Blanco whilst employed at "SecretBurgers" (YF 42). She also sells her eggs to a black-market buyer when she was in need of money after her mother's death and her father's suicide. Ren is employed as an exotic dancer before the Flood. Part of her job involves engaging in sexual intercourse with high-paying clients. Bouson's article "'We're Using Up the Earth. It's Almost Gone:' A Return to the Post-Apocalyptic Future in Margaret Atwood's *The Year of the Flood*" contains a detailed discussion on how the commodification of capitalism extends to the female body: pp 12 – 15.

of the natural world, but fails to s*ee* it; an act of cognitive dissonance to which even Toby succumbs in her narrative past:

> Everybody knew. Nobody admitted to knowing. If other people began to discuss it, you tuned them out, because what they were saying was both so obvious and so unthinkable. *We're using up the Earth. It's almost gone*. You can't live with such fears and keep on whistling. (YF 284-285)

Lucerne is unwilling to confront the obvious, yet inconceivable reality of the world's precarious ecological situation and is consequently unable to consider the potential value of alternative ways of thinking and behaving. Her vehement rejection of the Gardeners' lifestyle also has its origins in the deeply rooted entrenchment of capitalist ideology and rhetoric. Lucerne therefore embodies society's "loss of faith in the possibility of revolution," even when presented with the opportunity to live otherwise (Canavan 138). She retreats back to the compounds because she can no longer stand living "in [an] unsanitary septic tank with this clutch of dreamers … who didn't understand the first thing about how the world really worked" (YF 136). Her choice to return to her former materially-advantageous position as a compound wife positions Lucerne as the embodiment of capitalism's revulsion at the "heretical idea" that we can and should "slow … down the pace of progress and growth [and] be happy with what we already have" (Harari 249); the logic that underlies the Gardeners' rejection of consumerism. She is content to return to a husband who is "as cold as a crypt" (YF 139), because he supports her financially, and "she'd wasted no time" (YF 249) in transforming back into the "hothouse flower" that she once was (YF 94).

Lucerne's character also voices the ignorance, apathy and selfishness that plagues those privileged enough to lead lives cushioned by opulence and made effortless by their access to wealth. She, like the corporate "aristocracy" that her character represents, is shielded from the end stages of ecological collapse by virtue of her economic standing (Atwood, *Payback* 182). Her strata of society has, as Atwood observes, "controlled the government for a long time, and have made laws that benefit themselves," thereby enabling them to "corner a disproportionate amount of the state's wealth" at the expense of the financial and social security of those whom they marginalize and exclude (*Payback* 182).[39]

Lucerne's retreat back to the compounds also emphasizes the symbiotic relationship

[39] The reader should compare and contrast Lucerne's life in *The Year of the Flood* with the life Oryx has been forced to lead in *Oryx and Crake* to understand how economic standing impacts the ability to avert the consequences of climate change: the poverty that characterizes Oryx's community means that they are unable to overcome the climate change that has decimated their primary source of material wealth – farming.

that exists between capitalism and science in a technologically proficient world, and its contribution to the paradoxical discourse of sustainability. While she is living with the Gardeners, Lucerne is unwavering in her dedication to the authorised belief that only scientific progress offers humanity the chance to avert ecocide. She maintains that the compounds, where she has lived the majority of her life, are in possession of "the latest tech" which, according to her and the society she embodies, means that they are "*so much more truly green than those Purist Gardeners*" (YF 255). She is confident in her assumption that the technologies they produce and develop are sufficient to redeem humanity from the immanent ecological collapse which has been caused by our rapacious technological progress in the first place. This perspective, in conjunction with capitalism's rejection of moderation and corporate influence over what scientists are authorized to create and produce, are two of the greatest obstacles that humanity needs to overcome in the technological age should we wish to survive beyond the possible future Atwood presents to the reader.

While the Gardeners are sceptical of technological and scientific progress, this does not suggest, as Hoogheem states and Lucerne implies, that they "betray a fundamental, even wilful understanding of technology" (Hoogheem 62). Hoogheem supports his hypothesis with a passage wherein Ren is chastised by the female Gardner elders for picking up "a beautiful camera phone [that was] lying on the sidewalk [because] [s]uch a thing can hurt you! It can burn your brain! Don't even look at it: if you can see it, it can see you!" (YF 81). As Atwood states in her essay "Dire Cartographies," however, the Gardeners "avoid [these] high-tech communication devices … on the grounds that they can be used to spy on you – which is entirely true" (93). Most readers are thus as surprised as Toby when she discovers that the Gardener elders possess a laptop. Even though this may, as Hoogheem posits, seem anathema to their beliefs, once the reader comes to discover that it is primarily used for "the storage of crucial data pertaining to the Exfernal World" (YF 225) – mostly "[f]ormulae. Long lines of code. Test secrets, proprietary codes" brought to them by Compound escapees like Jimmy's mother (YF 294) – they come to realize, like Toby does, that the Gardeners are a "real and potentially explosive power" (YF 226). This insight is compounded when Toby notes that the laptop is used to communicate with "other branches in different pleebs, and even in other cities [and] cells of hidden Exfernal sympathizers embedded at every level, even within the Corporations themselves" (YF 226). The information provided by these moles is invaluable, as "by means of it, the intentions and movements of their enemies could be monitored, at least in part" (YF 226). The Gardeners are therefore much more "practical [and] tactical" than previously thought or expected (YF 293); an assessment which has escaped characters

like Lucerne who insist that the Gardeners are "fugitives from reality" (YF 57). To the contrary, this collection of "friendly though bizarre people, with their wacky religion" are the least blind to the reality of both the corporate machinations and environmental situation the world is currently facing (YF 53).

Lucerne, in contrast to the Gardeners, is unable to acknowledge that while the power of capitalism (and scientific progress) seems indisputable in our technological present, so "did the divine rights of kings" in our feudal past, as Le Guin notes in her 2014 "National Book Awards Speech" (para. 5). Lucerne is loath to modify her subjective judgements regarding the kind of pseudo-environmentalism practised by the general social order because this kind of environmentalism – thought of as the crux of sustainable living in a technological age – still allows her to participate in the consumerism and commodification that, essentially, gives her life meaning. Her obstinacy is primarily a result of her hesitancy to catalyse any change to the orthodox guiding narrative of capitalism which informs her sense of self. She is more concerned with decorating a room in "sunrise colours" (YF 139) than in preserving the possibility of future generations, like her daughter Ren, actually witnessing one. Her skewed prioritization derives from the fact that decorating makes her feel good, the hallmark of capitalist ethics which is neatly supported by her society's interpretation of humanism that insists that the meaning of life is tied to the subjective experience of positive emotions (Harari 269).

Lucerne and the society she epitomizes clearly fail to recognize that the worldview that underlies the orthodox perception of scientific progress, capitalism and the discourse of sustainability in the technological age are three crucial contributors to the ecological destruction with which Atwood's fictional characters, as well as her contemporary readers, must contend. When the "web of meaning" (Harari 175) communicated by our current orthodox guiding narratives is combined with the manipulative rhetoric the corporations employ in order to make the society they control "governable" (Bergthaller 729), the reader can perceive why the entrenchment of capitalism's worldview obstructs the Gardeners' ability to actualize environmentalism as a way of life in their broader social context.

The Limitations of Religious Thinking: The Gardeners' "Tragic Apocalypticism"

Although the Gardeners' community is utopic when juxtaposed against Atwood's corporate society, the reader should remain aware, as Atwood points out in her essay "Dire Cartographies: The Road to Ustopia," that a utopia always contains dystopic elements, hence her re-imagined term, "ustopia" (66). In addition, both Atwood's critical writings and Suvin's *Metamorphoses of Science Fiction* emphasize that the definition of "utopia" has, "at its roots the simultaneous indication of a space and a state" that are, at the same time, "nonexisting (*ou*) as well as good (*eu*)" (Suvin 51). This term's etymology emphasizes that the imagined perfect society cannot exist, and Atwood draws on this antonymy in her construction of the Gardeners' "ustopia," as their ostensibly utopic community possesses certain structural and ideological deficiencies that are usually associated with dystopias (Atwood, "Dire" 66).

The Gardeners are, as Hoogheem points out, still hierarchical and patriarchal in their social organization (66). They have church elders, a principle male advisor, Adam One, and the women are told to "wear their hair long [because] the aesthetic preference was God's" (YF 56).[40] In addition, some members are unrepentantly flawed individuals: Burt is a likely paedophile and definitely involved in the illegal drug trade, whereas Mugi attempts repeatedly to sexually harass the female Gardeners. While these are serious issues that need to be addressed, due to space limitations, this chapter will engage with the most dystopic element of the Gardeners' community: their "tragic" perspective of the apocalypse (Jennings 13).

Following Greg Garrard, Jennings argues that a narrative that explores notions of the apocalypse uses "either a tragic or a comic plot, depending on one's 'frame of acceptance' with regard to the role and/or responsibility of the individual or community in averting or hastening the imagined end" (Jennings 12). A tragic plot posits that "evil is fundamentally rooted in guilt" and is inherent to human nature (Jennings 12) and that the "'predetermined'" end must result in either "sacrifice and death" (Garrard qtd. in Jennings 13). In contrast, "comic visions" of the apocalypse (Jennings 12) view evil "in terms of human error" and thus see "redemption [as] contingent upon the recognition (and rectification) of mistakes" (Jennings 13). In short, a tragic plot "demands victimhood and comedy permits agency" (Jennings 13). One plot sees the end as "final [and] catastrophic" (Northover, "Ecological

[40] Hoogheem calls them patriarchal primarily due to the fact that no "corresponding Eve One" is mentioned to complement Adam One in *The Year of the Flood* (66). The story of Eve One, Katrina, is, however, relayed to the reader in *MaddAddam* – see pp. 293-314.

83), the other chooses to view the possibility of the apocalypse "in its original sense of revelation (of a new age), a liberation or salvation from current difficult times" (Northover, "Ecological" 83). Jennings maintains that Atwood employs both senses in *The Year of the Flood* in order to perform a "critique of apocalyptic rhetoric as it is located in competing discourses of ecocritical movements" (11) and to demonstrate to the reader the limitations of religious thinking within the context of an ecological apocalypse, as the pessimism engendered by the belief that the end is unavoidable and preordained elides any hope that it can be averted (11).

According to Jennings, this is why *The Year of the Flood* should be seen as "a cautionary tale a*bout* our cautionary tales" (11), as it is capable of showing the reader how apocalyptic thinking, "if taken to nihilistic extremes" (11), can bring "about the very disasters [it] warn[s] against" (11). Atwood draws the reader's attention to the dangers inherent to this perspective of events by juxtaposing the 'tragic' and the 'comic' visions of apocalypse against each other in order to illustrate how these two different approaches to the apocalypse affect one's reaction to and perception of the same event. She therefore contrasts the Gardeners' perspective of the Flood, which is "tragic" (Jennings 13), as I will shortly argue with reference to two of Adam One's sermons, with the "narrative framework of the text itself [which] presents a comic vision" of the apocalypse (Jennings 13), as the story carries on after the end has occurred. The book itself therefore presents the reader with opportunity to "imaginative[ly] explore [the] possibilities" presented to her by "the revelation of a new age" (Northover, "Ecological" 85).

Adam One's sermons "Of the Fragility of the Universe" (YF 507) and "Of the Two Floods and the Two Covenants" (YF 108) make it clear that the Gardeners have a "tragic" perspective of events (YF 108). Firstly, they believe in an inevitable end that cannot be averted. In his "Covenants" sermon, Adam One reimagines the story of the "First Flood" within the boundaries of environmentalism (YF 108). He tells his followers (and Atwood's readers) that the Biblical Flood with which we are familiar was sent by God in retribution for humanity's previous abandonment of "Adam's original stewardship" (YF 108). He notes that God promised Noah that after the "First Flood of extinctions" took place (YF 108), He would never again "smite every living thing" (YF 109) because He acknowledges that the consequences of humanity forsaking their divinely-appointed "task" should lie with humanity alone (YF 108). Adam supports his hypothesis with a scriptural passage from the book of Genesis, in which "the Human Words of God" state that God promised Noah that He "will not curse the ground again any more for man's sake; for the imagination of man's heart is

evil from his youth" (YF 109). According to Adam One, this means that society "must be ready for the time when those who have broken trust with the Animals – yes, wiped them from the face of the Earth – will be swept away by the Waterless Flood" (YF 509). He characterizes this Flood as "a plague that infects no Species but our own, and that will leave all other Creatures untouched" (YF 509), because of the original covenant God made with Noah after the "First Flood" wherein he promised Noah that his next punishment would be directed at humankind alone (YF 108). Adam One's decision to use this specific passage from Genesis to support his interpretation of the apocalypse is evidence that he, and the Gardeners, believe the following: evil is inherent to humanity, therefore contemporary technological society is necessarily duplicating the same behaviour that necessitated God's punishment in the first place. Humanity will thus inevitably and unavoidably suffer retribution for our repeated offence, which will end in our "sacrifice and death" (Garrard qtd. in Jennings 13).

It must be noted that although the Gardeners' "take biblical prophecy literally," one of the hallmarks of a tragic perspective of the apocalypse (Jennings 13), they still possess a certain sense of agency and hope that they could possibly forestall the inevitable, two characteristics of the comic perspective of events. They passively resist capitalism, they protest against "eat[ing] anything with a face" (YF 48), and collect important information from employees who defect from the corporations. They also believe, as previous sections of this chapter have argued, that if society were to embrace their way of life, we could redeem the planet and, hopefully, in the process, "restore" ourselves in the eyes of God (15). They are, however, still "tragic" as their certainty in the coming of the Flood, the form it will take, and why it will be sent, is dogmatic and unwavering. This prohibits them from re-imagining their orthodox guiding narrative and "symbolic order" (Bergthaller 738) and subsequently seeing the possibility of the Flood occurring as an opportunity to "avert [the end of the world] by persuasive means" (Garrard qtd. in Jennings 11). The Gardeners can obviously perceive that their "environmental conscious-raising" (Bouson, "Using" 23) is not effecting the kind of changes they would like to see happening within their broader social context, but their tragic perspective of events means that they are content to give up their agency to God, "the Alpha predator" (YF 411), who will undoubtedly seek His revenge against those who have wronged His "Creatures" (YF 13). In addition, the Gardeners position themselves as a "plural Noah" (YF 110) because they believe that they alone have dedicated themselves to "keeping God's beloved [animal] Species safe" (YF 108). They thus believe that that they alone have been

"called [and] forewarned" about the coming calamity by God (YF 108), and therefore exempt themselves from His chastisement:

> we Gardeners will cherish within us the knowledge of the Species, and of their preciousness to God. We must ferry this priceless knowledge over the face of the Waterless Waters, as if within an ark. (YF 110)

As Jennings observes, the Gardeners' belief that they are "the chosen believers" who will inherit the "new world" that will appear once the Flood has "cleanse[d] the world" (13) further inhibits them from embracing a "comic" perspective of events (Jennings 13). This conviction clearly positions the Gardeners as separate from and superior to the rest of humanity, who are the "deserving damned," as they have failed to embrace the true religion of the "righteous oppressed" (Jennings 13). The Gardeners see the rest of society as heretics who cannot be redeemed.

Their belief that their salvation is guaranteed contradicts their primary philosophical principle, which is that humanity should not "vainly imagine that we are set above other Life" (YF 64). Firstly, their self-ordained behavioural role of "bear[ing] witness" (YF 300) is still premised on a covert belief in human exceptionalism. The Gardeners' creed maintains that the human race, in the form of the Gardeners, will come out as the victors in the game of "Exctintathon" (OC 98) that humanity is playing with its biosphere, as they are convinced that they will be left alive by God (and Nature) for the sole purpose of reassuming their rightful position as "stewards of God's Creation" (Garrard qtd. in Jennings 15). Secondly, the "ecological stance" that ultimately structures the Gardeners' symbolic order and designates the role they must play in the Flood is, according to Jennings, based on a contradictory "inhumanism" (14). She argues that the Gardeners' espoused belief in the equality of all life means that "they care more for the suffering of fish than people" (Jennings 14). While the ideological basis of the Gardeners' faith rests on the belief that all life is sacred because it has been created by God (Hoogheem 61), this should, in theory, extend to the human animal as well, "for are not Human beings God's Creatures too?" (YF 423). The Gardeners, however, refuse to "confront the extensive human suffering" (Jennings 14) that is prevalent in their broader social context. This attitude is most evident in how the surviving Gardeners interact with other humans once the Flood hits. As Adam One tells the Gardeners before the Flood:

> [w]hen the Waterless Waters rise … the people will try to save themselves from drowning. They will clutch at any straw. Be sure that you are not that straw, my Friends, for if you are clutched or even touched, you too will drown. (YF 26)

Thus, once the Flood begins, the Gardeners sequester themselves in their Ararats and defend their walls against invasion, refusing to save "those people [who] had called for help" (YF 5) or even properly confront their anguish: "Toby had watched [them] from the roof [of her Ararat at the AnooYoo Spa], crouched behind one of the planters, but she hadn't watched for long" (YF 5). The moral apartheid which is a necessary consequence of the Gardeners' dogmatic apocalypticism therefore inhibits their "ability to see and ethically respond to the 'other'" (Jennings 16), as, according to their perspective of events, God has already judged who are the "chosen ones" worthy of salvation, and who is deserving of punishment (YF 110). They adhere to their rigid behavioural and ethical systems because they believe that this is what makes them worthy of God's grace and mercy. It is the Gardeners' certainty in their own survival that allows Jennings to claim that they are "not so much concerned with preserving life but passively standing by as witness to its annihilation" (14).

This observation is supported by the following: in contrast to Noah's role of *actively* saving the animals from death by sequestering them in his Ark, the Gardeners are convinced that their "role in respect to the Creatures" in the technological age is "to bear witness" to their destruction and to "guard the memories and genomes of the departed" (YF 300), so that once the Waterless Flood has come to pass, they could "replenish the Earth. Or Something like that" (YF 56). Toby, who has always been critical of the Gardeners' view of the Flood, wonders whether Adam One "harbour[s] a dream of restoring all the lost Species via their preserved DNA codes, once a more ethical and technically proficient future had replaced the depressing present" (YF 295). She asks whether "that [was] his vision of the ultimate Ark" (YF 295), a notion which is supported by the rhetoric Adam uses in his "Covenants" sermon (YF 107) and the first stanza of the hymn, "My Body Is My Earthly Ark," which is sung on the day the Gardeners' celebrate "The Festival of Arks" (YF 107). This liturgy states that

> My body is my earthly Ark;
> It's proof against the Flood;
> It holds all Creatures in its heart,
> And knows they are good. (YF 111)

Toby's question, however, gives the reader pause to question the following: is Adam One's desire to "replenish the Earth" (YF 56) simply rhetorical? The reader is never given direct access to his consciousness, as all her imaginative engagements with Adam's character take place through others, so she cannot be sure of his intentions. This notion is, however, given credence when the reader realizes that, should the Flood come to pass in the form that the Gardeners believe it will, contemporary civilization will collapse and it will subsequently be impossible to recreate the advanced genetic sciences that will be necessary to clone animals from their DNA and re-populate the Earth. The reader finds out in *MaddAddam* that this is indeed true: while some trained scientists survived the Flood, they do not venture near practising science; instead, they perform basic engineering, such as repairing solar power cells. It is, therefore, more likely that Adam One means that once humanity has been wiped out by the Flood, the animals whom we have not managed to exterminate will be able to procreate and flourish. This interpretation is further supported by his first sermon "Of the Creation, and of the Naming of the Animals" (YF 13) when he states that "[t]he time of the Naming is not over, my friends. In His sight, we may still be living in the sixth day" (YF 15), which is, according to Genesis, the day on which God "populated [the dry land] with Animals, and with Plants and Trees" and told them to "multiply" (YF 14).

The passivity inherent to the Gardeners' self-proclaimed role of bearing "witness" (YF 300) also endorses the observation that Adam One's idea of "replenishing the Earth" (YF 56) is purely rhetorical, as it draws the reader's attention to how their belief that the Flood will come to pass allows them to abnegate any sense of "responsibility and agency" (Jennings 13) towards achieving their ethical, ecological and moral objectives in their broader context. This is because the voyeurism that their inaction engenders clearly undermines their self-appointed task of being "good stewards of God's creation," which leads to the assessment that their symbolic order is inherently contradictory (Garrard qtd. in Jennings 15). These ideological paradoxes are given explicit narrative form in *The Year of the Flood* in an argument between Adam One and Zeb, his brother and a high-ranking Gardener elder, when they disagree about the Gardeners' passive tactics. The reader would assume that Gardeners' proximity to an "endangered-species luxury couture operation called Slink" (YF 37), which masquerades as a costume shop, but "kill[s] the animals on the premises" (YF 37), as well as to "Rarity," a "chain of gourmet restaurants" that buy the "skinned carcasses" of endangered animals from "Slink" to serve in their "private banquet rooms" (YF 37), would urge them to act against those who have "violated [their] kinship" with these animals (YF 15). Adam,

however, urges the Gardeners' inaction as their pacifism prohibits "fighting blood with blood. I thought we'd agreed on that" (YF 300). Zeb, by contrast, tells Adam that

> [p]eace only goes so far … There's at least a hundred new extinct species since this time last month. They got fucking eaten! We can't just sit here and watch the lights blink out. Have to begin somewhere. Today, SecretBurgers, tomorrow, that fucking gourmet restaurant chain. Rarity. That needs to go. (YF 300)

The Gardeners' relinquishment of responsibility and accountability is also anathema to their conviction that "if all were to follow [their] example, what a change would be wrought on our Planet" (YF 13), as the passivity and stoicism engendered by their tragic view of the apocalypse fatally undermines their ability to achieve their ecological objective. Toby recognizes this inconsistency early on in the narrative when she is first introduced to the Gardeners' creed and questions "why be so picky about lifestyle details if you believed everyone would soon be wiped off the face of the planet?" (YF 56). What Toby fails to consider, however, is that the Gardeners believe that they will be "providentially sequestered" (443) by God, and will therefore be free to embrace their new world order; one which is premised on self-sufficiency, reverence, compassion and interspecies respect. Adam's insistence on remaining impassive in the face of the annihilation of the environment he observes taking place around him, coupled with his group's failure to respond to the cruelty and violence that is perpetrated against animals in his own neighbourhood, therefore demonstrates that the Gardeners' belief that the Waterless Flood will come to pass, and the apathy produced by this perspective, means that they wish to bring what they view as an inevitable end to fruition (Jennings 12).

It is also important to note that while the Gardeners feel as though their "[s]piritual guidance" has prepared them for the coming of the Flood, "to put it a materialistic way: [they] knew a global pandemic when [they] saw one" (YF 413). As Atwood notes in *Payback*, "[m]aybe a pandemic plague is part of Nature's cost-benefit analysis … When Mankind becomes too irritating … a plague results" (187). This comment can also illuminate why the Gardeners do not take any agential action to avert "the imagined end" (Jennings 12). The Gardeners' doctrine makes it clear that they see humanity as a pest, and that they were therefore expecting God to take action against those who are desecrating His Garden. Although Crake does not believe in God or nature with "a capital N" (OC 242), it is evident that he too draws on this idea: the plague of humanity needs to be exterminated, and because he does not see nature as capable of asserting agency, as his characterization of it suggests, he

therefore takes it upon himself to rid the Earth of the human animal in order to preserve its equilibrium.

This discussion of the Gardeners' apocalypticism makes it clear that the imaginative framework or "symbolic order" within which they believe their actions can be construed as "meaningful and 'good'" (Bergthaller 738) is premised on the re-occurrence of a cataclysmic event sent by God in order to punish humanity, leaving the chosen few to experience a return to the Garden of the Earth in its first Edenic state. Once the Flood has come to pass, however, the Gardeners' symbolic order disintegrates, effacing the circumstances in which their passive resistance to the corporations' social and moral order could be construed as appropriate. The Flood also effectively decontextualizes the Gardeners' re-imagined orthodox guiding narratives, as the reality that necessitated the creation of an alternative way of living and being no longer exists. The greatest challenge with which they are faced after they survive what they regard as the inevitable end, however, is trying to cope with the reality of the Flood, as the kind of world that it produces does not conform to the narrative which the Gardeners told themselves about this event:

> True, there is a certain – let us not say *disappointment*. The debris left by the Waterless Flood, like that left by any receding flood, is not attractive. It will take a long time for our longed-for Eden to appear, my Friends. (YF 443)

The Gardeners' failure to achieve their ideal and experience the utopia that they expected means that they are necessarily accompanied by "despair and nihilism" (Jennings 15). As Adam One states once the Flood has occurred,

> We did not realize then how much better those times [at the Rooftop Garden] were, compared with the dark days we are living through now. Then, we enjoyed the prospect [of the post-Flood world] from our peaceful Garden … [and] we viewed it from a space of restoration and renewal, flourishing with innocent Plants and industrious Bees. We raised our voices in song, sure that we would prevail, for our aims were worthy and our methods without malice. So we believed, in our innocence. (YF 485)

As Hoogheem and Jennings note, the lack of agency and the inflexibility that necessarily accompanies the Gardeners' "tragic" perspective of events (Jennings 13), renders them incapable of seeing that the world that the Flood actually leaves behind as an opportunity to self-create. According to their symbolic order, God is responsible for ushering

in a new Eden and they have been left alive to receive it. Hoogheem argues the Gardeners who remain with Adam One after "a cadre of disillusioned" members leave to form MaddAddam, are unyielding in their orthodox interpretation of events (67). He suggests that this trait calcifies their doctrine and eliminates any chance of their further revising their already recontextualized guiding narratives and re-adjusting their behaviours so that their "orthopraxis" can remain contextually relevant in the secular and post-capitalist world created by the Flood; one whose reality is anathema to their expectations (Hoogheem 62). They fail to acknowledge that they can now utilize and consume the abundance of materials and products to which they now have access, without the fear of God's retribution, or the guilt that they would necessarily feel for contributing to the capitalist system, because they still feel that these behaviours are dystopic in the sense that they support that which they abhor. In addition, instead of being proactive and rebuilding their community with the skills and knowledge that they have developed from their belief system, Adam and the few remaining orthodox Gardeners "wander despondently from one hiding place to the next" (Hoogheem 67), scavenging for "resources" that could sustain them (YF 414) because the landscape that and lifestyle that they believe they were promised has not materialized. The orthodox Gardeners remain so fixated on 'the end' and, as the reader can infer from their passivity, so focussed on "hastening the 'predetermined end'" (Jennings 12) so that they can usher in their utopia, that they have failed to consider that their "imagined perfect society" cannot, by definition, be actualized (Atwood, "Dire" 66). The world that the Flood leaves behind is not what they expected, and their dogmatic interpretation of events leaves them incapable of embracing the alternative that is presented to them. This is the primary limitation of religious thinking: the unwavering dedication to authorized beliefs. Atwood has decided to critique this orthodoxy in order to show the reader why she needs to choose the "comic vision" of the apocalypse over a "tragic" perspective of events (Jennings 13). This performance is duplicated by her texts. As the following chapter will show, the Flood does not end human history nor usher in an ecological utopia, as the Gardeners (and Crake) hoped it would. Instead, it presents the reader with an "ustopia" that could exist after the collapse of modern civilization and the capitalist economy (Atwood, "Dire" 66), as within each utopia [exists] a concealed dystopia" and vice versa (Atwood, "Dire" 85). Humanity's history is not "swept away by the Waterless Flood" (YF 373). Rather, as the narrative of present of *MaddAddam* shows the reader, the human survivors of the Flood are gifted with the opportunity to re-imagine it.

Thus, in conclusion, the answer to the question that lies at the heart of this chapter, which is whether the "anthropotechnology" of religious narratives (Sloterdijk 23) – specifically the narratives associated with the "eco-religion" that is practiced by the God's Gardeners (Bouson, "Using" 9) – is a viable and effective means of confronting the environmental catastrophe that the characters in Atwood's fictional world are currently facing, is, sadly, a "no." As Bergthaller states, the Gardeners' ecological and ethical beliefs and the rituals that support them can be seen as an appropriate response to the ecological crisis, but their "world-view clearly does not lay out a viable path to a sustainable future" because it is premised on the inevitability of the Flood (738). The Gardeners' intentions are good, but their execution of their ideas is lacking. This is the reason why the Gardeners are unable to effect any large-scale changes to the way in which their broader society perceives of and interacts with their environmental context. The objectives that they wish to achieve are laudable, and the reader should attempt to emulate these in her daily life. Their failure, however, stems from the entrenchment of capitalist ideology and the discourse of sustainability – two orthodox guiding narratives which contribute to the "deficiencies" (Iser 79) inherent to the way in technological civilization is organized – and the limitations of their religious thinking: the "tragic apocalypticism" (Jennings 13) that permeates their worldview. This is the dystopia that is embedded within their utopia, and the reason why their community can also be designated an "ustopia" ("Atwood, "Dire" 66).

Despite the Gardeners' shortcomings, the value that they bring to Atwood's speculative fiction trilogy and her readers lies in their ability cultivate a truly environmentally-friendly and self-reliant lifestyle and show the reader how this way of life can be achieved in her present context. In addition, the Gardeners' ideology and praxis are capable of drawing the reader's attention to why she needs to try and accomplish the Gardeners' ecological, ethical and moral objectives in the contemporary technological age. This is why Atwood has situated the possibility of redeeming humanity and the environment in the hands of an eclectic group of religious environmentalists: the reader needs to consider seriously the alternative way of living and being presented to her by the God's Gardeners in *The Year of the Flood,* as well as undertaking to understand exactly how and why their detailed attempt at creating such an alternative is flawed. Considering both the successes and the failures of the Gardeners is essential to the reader as part of our own reimagining of a possible future.

The third chapter of this thesis will argue that community formed by the MaddAddamites, Toby, Ren, the Crakers and the Pigoons in the narrative present of the third text symbolize the kind of social and moral order that needs to be achieved in order to facilitate the practice of environmentalism as way of life (Canavan 152). Although the reader cannot become Crakers, Crake's idealistic and unachievable embodiment of a truly environmentally-friendly people as they have been genetically engineered to live in harmony with their environment, she can see Toby, Ren and the MaddAddamites as potential exemplars who can teach her the value of authentically broadening their "intersubjective reality" (Harari 175), thereby continuing the re-education of the human animal that the Gardeners begin in *Oryx and Crake*. If present human society fails to actualize the kind of community envisioned in *MaddAddam*, the trilogy's narrative arc suggests that Crake's option would be the necessary alternative in order to save humanity from suicide-by-ecocide. The "cyclical and dialogical way in which [Atwoods' texts] relate to each other" therefore encourage the reader to confront the very real possibility of the extinction of our own species in the near future (Northover, "Ecological" 89).

Chapter 3

The Necessity of 'Reading Beyond the End' in Margaret Atwood's *MaddAddam*

MaddAddam, published in 2013, is the final chapter of Margaret Atwood's tripartite exploration into what humanity's possible future may hold. Its narrative past is set prior to and overlaps with the sequence of events explored by the retrospective passages of *Oryx and Crake* and *The Year of the Flood*, thereby enlarging and recontextualizing her pre-Flood world (Northover, "Ecological" 91). *MaddAddam* is also able to provide Atwood's readers with additional information about the enigmatic figures of Crake, Zeb and Adam One, as well as the creation and history of the God's Gardeners, whose ideology and praxis are explored in *The Year of the Flood.* The narrative present of *MaddAddam* is set shortly after the climactic final sentence of *The Year of the Flood* and affords the reader the opportunity to experience fully the post-capitalist and post-human landscape engendered by the Waterless Flood, Crake's genocidal and virulent plague that exterminates the majority of human race and collapses contemporary technological civilization. The narrative present of the first two texts of Atwood's speculative fiction trilogy presents the reader with the story of how the post-Flood world came about and allows her to engage imaginatively with the trials and tribulations experienced by the individual human survivors of the Flood. *MaddAddam* introduces her to how the community formed by MaddAddam, the bioterrorist group around whom the narrative of this eponymous third text pivots, and former Gardeners Toby and Ren, handle the social and practical "problems arising out of the new situation" of their post-Flood context (Heinlein 3). Of particular concern is whether their human community will be able to live in harmony with the two groups of genetically-engineered beings with whom they share their post-Flood environment: the Crakers, "the strange … quasi-humans who lived by the sea" (MA 11), and the Pigoons, transgenic pigs who possess "human-neocortex tissue" (MA 19). *MaddAddam*'s narrative investigates how the human survivors of the Flood are able to gradually recontextualize their orthodox guiding narratives and authentically broaden their "intersubjective reality" so that their worldview can include both the Pigoons and the Crakers (Harari 175).

As the last book in her speculative fiction trilogy, *MaddAddam* is the textual space wherein the characters and narrative claims made by *Oryx and Crake* and *The Year of the Flood* converge, bringing to a close Atwood's argument regarding *what* "revolutionary

changes" (Canavan 152) need to be made by humanity to its current orthodox guiding narratives of human exceptionalism, capitalism, and the discourse of sustainability and the conceptions of identity they engender, and *why* searching for alternative ways of living and being in the reader's present context is critical to the future survival of the human species.

The Foundation of the MaddAddamites' Worldview

The organization that calls itself MaddAddam is formally introduced to the reader in *The Year of the Flood*. The reader learns from this text that MaddAddam was created by a band of former God's Gardeners who left the fold because they disagreed with Adam One about the role they should be playing in "respect to the Creatures" (YF 300). They also count among their members "[t]op scientists – gene splicers who'd bailed out of the Corps and gone underground because they hated what the corps were doing" (YF 398 – 399).[41] As the second chapter has argued, Zeb, who becomes the leader of MaddAddam, feels that the Gardeners' passive resistance to the Corporations and their non-participation in the "cruelty and bloodshed and violence" (YF 15) that characterizes contemporary technological society's interactions with their broader ecological context "goes only so far" (YF 300).

In contrast to the abdication of agency and responsibility that characterizes Adam One's and the orthodox Gardeners' insistence that "[a]ll [they] can do in this world, now, is to learn what to avoid" (MA 255), the MaddAddamites acknowledge that the responsibility to make meaningful changes to the way the capitalist system operates lies with them. MaddAddam therefore directs its attention to dismantling capitalism and thereby gifting the planet with the opportunity to "repair itself. Before it was too late and everything went extinct" (YF 399). They believe that by asserting their agency collectively through their "public acts of bio-resistance" (Bouson, "Using" 20), which target the physical infrastructure and the "technological connections" (YF 271) that facilitate the corporate agenda, will "make [people] think" (YF 399) and encourage the creation of "a renewed free space in which another kind of life might be possible" (Canavan 139).

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[41] The narrative of *Oryx and Crake* reveals MaddAddam's existence during a conversation that takes place between Jimmy and Crake during their late adolescence. Crake discovers that the dreary and tedious online game "Extinctathon" (OC 252) belies a greater purpose: this site hides the MaddAddamites' in plain sight of the Corporations, allowing them to communicate with each other through the game's "playroom" (OC 253) and organize and synchronize their attacks against the oligarchal Corporations that rule Atwood's pre-Flood world. During his early adulthood, Crake is affiliated with the MaddAddamites: Zeb tells Toby that they thought that he was their "inside guy, feeding [them] stuff from the Corps through the MaddAddam chatroom" (MA 334). However, they came to learn that he had a secret agenda: he initially curried favour with this group so that he could use the "chatroom" (MA 334) to track down and kidnap the majority of their members, where after he exploited MaddAddam's corporate scientists' to facilitate the creation of the Crakers (MA 43).

One of MaddAddam's "bio-attacks" (YF 327) involves the creation and release of "a new form of the common house mouse addicted to the insulation on electrical wiring," which they use with the intention of disrupting the system that distributes electricity (OC 253). They hope that the damage they cause will draw contemporary technological society's attention to their continued use of and over-reliance on the non-renewable resources that are used to fuel all aspects of its highly mechanized civilization, and lead to the proactive search for and use of alternative energy sources. The MaddAddamites also focus their efforts on impairing the efficacy of the transportation networks and vehicles that facilitate the production, manufacture and consumption of capitalist commodities. In order to do so, they create a "splice porcubeaver" (YF 322) that is particularly partial to "devastating [the] fan belts and transmission systems" of automobiles (OC 253), and distribute an "asphalt-eating microbe that [melts] highways" (YF 323) and effectively turns them into "sand" (OC 253). They believe that the disorder and inconvenience these "bioforms" (YF 399) create will encourage contemporary technological society to acknowledge their dependence on fossil fuels, as well as give them pause to consider the scale of the sophisticated systems of collaboration required by capitalism and how they negatively impact the landscape (Harari 181).

MaddAddam anticipates that the reprieve that their acts of sabotage create will encourage society to adopt "a form of social organization that promotes social and ecological wellbeing" (Edwards, "Ecological Culture" par. 5), as well as draw the general population's attention to what could plausibly occur should modern human civilization continue to operate as it currently does. If humanity does not decide to actively recontextualize the orthodox guiding narrative of capitalism and decide to take the opportunity provided by the MaddAddamites to envision and enact alternatives to the capitalist system and the dominant corporate worldview, "an unprecedented number of housefires" will be the least of the problems humanity will have to contend with in a world devastated by an ecological apocalypse. (OC 253). The MaddAddamites fail to accomplish their goal of providing society with the opportunity and the motivation to create alternatives to the dominant social, political and financial systems because their endeavours are too localized to effect change on a global scale, however. Ultimately, Crake's pre-emptive strike on humanity achieves their primary objective of stopping "people from wasting everything" (YF 399) by effectively shutting "the whole system" down (OC 254).

In contrast to the Gardeners' apocalyptic worldview, in which they give over their agency to a higher power, and Crake's view that humanity is incapable of steering itself "in a more beneficial direction that the ones hitherto taken" (OC 346), the MaddAddamites have

faith that contemporary humanity is capable of performing eco-friendly behaviours and can subsequently restore the planet. Their resolve and their determination to make a considerable difference in their present context makes it clear that this group possesses that which the Gardeners and Crake do not – the hope that humanity could experience a future, even though the MaddAddamites "do not know if [it] will really happen" (MA 292). When the Flood comes to pass, this difference in perspective allows the MaddAddamites to view this event as a revelation and an affirmation that "things might yet be otherwise" (Canavan 156), instead of a "predetermined 'end'," as the Gardeners do (Jennings 13). Toby and Ren's perspective of events is similar to the MaddAddamites as, like them, they "refuse to take biblical prophecy literally" (Jennings 13). Toby is inherently sceptical of the Gardeners' dogmatic interpretation of the apocalypse when she joins the Gardeners, which encourages her to reflect critically on their ideology. Early on in *The Year of the Flood*, Toby observes that the "Gardeners were convinced of impending disaster, through no solid evidence that [she] could see. Maybe they were reading bird entrails" (YF 56). Ren, even as a child, is able to discern the contradictory nature of the Gardeners' symbolic order, which enables her to analyse and interrogate the Gardeners' creed. She observes that while the Gardeners were "strict about not killing Life … on the other hand they said Death was a natural process, which was sort of a contradiction, now that I think about it" (YF 71). Ren and Toby's eschewal of the Gardeners' apocalypticism could be a consequence of the fact that they are both forced to leave the Gardeners' community years before the Flood happens and are therefore able to analyse and engage critically with the Gardeners' doctrine on their own, outside the "web of meaning" created, perpetuated and maintained by the Gardeners' closed community (Harari 171). The reason why the MaddAddamites, Toby and Ren are able to survive past the "epochal" end signified by the Waterless Flood (Jennings 13) is because the resilience cultivated by their optimistic worldview allows them to embrace the opportunity that the Flood affords them to "live another kind of life" (Canavan 139). In juxtaposition, the orthodox Gardeners who remain with Adam One after the Flood drift from Ararat to Ararat, mourning for the "more hopeful era [where they] spent such happy days together" (YF 507) because the reality of the Flood does not occur as they envisioned.[42] As Jennings states,

[42] Even though they are fewer in number, it is extremely probable that, if they wished to, they could also have survived beyond the end of the Flood. Indeed, just after Toby returns to the cobb-house following Amanda's rescue she remarks that "if anyone would know how to … it would be them" (MA 26).

> it is hope that compels us towards self-preservation, and by extension, the preservation of the world in which we live – as opposed to the catastrophic and hence self-destructive or ineffectually despairing viewpoint of a tragic apocalypticism. (16)

Toby, Ren and the MaddAddamites' decision to dwell in hope, rather than despair, is what allows them to survive the Flood and its aftermath, and enables them to plan for their future (Jennings 16).

As the previous chapters of this thesis have maintained, Atwood is astute in her awareness of how stories operate and their effects on the real world ("Burning" 49). This cognisance is given explicit narrative form in the retrospective passages of *Oryx and Crake, The Year of the Flood* and *MaddAddam*, which enlarge on the pre-Flood world that the reader engages with in the first two texts and provide the reader with additional opportunities to engage with the possible real-world consequences of the behaviours which are currently authorized by our orthodox guiding narratives. The first two chapters of this project have argued that Atwood undertakes an exploration of capitalism, the discourse of sustainability, as well as the doctrine of human exceptionalism upon which they are founded, in order to show the reader why these narratives need to be re-imagined by dramatizing the effects that they could have on our environment and social organization should they continue to operate without revision. In this chapter, I will argue that *MaddAddam* extends Atwood's investigation into why the recontextualization of humanity's orthodox guiding narratives is pivotal to the survival of the human species. In the final novel of the trilogy, it is only those characters who succeed in revising their pre-Flood orthodox guiding narratives, and who take the opportunity subsequently afforded to them to re-negotiate the boundaries of their "intersubjective realities" and identities, who are able to live and thrive in the narrative present of this text (Harari 175).

In order to support this claim, the following argument will be made: in order to live past the end of technological civilization, the human survivors of the Flood must first learn how to contend with an unprecedented situation, which is how to survive in a post-human, post-capitalist world. One of the major adaptations they need to make entails broadening their perception of the Crakers and the Pigoons, the sentient beings with whom they learn, gradually, to share their post-Flood world (Northover, "Strangers" 133). The principles, values and re-visioned worldview that the post-Flood human community cultivate whilst establishing their interspecies community during the course of *MaddAddam*'s narrative present represent the kind of society that needs to be constructed and the kind of culture that

needs to be adopted in order restore the planet's equilibrium and avert a human-made ecological apocalypse.

The Post-Flood Landscape of *MaddAddam*: The End of The Anthropocene

The practical challenges that the small community of human survivors must contend with in *MaddAddam* are a result of the cessation of capitalism and the dissolution of the technological and physical "connections" that sustain it (OC 271). Engaging imaginatively with this text's post-Flood landscape encourages the reader to contemplate what might be necessary to for her to survive in a post-capitalist and post-Anthropocenic world. The MaddAddamites, Toby and Ren are capable of demonstrating what skills she would need to possess, as well as what actions she might need to be willing to undertake in order to ensure her long-term survival in an environment where she is now "the marginalized Other" (Changizi and Ghasemi, 59). As a thought experiment, this book presents the reader with a possible future world, beyond the widespread domination of human culture and the capitalist economy, and thus poses to the reader two questions, both of which require serious analysis. Firstly, the reader should pause to consider whether the kind of life that individuals of the cobb-house community lead post-Anthropocene is better or worse than what they experience pre-Flood. Implicit in this, is whether the "Neolithic" (Northover, "Strangers" 129) lifestyle lead by the MaddAddamites, Toby and Ren, wherein they "have reverted to hunter-gathering, pastoralism and limited cultivation" (Northover, "Strangers" 131), is more desirable than the capitalist rat-race of the trilogy's narrative past and the reader's present. Secondly, the reader needs to consider whether it would even be possible to emulate the cobb-house community's post-Flood behaviours in a world devastated by wholesale ecological collapse, as, in these texts, Crake's virus has averted this likely possibility.

The humans who have gathered at the cobb-house acknowledge that in order to flourish in their post-Flood context, they must be able and willing to work together in order to meet their basic needs, seeing as large-scale agriculture has collapsed and the production of material goods has ceased.[43] One of the most crucial skills that the post-Flood human community possesses, thanks to the individuals who are former Gardeners, are those which can help them feed themselves. These members of the community are equipped with the practical survival skills and the kinds of knowledge that is needed to survive in a post-

[43] Although the Painballers survive the Flood itself because they are locked inside the Painball facility when Crake first releases his plague, it is important to note that, post-Flood, the Painballers exist; they do not flourish. They live hand-to-mouth, have no long-term survival plans, and fail to create a functional home-base.

capitalist world. The MaddAddam scientists are capable of complementing the Gardeners' expertise, re-emphasizing the observation made in chapter one that varieties of knowledge need to be seen as symbiotic and dialogic, and not in conflict with one another. The former Gardeners who are members of MaddAddam have begun to cultivate a small vegetable garden in an attempt at localized subsistence farming and are capable of finding edible "forage greens" in the meadow surrounding the cobb-house (MA 205). The whole community has also begun to think about potential contingency plans that they can put into place once the food supplies that they have collectively scavenged from now-abandoned supermarkets and compounds have been exhausted and no more can be found. In order to ensure that they have a future supply of honey, which, as Toby knows, can be both eaten and used as medication, Zeb helps her capture a "swarm" (MA 210) of bees in the forest nearby. Manatee, a MaddAddam scientist, proposes going "beach fishing, or out deer hunting" to supplement their dwindling food provisions (MA 380), and Rebecca, who used to be the Gardeners' chef before she left with Zeb, wants to make a "saltworks … down by the [sea]shore" once the Painballers have been "accounted for" (MA 158). One of the other MaddAddam scientists, Tamaraw, begins experimenting with Mo'Hair "sheep cheese, both hard and soft; also yoghurt" near the end of the narrative (MA 378). The cobb-house community also sustains themselves by eating "bacon, ham and chops" made from Pigoon, as well as "dog ribs on the side" (MA 34), as they know that their "[p]rotein variety is lacking" (MA 205). While they would "kill for some live chickens because then they could … have eggs" (MA 205), the question that arises is "where are such chickens to be found?" (MA 205) The closest alternative is "seabird eggs" which they can find in the "derelict towers offshore" where seagulls have made their home (MA 205). They decide against it, however, as the towers "must be very unstable by now" (MA 206). Although "[t]here have been some jokes about lamb stew" being made from the offspring of the "Mo'Hair" sheep that provide the community with fresh milk, "no one wants to go there: it would be hard to slaughter and eat an animal with human hair" (MA 205).

This comment is indicative of the stark discrepancy that exists initially between how the MaddAddamites perceive the Pigoons and how they perceive the sheep. Both are genetically-engineered. The difference in attitude derives from the animals' appearances. The pelts of the Mo'Hairs are human hair, presenting the humans with physical proof of kinship which affects how the humans regard them. The certain sense of personhood that this recognition engenders influences the dynamics of the interpersonal relationship that the humans cultivate with the sheep. For example, when the cobb-house humans are preparing to

fight the Painballers, Croze, who shepherds the Mo'Hairs, is anxious at the thought of leaving his flock behind, as they would be easy prey for human and non-human predators. When the contingent arrives at the Spa on the eve of the "battle" to prepare (MA 357), Toby observes that Croze "is all for herding [the Mo'Hairs] into the gym: he's become quite attached to them, and is worried" about the threat of predation "once darkness falls" (MA 283). The humans therefore decide to corral them in "the kitchen garden [as] it has a fence" and post sentries on the roof who can "keep an eye on the flock and report any unusual bleating" (MA 283). It is clear that the humans feel care and concern for these visually similar animals, which manifests itself in a protective and paternalistic relationship.

While the majority of the cobb-house community are comfortable consuming animal flesh, Toby and Ren still find it particularly difficult. As former Gardeners who still uphold the Gardeners' "VegiVows" as far as possible (MA 34), these two women find it more challenging to concede the contextual irrelevancy of the Gardeners' orthodox vegetarianism in the post-Flood world. While the ethics of their decision to abstain from eating meat and therefore refusing to be complicit with the capitalist worldview and its "commodification of all life forms" is admirable in their pre-Flood context (Dunlap 5), Toby and Ren are capable of admitting that it can no longer be defined as practical, or even possible now. Toby notes the complete dissolution of this aspect of the Gardener's imaginative framework when she remarks that

> [t]here would be no point in being a Gardener now: the enemies of God's Natural Creation no longer exist, and the animals and birds – those that did not become extinct under the human domination of the planet – are thriving unchecked. Not to mention the plant life. (MA 209)

In addition, Toby and Ren are beginning to learn a vital lesson that the former Gardeners who joined MaddAddam already have: if they wish to survive long-term, they need to be able to accept that "the origin of [their] sustenance [lies in the] appropriation" of other life forms (Edwards, "Ecological Culture" par. 32).

The reader should also be aware that the post-human landscape that the human survivors now inhabit is hazardous: as humans living in a world wherein society no longer has jails and nature no longer has "fences" (MA 157), the sense of superiority that is engendered by being a human in the Anthropocene and the perception of safety that is created by having the opportunity to segregate the violent members of society from the general populace is consistently challenged by the predators with whom they now share their space.

The Painballers who, due to the actions of the Crakers, escape at the beginning of the narrative, present a fatal threat to their persons, and the wolvogs, which are "vicious dog splices" (MA 157), regularly attack the cobb-house enclave and their herd of Mo'Hairs. The Pigoons continually raid the humans' meagre vegetable patch and have, on multiple occasions, cornered them when they have ventured into the "city's deserted buildings" to glean supplies (MA 29). They are also physically intimidating creatures: "glossy and greyish pink, rounded and plump and streamlined, like enormous nightmare slugs" (MA 268), the males are equipped with "lethal scimitars" for tusks and could gut the humans "like a fish" (MA 268). The MaddAddamites must therefore be willing and able to defend themselves. In order to do so, they practise constant vigilance by posting guards around the cobb-house's perimeter and are prepared to "shoot what needs to be shot" (MA 28). At the outset of the book, the cobb-house members are comfortable eating Pigoon and dog because these creatures threaten the future survival of their community, but once the humans realize the Pigoons' intelligence and acknowledge their sentience, they refrain eating "[p]ig in three forms" (MA 34). The interpersonal relationship that develops between the humans and the Pigoons will be elaborated on in some detail later in the chapter, as it forms an integral part of this chapter's argument regarding the necessity of broadening one's worldview so that one can respond ethically to other life forms.

In addition, the surviving humans must also contend with those dangers that arise following the end of humanity's domination of the planet. Now that the systems that used to sustain contemporary technological civilization have completely failed and "their keepers [have] died" (YF 24), nature is reclaiming the environment. As Toby observes,

> no human-built structure stands a chance. [The tree roots will] tear a paved road apart in a year. They'll black the drainage culverts, and once the pumping systems fail, the foundations will be eaten away, and no force on earth will be able to stop that kind of water, and them, when the generating stations catch fire or short out, not to mention the nuclear…. (MA 31-32)

As is clear from the above extract, where Toby's words taper into silence, that all of the consequences of the current situation are terrifying, and she is incapable of articulating fully what horrors could potentially arise after the collapse of modern society. The leftovers of the human race recognize that staying near urban areas increases their chances of coming into contact with "an arm, a hand, a rock, a knife" or "disappearing under a cascade of glass shards and chunks of cement as another burnt-out high-rise crashes down" (MA 33). They

therefore chose to turn the cobb-house "parkette" (MA 26) into the first post-Flood human settlement because it is "safe" (MA 26). Even though the house itself "wasn't built to be lived in" (MA 26), its location recommends it as a habitable space: it lies on the outskirts of the city and is therefore far away from the "urban rubble – the deserted street and random electrical fires and the buried rivers that are welling up now that the pumps have failed" (MA 26). It also has other advantageous features: the "violet biolet" solar-powered toilets are still functioning (MA 97), and a "hand pump" on the property grants them easy access to "drinking water" (MA 41).[44] Arable land surrounds their living quarters, which provides the community with the opportunity to begin small-scale subsistence farming. The natural environment that surrounds them also has the materials that they need to build additions to their repurposed house: they mix "mud, straw, and sand" that they collect in order to make "layers of cobb" that can then be added to the "wood frame[s]" that they have constructed (MA 95). An additional benefit of their locale is that while they are far away enough from the city and the dangers it poses, they are close enough so that they can scavenge for what they need to "[r]epair what can't be repaired [and] mend what can't be mended" (MA 28).

In a post-capitalist context wherein the concept of ownership no longer exists and "physical objects have shucked their tethers" (MA 33), the previously anti-capitalist survivors see the practical advantages of utilizing the overabundance of material goods to which they now have access: "[o]nce, there were too many people and now not enough stuff; now it's the other way round" (MA 33). The community has salvaged and recycled what they have needed from "deserted backyards" (MA 31) and vacant houses in order to furnish their simple lodgings, including "real crystal" glasses (MA 32). They also search for those goods that they cannot produce themselves, such as "painkillers" (MA 155), articles of clothing and "[m]enstrual wadding" for the women (MA 143). They do, however, worry about what will happen "when [they] run out" (MA 43), as the "Corps [have] stopped making anything new" (YF 271). Toby wonders whether the women will have to "fall back on torn-up bedsheets. Or moss. Though we'll come to that sooner or later" (MA 145). The other problem that the community faces as a result of end of contemporary technological civilization is the fact that there are no longer readily-available sources of energy: as Toby remarks, "even if there were

[44] While it is highly probable that this water source has been contaminated by "every toxic spill for miles around," (MA 41) the reader should consider, as Toby does, whether the alternative of using "rainwater" (MA 42) would be any safer, seeing as "faraway fires and maybe nuclear meltdowns [are probably] sending dirty particulate into the stratosphere" (MA 42).

still a power source, no one here would know how to repair the tech" (MA 153). The MaddAddamite scientists are, however, able to cope with this challenge, as they possess the skills and knowledge necessary to install and maintain enough "solar units" to supply electricity for their basic needs (MA 377). While they do not have access to or the ability to create the amount of power that would be required to rebuild contemporary civilization, they are at least capable of illuminating a "single light bulb" (MA 18). The community also looks towards alternative sources of energy as a means of reducing their dependence on the limited solar power that they have: Shackie and Croze experiment "with making charcoal" (MA 377) and the sentries use "battery-run headlamps gleaned from a bike shop" at night when they patrol (MA 18).

The skills and knowledge that the "MaddAddamite and God's Gardeners" collectively possess (MA 367), as well as how well they are able to cope with practical issues in their post-human and post-capitalist world as a community positions them as exemplars the reader. She would need to emulate the kinds of self-reliant behaviours performed by human survivors in the narrative present of this third text in order to survive the end of the contemporary technological age. There is still one key lesson that the MaddAddamites of the community must learn in their present, however, if they are to be viewed by the reader as offering "examples of good conduct and right belief" (Jennings 16). This is the importance, value and significance of "seeing and ethically responding to the 'other'" (Jennings 16). This can only occur once they overcome the sense of human exceptionalism that informed their acts of eco-terrorism in the pre-Flood world and which still lies at the heart of their conceptions of their identities post-Anthropocene.

The Development of the MaddAddamites' "Intersubjective Reality"

The MaddAddamites' refusal to succumb to the nihilism inherent to the Gardeners' apocalyptic symbolic order, coupled with their assertion of agency, are the primary reasons why this collection of individuals is able to survive past the end of contemporary human civilization. The kind of strategy that the MaddAddamites employ to influence the way contemporary human civilization perceives of and behaves towards their broader ecological context in the narrative past of the trilogy, however, voids any potential that this organization has to generate a "significant change in [humanity's] social [and environmental] relations" (Canavan 139). Although the MaddAddamites' actions are too localized to stimulate any definitive changes to society's behaviour, their failure is primarily a result of the direct conflict that exists between their ecological and ethical intentions and the manner in which

they hope to achieve them. Their deliberate creation and selfish use of genetically-engineered animals to achieve their human goals is premised on a covert sense of human exceptionalism, as the activities they engage in are entirely dependent on and wholly authorized by the hierarchical and "hyper-exaggerated false dichotomies" that are purported to exist between humans and animals (Edwards, "Culture Dysphoria" par. 8). This paradox is given explicit narrative form when the reader learns that they are the ones responsible for the release of a "tiny parasitic wasp … carrying a modified form of chickenpox, specific to the ChickieNob and fatal to it" (OC 253) as a means of drawing technological society's attention to the ethical lack that characterizes the discipline of genetic engineering in an age governed by the grotesque coupling of capitalism and science. It is clear to the reader that this action, while ostensibly undertaken in resistance to the cruelty entailed in the lives of the ChickieNob, effectively employs similar tactics against the cruel treatment of animals and the human domination of the planet to which the MaddAddamites are ideologically opposed. Their exploitation of genetically-modified animals, coupled with their failure to recognize the human exceptionalism that informs their bioterrorism and their inability to acknowledge that their actions contribute to upholding the corporate status-quo created by the fusion of capitalism and scientific ingenuity in the technological age, inhibits this organization's potential to actualize what the environmental philosopher Val Plumwood terms an "ecological culture" (qtd. in Edwards, "Ecological Culture" par. 13). This kind of culture is described by Plumwood as a worldview in which the human is

> seen as part of the natural community, part of the natural systems seen as integrated wholes and with welfare and interest bound up in the whole, and not as, in the typical Western view, a separate, self-contained actor standing outside of the system and manipulating it in pursuit of his self-contained interests. (qtd. in Edwards, "Ecological" par. 13)

During the course of *MaddAddam*'s narrative present, the MaddAddamites recognize the necessity of re-imaging their anthropocentric worldview when they interact with the Crakers and the Pigoons in their post-Flood context. The rest of this chapter will endeavour to demonstrate how these two 'others' stimulate this crucial shift in the cobb-house community's human-centred perspective.

Alan Northover argues that when the human survivors are confronted by the Pigoons' "animal gaze" in their post-Flood landscape, it fosters an "extreme experience of defamiliarization, since through it, [the] humans are decentred as subjects" and subsequently

find themselves "being viewed as objects" (Northover, "Strangers" 123). This concept is valuable, as it is able to express how the inversion of perspective engendered by the "animal gaze" ousts the humans "from [the] position of power that [they] take for granted" (Northover, "Strangers" 127) and encourages them to view themselves as they used to view the Pigoons: as "mere objects" (Northover, "Strangers" 133). This shift in perspective enables the survivors to come to the acknowledgement that the categories of "human" and "animal" are binary cultural constructs which perpetuate the identification of differences, instead of emphasizing what they have in common with the Pigoons. Northover draws on Derrida when he states that the majority of the cobb-house humans still need to learn that "sympathy for animals" should not be founded upon "the basis of some positive similarity" and instead argues that "what is of significance is the profound *lack* that we share with animals: our suffering, vulnerability and mortality" (Derrida qtd. in Northover, "Strangers" 132-133). Atwood represents this argument textually: as will be shortly discussed, it is only when the cobb-house humans recognize that they, and the Pigoons, share the same "*lack*[s]" that they are capable of responding ethically to these creatures (Derrida qtd. in Northover, "Strangers" 132). In addition, this revolution in the human characters' perspective would have been impossible to achieve without the Crakers. These beings are responsible for facilitating the interpersonal communication, between humans and Pigoons, during the course of the interspecies meeting that allows the human survivors to perceive finally what they share with the Pigoons, and which in turn, allows them to admit and respond to the personhood of the Pigoons. In other words, the humans are only able to acknowledge the Pigoons' personhood through the Crakers. Thus, for the humans to respond to, learn to value and respect the radically different sentience represented by the Pigoons, they must first concede the *value* of the Crakers' alterity, which can only occur once the cobb-house community are capable of admitting that, in contrast to their previous prejudicial characterization of the Crakers as "Frankenpeople" (MA 18), who are "definitely not like [them]" (MA 35), the Crakers are in fact "people" who are merely different to them (MA 34).

The Value of the Crakers' Alterity

From the critical readers' imaginative engagements with the Pigoons and the Crakers in the post-Flood landscape of Atwood's trilogy, she can discern that a large difference exists between how the human survivors initially view and treat these two genetically-engineered biobeings; one which is reminiscent of the discrepancy in how they respond to the Mo'Hairs and the Pigoons. In contrast to the Pigoons, whom the humans view as a threat, the Crakers

do not evoke any feelings of fear or anxiety from the humans who encounter them, as they do not challenge overtly the dominant position that the cobb-house humans are used to occupying. Rather, they view them as radically different and strange 'others' with whom they cannot interact, as they assume that the Crakers are intellectually and socially inferior; an assumption that springs from the MaddAddamite scientists who were responsible for creating the Crakers under the guidance of Crake. The MaddAddamites also refer to them as a part of Crake's "Paradice dome circus" (MA 18); rhetoric which demonstrates that they initially hold these genetically-engineered hominids in contempt. While their derision stems from their feelings of inherent superiority in relation to the spliced Crakers, it is highly probable that it is also rooted in the following: while the Crakers are not capable of harming the humans as they have been engineered to exclude any proclivity for violence, their physical perfection and their transgenic heritage challenges the humans' sense of self and makes them feel inferior and inadequate.[45]

The MaddAddamite members of the cobb-house community know that the Crakers were created by their arch nemesis, "that fucker Crake" (MA 44), as a replacement for and improvement on contemporary humanity, of which they were a part. This fact challenges the sense of human exceptionalism that initially informs the boundaries of their human identity. In an attempt to reclaim the seat of power that they believe they are still entitled to occupy as humans in their post-human world, the MaddAddamites delineate their early responses to and interpersonal interactions with the Crakers, within the boundaries of colonial discourse. They refer to the Crakers as an "indigenous people" in need of the protection and guidance of benevolent masters (MA 140). The use of this term also implies that they view the Crakers as incapable of contributing to the daily life or long-term survival of the cobb-house's microcosmic hunter-gatherer society (Northover, "Strangers" 131). To the MaddAddamites, the Crakers are a useless burden that Toby has forced them to shoulder: as known vegetarians and non-agriculturalists whose main food source is "eternal mouthfuls of leaf" (MA 367), they have no need for nor inclination to participate in the cultivation of the vegetable garden

[45] Their breath-taking physical perfection also probably influences the humans' scorn: the Crakers are "preternaturally beautiful" when compared to the humans' "aging faces [and] warped bodies" (MA 36), which makes them feel inferior to and separate from these visually perfect representations of the human form. The males' large reproductive organs and the sexual behaviour they engage in with the Craker women also elicit feelings of sexual jealousy from the human men who reside at the cobb-house: when Toby and Ren first stumble upon the MaddAddamite enclave towards the end of *The Year of the Flood*, Croze tells Ren that the Craker men "get these huge – their dicks turn blue. Then they have group sex with these blue-assed women. It's wicked!" (YF 475). During the course of *MaddAddam*'s narrative, Toby wonders whether this "yearning" will result in "rivalries and wars [amongst] every single human male among the MaddAddamites" (MA 31).

that is one of the community's primary source of sustenance. The humans also assume that they will have to feed and house these people. Swift Fox, a MaddAddamite scientist, berates Toby for bringing them with her following the Painballers escape, stating that "[t]here's too many of them. We can't" (MA 19). Here, Swift Fox (and by extension the MaddAddamites whom she represents) fail to extend Derrida's notion of "[h]ospitality" to the Crakers (Dikeç et al. 3). Instead of responding to these strangers with generosity, compassion and friendship, she and the other MaddAddamites are intolerant of the Crakers and discriminate against them based on their differences (Dikeç et al. 5). Swift Fox is even loath to communicate with them: she tells the others that she does not want to "*talk* to them" as, to her, they are "vegetables" (MA 19). In addition, the MaddAddamites know that the Crakers have been created so that they are incapable of showing "aggression" (MA 19), which leads them to assume that the Crakers would be unable to defend themselves from any threats posed by the human and animal predators who are roaming the countryside. Toby and Ren's previous experience of the Crakers setting the Painballers free because they were too innocent and naïve to understand why these men were being kept prisoner also encourages these women to view the Crakers as in need of protection. The behaviours that the Crakers perform whilst sharing the cobb-house with humans, however, effectively overturns the myth of the 'Western Saviour' that has been a part of humanity's worldview since the advent of slavery, its twin, colonization, and the orthodox narrative of the "civilizing mission" that imperial countries used to sanction theft and perpetrate genocide (Hopkin, "Lessons" para. 2). All of the human survivors of the Flood who have gathered at the cobb-house come to learn that, in juxtaposition to their prior assumptions, the Crakers are the most well-equipped to deal with the natural threats posed by the post-Flood landscape. As Bergthaller points out, the Crakers "do not really require" the humans' assistance in navigating their world as they are perfectly suited to live within it (734). Furthermore, once the Crakers have drawn the humans' attention to their enhanced sensory capacity and the survival benefits this confers not only on their people, but also on the humans, the cobb-house community comes to recognize that, in contrast to their earlier bigotry, their future survival is contingent upon the Crakers as much as their survival depends on the cobb-house humans, who are able to protect them against the threats that other humans pose.

This awareness comes to the fore when the humans think that the cobb-house is under invasion by a "herd of giant pigoons" (MA 267). In contrast to the Crakers' serenity and lack of fear, the humans are "frightened" and therefore decide to arm themselves with a collection of rudimentary and repurposed weaponry, including "axes, rakes, and shovels" (MA 266).

The MaddAddamite scientists who worked on the Crakers know that their urine has been chemically composed to act as a "carnivore deterrent" (MA 43), but they were unable to carry out any tests as they "didn't have any carnivores [available to them] at the Paradice Project" (MA 43). Thus, when the humans see a line of Craker men approach the contingent of Pigoons and watch them "peeing in a line. Aiming carefully, peeing respectfully, but peeing" (MA 269), they are "far from sure" that this will prevent the Pigoons from suddenly charging and disembowelling both them and the Crakers (MA 268), despite the pronouncement made by Blackbeard, a young Craker boy, that "[i]t is safe" (MA 269). It is only when they have visual proof that they believe what Blackbeard has told them: they observe "[t]hree curious little piglets scamper[ing] forward, snuffl[ing] at the ground, then run[ning] squealing back to their mothers" (MA 269).

In addition, Blackbeard's declaration that the Pigoons have arrived at the cobb-house, not because they want to "harm" the humans (MA 268), but because they "want help from … the ones with two skins" (MA 270), is met with tangible suspicion and disbelief. Up until this point in the narrative, all of the humans are still unwilling to concede that the Crakers' melodic vocalizations are their way of "talk[ing] to the Children of Oryx" (which is their term for animals) and not "music" (MA 214). In a debate that the MaddAddamite scientists have amongst each other regarding how much of the Crakers' behaviour is "inherited [and] how much is cultural" (MA 139), they wonder what the purpose of their singing is. They concede that "it must be some form of communication," but they speculate whether it is "territorial" or if it "might be termed art" (MA 139). This exchange makes it clear that the scientists are beginning to concede that they may not know everything about their creations and they are bewildered as to why they could not "erase [the singing] without turning them into zucchinis" (MA 43). Despite this admission, they persist with their arrogant assumption that the Crakers' singing is a simple form of artistic and musical expression because that is the only acceptable explanation that does not challenge their previous suppositions about these hominids.

Blackbeard's puzzlement at Toby's query about their singing when he finds her "talking to the bees" encourages the reader to view the Crakers' singing as an expression of communication (MA 214). When Toby asks him if he sings to the animals because they "like music," Blackbeard answers "What is *music*?" (MA 214). His question negates the possibility that the Crakers' singing is solely a form of artistic expression, but the cobb-house humans – especially the MaddAddamites – are loath to acknowledge this, as the possibility that the Crakers' are capable of unseating them from the position of linguistic dominance that they

are used to occupying is unsettling. As this exchange between Toby and Blackbeard makes clear, however, the human survivors, including Toby, who is the most open-minded member of the cobb-house community, have clearly heard the Crakers, but have refused to listen, as their humanistic bias has obscured the Crakers' personhood.

The interspecies communication that takes place between the Crakers and the Pigoons and to which the cobb-house humans bear witness undermines the primary tenet of the orthodox guiding narrative of human exceptionalism: humans are the only species that is in possession of language and therefore capable of communicating linguistically and intelligibly (Mosca 40). Without this marker of dominance, the humans are forced to acknowledge that, in relation to the Crakers and the Pigoons, they are now only capable of occupying the subordinate position of voyeur. In their symbolic order, the boundaries of their human identity are thoroughly destabilized by the experience of total "alienation" that witnessing this unintelligible interspecies communication evokes (Northover, "Strangers" 123). They can only observe it, and are therefore forced into playing the passive role of a spectator by these two genetically-engineered beings. The humans need the Crakers to fulfil the role of "liaison" between them and the Pigoons (MA 343), which makes them feel impotent and compels them to acknowledge that they can no longer claim that they are superior to these biobeings. Instead, they are required to give up some of their agency to the Crakers, as they have now realized that the Crakers are vital to the future long-term survival of their own species. This shift in perspective is of particular significance to the MaddAddam scientists who live at the cobb-house. As the "the captive science brainiacs" (MA 43) responsible for constructing the Crakers (MA 43), they initially assume that they know how their "interesting experiment" will turn out (MA 207). The MaddAddamites' recognition of the Crakers' sensory superiority, however, allows them to concede the value of the Crakers' alterity, which is previously something that they disdained. They have to concede that the Crakers are able to practice an unorthodox form of knowledge acquisition with which the humans are unfamiliar, incapable of understanding and unable to replicate, as it is a consequence of the Crakers' genetically-engineered heritage. As Ivory Bill points out: "[t]hey've been doing several things we didn't anticipate in the construction phase" (MA 273).

The behaviours that the humans witness the Crakers performing are thus capable of both demonstrating *what* they are, as well as the worth of their alterity. The ontological gulf that undeniably exists between the humans and the Crakers, however, restricts their ability to perceive *who* these eerie hominids are. The following section will contend that engaging with the Crakers' mythology provides the human survivors with the opportunity to interpersonally

interact with them, which, in turn, allows the humans to comprehend the Crakers' personhood more fully. Toby's persistent re-imagination of the Crakers' stories, however, also grant the Crakers with the opportunity to learn more about the humans with whom they now live, as to the Crakers, the humans are also strange. In addition, the dialogic nature of Toby's continual recontextualization of the Crakers' orthodox guiding narrative also offers Atwood's readers the chance to experience why consistently revising her orthodox guiding narratives so that they can remain contextually relevant is critically important to the survival of the human species.

The Recontextualization of the Crakers' Orthodox Guiding Narrative: An Allegory

The necessity of continually re-imagining and adapting the orthodox guiding narratives that configure the boundaries of our human identities and which structure the dynamics of our interpersonal behaviour with each other, as well as with our broader ecological context, is re-emphasized by the opening of *MaddAddam*. The narrative begins with an amended version of the Crakers' origin story told by Toby, who now plays the role of story-teller to the Crakers. In terms of the position she occupies within the hierarchy of the Crakers' belief system, Toby can be viewed as a priestess. She is not the Crakers' prophet, as, unlike Jimmy, she did not hear, create or transcribe the Crakers' "[g]ospel" (MA 264). Rather, she interprets the Crakers' experiences within the boundaries of the original narrative Jimmy constructed for them in order to help the Crakers navigate their world successfully. The Crakers also consistently ask questions, add onto and amend the stories that Toby tells them, evidenced by Toby's responses to the Crakers' interruptions and questions. For example, when she says that "many people who were not like you" lived in "the chaos" that surrounded "the Egg" (MA 3), the reader can infer that the Crakers ask her why these other people were not the same as them, as the next written words that follow are an answer: "Because they had an extra skin" (MA 3). The Crakers' curiosity, and appetite for information that could explain the unknowns with which they are now faced, demonstrates that they require narratives as a means of helping them better comprehend the strangeness of the "Great Emptiness" (MA 289) that Crake left behind for them to live in, as well as foreignness of the humans, with whom they now live in close social proximity. In addition, Toby's role also enables her to act as a bridge between the Crakers' world and the humans' world. She is a choreographer of identities, which enables her to "make room for a 'different logic'" (Wolfe qtd. In Mosca 47) and encourage the other human survivors to "explore [the] new representational territories" represented by the Crakers (Mosca 50). This claim is validated when the reader remembers

that when she revisioned her identity after she was forced to leave the Gardeners by her old boss, Blanco, she chose green contact lenses, which are, uncoincidentally, the colour of the Crakers' eyes.[46]

The full title of the revised story that Toby relays to the Crakers is as follows:

> *The Story of the Egg, and of Oryx and Crake, and how they made People and Animals; and of the Chaos; and of Snowman-the-Jimmy; and of the Smelly Bone and the coming of the Two Bad Men.* (MA 3)

Toby has clearly updated the Crakers' mythology so that it can include what was previously unknown or left out of the original "fiction" that Jimmy "invented" for them in *Oryx and Crake* (OC 7). Toby also strategically uses the modifications she makes to the Crakers' orthodox guiding narrative to help them, as well as the reader, "understand" (MA 5) what happened once *The Year of the Flood*'s narrative concluded with "the sound of many people singing [and] the flickering of their torches, winding towards [the humans] through the darkness of the trees" (YF 516). This act of revision stresses the function that narratives, specifically those stories which are "central to our self-understanding" (Atwood, "Burning" 54), play in humanity's attempts to make sense of and navigate their broader context; an observation which can also be extrapolated to the hominid Crakers, as will be shortly demonstrated.

While the first "story" (MA 9) that Toby tells the Crakers (and the reader) about what happened after they arrived in the forest clearing where Toby, Ren, Amanda, Jimmy and the subdued Painballers were celebrating "the God's Gardeners' Feast of Saint Julian and All Souls" (MA 10) has "a happy outcome, or as happy as she could manage" (MA 9), the "second" version she tells is "for herself alone" (MA 9), and describes in more detail how the Crakers' arrival lead to a series of "events that set human malice loose in the world again" (MA 9) in the form of the Painballers. These two stories complement each other: they each contain information necessary for the reader – and Toby – to piece together the "sequence of events" that unfolded "like a pleebland street brawl: rapid action, tangled bodies, a cacophony of voices" (MA 12).

The reader can discern that, without a way to give "narrative form to an otherwise

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[46] The idea of Toby as a choreographer of identities stems from Mosca's article, wherein she draws on Donna Haraway to describe Atwood's investigation of post-humanism in her trilogy: in the contemporary age, which Atwood has hyperbolized in the narrative past of her texts, "[i]dentities are far from being fixed – on the contrary, they develop partial, ever-changing connections defined by Haraway as 'choreographic ontologies'" (Mosca 49).

chaotic experience" (Northover, "Ecological" 92), Toby, the Crakers and Atwood's readers would be bereft of the knowledge that would allow them to comprehend why the Crakers were drawn to the humans. Toby and the reader learn from the Crakers' contributions to their own story that they came to the clearing for two reasons: firstly, they wanted to "help Snowman-the-Jimmy [and] his hurt foot" (MA 5) and, secondly, they could "tell there were some women who were blue" and thus wanted to "mate" (MA 5) with them. Toby's "second" story recounts her personal experience of "that evening" (MA 9), and explores in detail how the Crakers unintentionally diverted her attention away from the Painballers when she was forced to intercede in the "major cultural misunderstanding" (MA 11) that arose between the Craker men and Amanda and Ren. This distraction presented the Painballers with an opportunity to manipulate the Crakers into helping them escape. While Toby is capable of comprehending that, in this moment, the Crakers were concerned that the "*rope is hurting these ones*" (MA 13), as she overheard one of them utter this statement over the cacophony, the Crakers' "first" (MA 5) story illumines the fact that their innocence and guilelessness prevented them from "understand[ing] about the bad men, and about why they had a rope on them" (MA 5). Their narrative therefore enables Toby and the readers to fathom w*hy* the Crakers set the Painballers free from their bonds and allowed them to flee "into the darkness" (MA 14). This event catalyses the action of *MaddAddam*'s plot, as it sets up the conditions necessary for the "battle" (MA 367), which takes place between the "cobb-house enclave" (MA 18) and the Painballers, who pose a fatal threat not only to the humans, but also to the Crakers. Designed to be free of humanity's potential for Machiavellianism, these people are "nonviolent by nature" and thus "incapable" of physically protecting themselves against the sadistic and malicious Painballers (MA 270). Their only recourse is hoping that "Crake [is] very angry with the bad men" and will "send some thunder" (MA 5) to punish them for the "cruel and hurtful things" they did to Amanda (MA 4).[47]

The Crakers' yearning for a narrative that can help them navigate the world that they now unexpectedly share with the cobb-house community shows itself in their "insatiable" curiosity about Zeb, the leader of the MaddAddamites, Toby's lover and the man who has become "their hero" (MA 106). Toby therefore plies him for information about his opaque past in order to satisfy the Crakers' demands for his "life story" (MA 106). She reworks and revises every one of Zeb's stories, attaching them as further amendments to the Crakers'

[47] This belief refocusses the readers' attention to what was discussed in the preceding chapter: the psychologically comforting nature of religious narratives (Hoogheem 58), as well as the role that they play as "anthropotechnologies" (Sloterdijk 23).

every-evolving mythology with the purpose of equipping them with a better understanding of "the chaos" (MA 3) that existed before Crake "poured [it] away," (MA 53) and the roles that they, and their new human counterparts, now play in the "brave new world" that they share (MA 218). The reader's awareness of how the Crakers' orthodox guiding narratives are constructed affords her the opportunity to realize that "the stor[ies]" (MA 56) that Toby tells the Crakers are an amalgamation of

> the real story, then there's the story of how the story came to be told. Then there's what you leave out of the story. Which is part of the story too. (MA 56)

The dialogic nature of Toby's storytelling emphasizes to the reader that the Crakers and Toby are co-creators of the Crakers' orthodox guiding narrative; an observation which harks back to the foundational principle of Iser's theory of aesthetic response: that the reader and the text are in communication with each other (Iser 3). In the context of the intimate relationship that exists between a work of speculative fiction and the reality which it investigates, the reader should come to realize that the same applies to the creation of the speculative fiction "story" (MA 56) that is presented to the reader by Atwood's texts. The "real story" (MA 56) that provides Atwood's "raw material" (MA 106) is the story of the contemporary reader in the technological age; the "extratextual reality" that informs Atwood's imaginative rendering of humanity's possible future world (Iser 53). The "story of how the story came to be told" (MA 56) refers to the authorial intentions that lie behind the act of writing this trilogy and which are illuminated by Atwood's own critical writings. As discussed in the first chapter, Atwood's essay "Dire Cartographies," found in her collection of essays gathered in *In Other Worlds: SF and the Human Imagination*, as well as her shorter, stand-alone articles "Writing *Oryx and Crake*" and "*Oryx and Crake* in Context" state unequivocally that her *MaddAddam* trilogy is informed by the environmental and social calamities that she sees occurring in the contemporary reader's present context. As the first chapter of this thesis has also maintained, this trilogy is Atwood's response to the "problems that are conditioned though not resolved" by the orthodox guiding narratives which are excavated and interrogated by her texts (Iser 3). Furthermore, what Atwood "leaves out of the story" (MA 56) refers to these texts' ability to "impinge upon the world [and] upon prevailing social structures" (Iser ix). These works of speculative fiction are capable of affecting change in the reader's perception of the "norms that govern [her] interpretation" (Iser 5) of reality, which should, ideally, result in modifications to her behaviour, particularly in terms of the non-human world.

Toby's dialogical re-imagining of the Crakers' mythology also stresses the fundamental role that this evolving narrative plays in facilitating the Crakers' comprehension of their new and bewildering social context. Toby uses the stories she gleans from Zeb as a means of facilitating her explanation of the difficulties that are created by the Crakers co-existing alongside the human survivors at the cobb-house. These stories are capable of providing the Crakers with the conceptual frameworks that allow them to cope with the novelties with which they are now confronted: the humans' use of metaphorical and figurative language, the concept of death, seeing as Crake removed "the foreknowledge of it and the fear of it" (OC 356) from his creations, and, most significantly, the biological and social differences that clearly exist between "the Children of Crake" (MA 11) and the ones with "two skins" (MA 270).

Toby, who functions as the intermediary between the Crakers and the humans, employs the "The Story of Zeb and Thank you and Good Night" (MA 84) as a means of facilitating her explanation of what the unfamiliar concepts of "*Thank You*" and "*Good Night*" mean (MA 84). The brief interpersonal interactions that she has had with the Crakers preceding her "performance" of this story (MA 45) has taught her that they are accustomed to learning about the world in narrative form, as that is how Jimmy (and Oryx) originally taught them about the world. Furthermore, she has learnt that she "should avoid metaphors" (MA 22) if she wants them to understand her: these figurative expressions are completely new to the Crakers and require literal and precise denotations, as they are still learning how to navigate the symbolic imagination and interpret symbolic thought. While the humans know that the phrase "*Thank you*" (MA 84) denotes feelings of gratitude, this abstract concept has no "physical equivalent" that can be used to demonstrate its meaning to the Crakers (OC 8).[48] Toby therefore has to formulate her explanation of what this phrase means into the kind of language that the Crakers are already capable of comprehending: she tells them that 'thank you' means that they "did something good for [her and] made her happy" (MA 84). She uses

[48] One of the Crakers' most amusing misinterpretations of figurative language occurs when Jimmy finally regains consciousness following the hallucinatory fever caused by his infected foot. Greeted by a horde of Crakers, unfamiliar with his new surroundings and slowly coming to terms with the fact that he "killed Crake," (MA 146) he exclaims "Oh fuck" (MA 146). The Crakers ask Toby "Who is this *Fuck*?" (MA 146) as it "is not the name of anyone here" (MA 146). She realizes that because Jimmy has prefaced his use of this word with the "term of address" (MA 146) that the Crakers use when speaking to the humans, they think "Fuck" (147) is a person. Toby knows that she cannot not explain the true meaning of this profanity to the Crakers, as they "would never believe that the word for copulation could [also] mean something bad" (MA 146). She therefore decides to work within the boundaries of the Crakers' original mythology: when they ask her whether "Fuck is a friend of Crake's," (MA 147) she affirms their assumption and tells them that Jimmy "calls on him for help" (MA 147) when he is in trouble.

a similar strategy when she explains that "Good night" (MA 84) refers to the "hope [that they] will sleep well, and wake up safely in the morning" (MA 85).

During the course of this story, the Crakers are also confronted with the prospect of their own deaths.[49] The only knowledge and awareness of death that the Crakers have prior to living alongside the cobb-house community stems from the "destruction and death [and] gnawed carrion" that they witnessed when they left "Paradice" with Jimmy a few weeks after the outbreak of Crake's plague (OC 410). When Jimmy finally regains consciousness, he tells Toby that one of the main reasons why he "made up a nice story" for the Crakers was to answer their questions about "where they came from and what all those decaying dead people [that they saw] were" (MA 265), as he knows that he "could hardly tell them the truth" about what their beloved creator did (MA 265).[50]

Toby tells the Crakers that Zeb said "Thank You to the bear. To the spirit of the bear" (MA 84) when he was in "the mountains" (MA 85) because "the bear didn't eat him, but allowed him to eat it instead" and "gave him its fur skin to put on" (MA 84). The Crakers naturally ask her what a "spirit" is (MA 84), and Toby replies that a spirit is "the part of you that doesn't die when your body dies" (MA 84). Ignorant of what this word denotes, Toby formulates her explanation of this concept in the only way she knows that the Crakers will be able understand: "it's what the fish do when they are caught and then cooked" (MA 84). When they enquire if "it's only fish that die," Toby replies that "[p]eople do it as well. Yes. Everyone. Yes, you as well. Sometime. Not Yet" (MA 84). The Crakers search for a reason as to "why" this has to happen (MA 84), and, bereft of a suitable explanation, Toby decides to make recourse to "the story [she's] got" (MA 265), informing them that "Crake made it that way" (MA 84) because "if nothing ever died … the world would get too full" (MA 85). She grasps the importance of using the narrative with which they are familiar to explain a concept with which they are unacquainted, unaccustomed and, most significantly, unaware of

[49] The story has been informed by Zeb's real-life experiences: when he was on the run from his sadomasochistic father, The Rev, he joined an environmental organization called "Bearlift" (MA 59). This group drops edible "trash" (MA 59) in the mountains for the polar bears and grizzly bears to eat, seeing as climate change has decimated their environment. On one of Zeb's runs, the helicopter he is travelling in crashes in the "Mackenzie Mountain Barrens" (MA 56) and he subsequently kills and eats a bear in order to survive the long trek back to civilization.

[50] Jimmy is armed with a basic understanding of the Crakers' genetically-engineered cognitive limitations due to the information that Crake relayed to him and the interactions he observed taking place between Oryx and the Crakers while they still resided inside the "Egg" (MA 264). He knows that his explanations need to take the form of easily-understandable narratives, as this is how Oryx taught them about "what not to eat and what could bite. And what not to hurt" (OC 363) before the Flood. This is why he decides to tell them that what they saw was simply a "part of the chaos [that] Crake and Oryx are clearing away … for you – because they love you – but they haven't quite finished yet" (MA 410).

at this early stage in their interactions. Anxious that they will die in the same way as the fish that Jimmy and Toby must eat before they begin telling the stories of Crake – by being "cooked on a fire" (MA 85) – Toby reassures them that every animal dies in their own way: the bear that Zeb ate "died in a bear way. Not in a fish way" (MA 85).

Prior to the "battle" taking place (MA 367), the Crakers had never come into direct contact with "dead ones" (MA 357). When the interspecies contingent enters the "Egg" (MA 360), they see "skeletons" littering the entrance (MA 365). Blackbeard overhears Jimmy say that these are the bodily remains of Oryx and Crake, which has the potential to shatter his mythological worldview: "Oryx and Crake must be beautiful! Like the stories! They cannot be a smelly bone!" (MA 356). The story that he has been told is, at this moment, in direct conflict with his experience of reality. As a means of saving his reality principle, Toby tells Blackbeard, who later relays "The Story of the Battle" (MA 357) to the other Crakers, that "the bone piles were not the real Oryx and Crake any more, they were only husks, like an eggshell" (MA 359). Toby comprehends that she cannot tell the full truth, as it would "damage" the Crakers' worldview (MA 365), leaving these "brave new humans" unanchored in the world (MA 352). As Joseph Campbell observes:

> [m]yths are stories of our search through the ages for truth, for meaning, for significance. We all need to tell our story and to understand our story. We all need to understand death and to cope with death, and we all need help in our passages from birth to life and then to death. We need for life to signify, to touch the eternal, to understand the mysterious, to find out who we are. (Campbell and Moyers 4)

A theme that Toby consistently grapples with in both her stories and her interpersonal interactions with the Crakers is why the cobb-house community engages in behaviours that are both odd and anathema to them. While the direct contact the Crakers have with Jimmy in *Oryx and Crake* familiarizes them with the visual differences that clearly exist between these two species of hominid, Jimmy's role as "pedagogue" (OC 7) and the reverence with which the Crakers regard him limits the range of their interpersonal interaction and ultimately encourages them to view him as "a separate order of being" (OC 116). The physical and, most importantly, social proximity that is the necessary consequence of the Crakers now living alongside the human survivors of the Flood provide the Crakers with the opportunity to interact more extensively with the ones who have "clothing skins" (MA 107). One of the distinctly human behaviours that the Crakers witness is the consumption of animal flesh, which they refer to as "a smelly bone" (MA 4). As a people whose diet consists of "leaves"

(MA 19) and their own "droppings" (MA 92), the Crakers require Toby's assistance in order to comprehend why the cobb-house humans are allowed to eat "the Children of Oryx" (MA 93) if Jimmy told them that one of the reasons why "Crake decided to make the Great Emptiness" (MA 290) was because "the bad people in the chaos ate [them]. They killed them and killed them, and ate them and ate them. They were always eating them" (MA 93). Once again, Toby relies on their original narrative in order explain away the contradictory nature of what they see taking place around them: she discloses that the people who lived "in the chaos [were] eating them in the wrong way" (MA 93), whereas she and the rest of human survivors eat them in "the right way" (MA 93). Toby never specifically explains to the Crakers what "the right way is" (MA 93), and they therefore rely on what their revised mythology has taught them thus far, coming to the conclusion that it means that "Oryx said [they] could" (MA 264). The critical reader can, however, infer from both the ethical and environmental impetus that informs Atwood's speculative fiction trilogy, as well as the consistent repetition of the words "killed" and "ate" (MA 93), that the "wrong way" (MA 93) refers to the magnitude of humanity's appetite for meat, as well as the cruelty and violence that characterizes the industrial slaughter of the animals on which humans rely for sustenance.

One of the other unanticipated situations that arise as a result of the Crakers' closeness to the humans revolves around the fact that "the younger cobb-house women" (MA 100) always smell "blue" to the Craker men (MA 107), as their still-fertile human bodies release consistently the "pheromones" (Canavan 145) that stimulate the Crakers' sexual behaviour. After the incident that occurs at the clearing, wherein the Craker men thought Amanda and Ren were "blue" (MA 5) and subsequently mated with them, the Craker men "don't know what's expected of them" anymore, now that they have grasped that "rambunctious group copulation is not acceptable" (MA 100) behaviour to the humans:

> *Is she blue? One is blue. Two others were blue, we joined our blue to their blue but we did not make them happy. They are not like our women, they are not happy, they are broken. Did Crake make them? Why did he make them that way, so they are not happy? Oryx will take care of them. Will Oryx take care of them, if they are not like our women? When Snowman-the-Jimmy wakes up, we will ask him these things.* (MA 100-101)

In order to explain the physiological and cultural differences that are clearly discernible between the human women and the Craker women, Toby tells the Crakers "The Story of the Birth of Zeb" (107). She tells them that Zeb "was born, the same way you were

born. He grew in a bone cave, just like you" (MA 107). The Crakers interject, as they wonder whether this similarity means that the human women "are the same" as the Crakers (MA 107). Toby answers that they are "[a]lmost the same," as although their "bone cave is the same" and the human women "might smell blue sometimes" (MA 107), they "do not turn blue" (MA 106). To assist the Craker men as they navigate their new and unfamiliar social context, and the crucial issue of sexual consent, which has little meaning within their cognitive framework, she advises them that "when there is a question about blue things," they should be "respectful" and ask the woman in question "first, to see if [she] is really blue or is just smelling blue" (MA 386). Sexual consent is one of the primary issues that the Crakers and the humans need to navigate together, as it is one of the primary biological and cultural discrepancies that separate the humans from the post-human Crakers. It is important to note that while the Craker men force themselves onto Amanda and Ren and penetrate them, their immediate responses show that neither woman feels as though they were raped by the Crakers, despite the fact that they do not consent to having sexual intercourse with them. Their contrastive reactions are telling: while they felt violated, abused, defiled and assaulted by the Painballers, they seem to comprehend that the Crakers' act was a reaction to a stimulus and was not motivated by the need to satisfy their sexual desire, or assert dominance.

Toby's narratives clearly provide the Crakers with the ability to better comprehend and navigate the distinct physical and linguistic differences that separate them from the humans of cobb-house community, which means that they can also be designated as "anthropotechnolog[ies]" (Sloterdijk 23). While the Crakers do not necessarily require the same "technologies of self-domestication" (Bergthaller 729) as humans do because, as Bergthaller notes, their genetically-engineered heritage leaves them bereft of the "biological indeterminacy [and] moral ambivalence" that characterizes the human animal (736), Toby's tales are capable of equipping the Crakers with basic behavioural guidelines that assist them in structuring the boundaries of their interpersonal interaction with the "two-skinned ones" and, in particular, the human women (MA 386). Toby's stories thus help the Crakers navigate the unfamiliar human world of the "cobb-house enclave" (MA 18). Her stories, however, also have the inverse effect: they contribute to the human survivors' comprehension of *who* these hominids are.

The MaddAddam scientists who were "working the evolution machines for Crake" (MA 43) possess the scientific knowledge necessary to understand *what* the Crakers are, but their lack of social interaction with beings whom they view as a scientific experiment, coupled with their adherence to scientific discourse and the "value-laden, hyper-exaggerated

false dichotomies" between the human and the animal that this rhetoric engenders (Plumwood qtd. in Edwards, "Ecological Culture," par. 8), hinders their ability to understand the Crakers' personhood. Toby's narratives draw the humans' attention to the anthropomorphic traits and capabilities that the Crakers possess – their need for narratives to help them make sense of the world, their mortality and their ability to comprehend symbolic language – which allows the MaddAddamites to perceive of the Crakers as subjective agents. Most significantly, the Crakers' mythology also offers the human survivors of the Flood an alternative means of coming to terms with a world wherein all that used to be "familiar is long dead" (MA 25). This pedagogical function is particularly evident in "The Story of the Two Eggs and Thinking" (MA 289) that Toby shares with the Crakers about the Pigoons shortly after the humans discover that these two sentient beings can communicate intelligibly with each other (MA 266). The concept of a non-human animal speaking in a language that can be intelligibly understood by an 'other' is a momentous departure from the humans' previous Anthropocentric experience of the world, and they therefore require a narrative that can gift them with an opportunity to understand and grasp the significance of what was previously unknown.

Working within the boundaries of the Crakers' original narrative once again, Toby explains to the Crakers that Oryx laid two eggs, not only one: one hatched her "very many Children" and the other was "full of words" (MA 290). As a means of justifying to the Crakers, herself, and the other cobb-house humans why the Crakers and the Pigoons are capable of understanding each other and why the humans are unable to comprehend what they say, she tells her audience that the second egg

> hatched first, before the one with the animals in it, and you ate up many of the words, because you were hungry; which is why you have words inside you. And Crake thought that you had eaten all the words, so there were none left over for the animals, and that was why they could not speak. But he was wrong about that. (MA 290)

Toby goes on to say that some of the words were seen and eaten by Oryx's Children, but because they "chewed up the words too small" (MA 290), people found it difficult to understand them. However, the "Pig Ones" ate the majority of the words that were left over, which is why they can "think very well" and communicate with the Crakers (MA 290), and why the humans cannot understand them. With the intention of drawing all the Crakers' mythological strands together and furnishing them (and the cobb-house community) with a cohesive worldview, Toby then declares that Oryx "made a new kind of thing, called singing.

And she gave it to [the Crakers] because she loved birds and she wanted [them] to be able to sing like that as well" (MA 290). Although this story never explicitly states that their "singing" (MA 290) is what enables them to "talk with the Children of Oryx" (MA 214), it is implied, as this story takes place immediately following the momentous occasion of the interspecies conference that takes place between the humans and the Pigoons and which is facilitated by the Crakers. Toby has clearly re-imagined the Crakers' original orthodox guiding narrative so that it can include what the humans were previously ignorant of, thereby revising and recontextualizing the cobb-house's understanding of *who* the Crakers are.

The recitation of this story is especially significant to *MaddAddam*'s narrative framework as it is draws the reader's attention to the following: during the course of this text, the Crakers' mythology is, over time, slowly altering the guiding narratives of the humans in the cobb-house community. What the human survivors experience post-Flood "tells [them that they] do not always have all the information [they] need to understand situations" and the Crakers' mythology is capable of "fill[ing] these lacunae" (Hoogheem 58). This statement is supported by the final chapter of the book, which is authored and disseminated by the Craker boy Blackbeard: he tells the reader (and his audience) that Toby collected all the stories she has told them in "this Book" which the community needs to make copies of "each time a person [comes] into the knowledge of the writing … So it would always be there for us to read" (MA 386). In addition, they should "attach" blank pages to the end of each copy so that they can "write down the things that might [still] happen" in the future once the text of *MaddAddam* ends (MA 387).

In order to draw the reader's attention to the significance of the Crakers, and their mythology, in the humans' post-Flood context, Atwood associates the Crakers with the mythological figure of "Hermes Trismegistus" (MA 347) or "Thrice-Great Hermes" (Fontana 110), who brings a variety of connotations with him in his wake; all of which are capable of demonstrating to the reader the varied functions that the Crakers fulfil in the world that they now share with the humans and the Pigoons. In anticipation of the difficulties Blackbeard may have on the journey to "Paradice" if he walks there with bare feet, Toby has "fitted Blackbeard with a pair of Hermes Trismegistus cross-trainers [decorated with] green wings [and] lights that flash with every step he takes" that she has chosen for him from the MaddAddamites' "stockpile of gleaned footwear" (MA 347). Hermes Trismegistus is credited with authoring *The Emerald Tablet*, a collection of texts "responsible for the Western occult tradition" (Fontana 110). According to Blackburn, Hermes' writings began the school of thought called "Hermeticism," the body of thought that emerged in "the first

three centuries after Christ," and combines "magical, religious, and tangentially philosophical fragments" (165). [51] As Fontana notes, Hermeticism also explores astrology, cosmology, geography, medicine, pedagogy, the act of worship, and alchemy, which is the act of "transform[ing] a raw and unrefined base material or First substance … into something pure and perfect" (60). When people usually hear the term 'alchemy,' they automatically associate it with the act of turning lead into gold (Fontana 60). The psychologist Carl Jung, however, saw alchemy as an allegory for the "spiritual practice intended to turn the base metal of the self into the gold of the spirit" (Fontana 21). This shift in perspective allows the reader to view Hermeticism as an "anthropotechnology" (Sloterdijk 23) like all religious narratives: they all have the same goal, which is "the refinement and perfection of human nature" (Fontana 60). Associating the Crakers with the author of this alternative worldview provides the reader with the opportunity to make additional connections between the mythological figure of Hermes Trismegistus and the Crakers who, in the context of Atwood's trilogy, are the embodiment the kind of harmonious relationship that humanity should endeavour to have with our broader environmental context. Although humanity can never become the Crakers, as Canavan notes, these hominids

> allegorize the radical transformation of both society and subjectivity that will be necessary in order to save the planet – showing us how very difficult the project will be, and giving us a side-ways … glimpse at the kinds of revolutionary changes that will be required to make the future better than the present. (152)

In addition, Blackbeard literally walks in Hermes' shoes, which positions him as the Hermes Trismegistus of the post-Flood world. This association makes it clear that he is the reincarnation of this mythological figure: in his role as interpreter between the Pigoons and the humans, and his function as the bridge between the humans and the Crakers, Blackbeard is responsible for drawing the humans' attention to the value that the Crakers' alternative and "esoteric" forms of knowledge acquisition have in their post-human context (Fontana 21),

[51] In the reader's present context, Hermes is a sought-after, high-end and expensive French fashion brand whose value is totally reliant on the narrative of capitalism. In the humans' new post-capitalist context, this economic system has been dismantled by the Flood, which means that the "network of stories" (Harari 170) that humanity used to "reinforce [its] beliefs" (Harari 171) about the intangible monetary and social value of this product no longer exists. Atwood emphasizes the ironic nature of capitalism by completely decontextualizing it, which draws the reader's attention to humanity's tendency to harness our sense of self to the kind of products that we are able to consume by having Blackbeard, a Craker boy has no comprehension of what this symbol of elitism means, wearing them. Bereft of the need for clothing and unaware of what these testaments to the god of money means, Blackbeard stresses the fictional nature of this "intersubjective entity" and the orthodox guiding narrative of capitalism to which it is bound (Harari 176).

which catalyses the transformation of the humans' perspective of these hominid bio-beings, as has been previously argued.

This observation – that the Crakers, and Blackbeard in particular, are the Hermes Trismegistus' of the post-Flood world – is supported by this figure's mythological ancestry. Mythologically speaking, Hermes is a hybrid, created by splicing together the Greek god Hermes, and the Egyptian god Thoth: he "combines the characteristics" of both (Fontana 21). This quality is clearly shared by the "Children of Crake" (MA 11), who are a combination of both the animal and the human. Furthermore, in Greek mythology, Hermes is viewed as the "god of transfer, transaction and exchange" and is capable of bringing good luck to those who see him (Fontana 111). Blackbeard (and the Crakers) are the other-worldly beings who continually facilitate the exchange of information between the Pigoons and the humans and, without whom, the interspecies "deal" that is agreed upon by these two radically different groups of beings would never have taken place (MA 268).

Hermes is also the god of communication who acts as the "wing-footed messenger of the gods" (Fontana 111), a role that the Crakers clearly fulfil when they facilitate the communication that occurs between the humans and the Pigoons. The question that the reader should ask here is, who are the new gods that inhabit the landscape of the post-Flood world, in the same way that the Greek gods were once thought to interact with and influence the workings of the world of Greek antiquity? The ones with "two-skins" (MA 270) or "The Pig Ones?" (MA 266). If, within the mythological context of the Crakers' post-Flood world, they are both gods, then the Crakers' must be as well, otherwise they would not be able to carry messages between their divine contemporaries.[52]

Moreover, Hermes is the "guide of the dead" (Fontana 29); a role that the Blackbeard must fulfil when he accompanies the "ones who became dead, in the battle" back to the cobb-house (MA 357). In addition, pictorial depictions of Hermes usually show him carrying a "snake-entwined staff" (Fontana 10) that is still intimately associated with "physicians" in the reader's present context (Fontana 81). The reader should remember that the Crakers practise their own kind of medicine – they purr to self-heal, and use this ability to relieve the humans of some of their pain, when the need arises. In Hermes' hand, the staff also becomes a symbol of "peace and protection" (Fontana 81). The Crakers make it possible for the human

[52] The sense of equality that is engendered by this triad reminds the reader of the previous chapters' arguments advocating the importance of achieving a horizontal organization of all life forms, which needs to occur in the readers' present context if contemporary humanity is going to avert an ecological apocalypse of our own making.

survivors to experience these two physical and emotional states, as without them, the humans would have never been able to achieve peace with the Pigoons, which enables the humans to avert the potential danger that the Pigoons could pose to the future survival of their community, and vice-versa.

The different roles that Hermes fulfils, demonstrates that he is intimately connected to "transformation" (Fontana 29). He is therefore closely associated with the moon (Fontana 29). Throughout the trilogy, the Crakers are directly connected to moon imagery in key moments which herald specific changes to the humans' perception and experience of the world. One such incident occurs towards the end of *The Year of the Flood,* when the narrative arcs of the two first texts meet: the evening that Toby, Ren and Jimmy capture the Painballers who are holding Amanda hostage as a sex slave is marked by the rising of a "new moon" (YF 512) which, as Fontana observes, it seen as symbolising the "potentially of all growth" (29). Shortly thereafter, they hear "the sound of many people singing" (YF 516) which, as the reader knows, is a precursor to the Crakers' arrival; an event that has far-reaching consequences for the humans' worldview and which introduces a new set of problems with which the humans must now contend. These are the difficulty of co-habiting with the post-human Crakers, and the threat that other humans pose. In addition, if the Crakers did not allow the Painballers to escape back into the world, the humans would never have had the opportunity to engage with the Pigoons' personhood.

While these Hermetic qualities and characteristics are shared amongst all the Crakers, Blackbeard has a much closer relationship to Thoth, Hermes' Egyptian "equivalent" (Fontana 28) and the other half of the inspiration for the mythological figure of Hermes Trismegistus, than the other Crakers at this point in the narrative. Although this can be a consequence of the readers' intimate involvement with his consciousness, it is more likely a result of the fact that he is the first Craker in recorded post-Flood history who is taught to read and write. Most significantly, he is tasked with transcribing and disseminating the Crakers' mythology once Toby dies. Egyptian mythology posits Thoth as the "creator of hieroglyphic writing and [the] keeper of secret wisdom and magic" (Fontana 64), and views him as "the scribe of the gods" (Fontana 174); characteristics that Blackbeard also possesses at this epochal moment in the book's time.

The Personhood of the Pigoons: The "Animal Gaze"

The Pigoons are first introduced to the reader in *Oryx and Crake* when Jimmy is reminiscing about the childhood he spent at "OrganInc Farms" (OC 25). These human-porcine splices unsettle both Atwood's readers and her characters from the first time they are confronted with the sight of these eerily "uncanny" animals (Mosca 40): while they may look similar to the real pigs that Atwood's readers and characters are accustomed to seeing and consuming, they "share DNA with humans" which therefore makes them "ontologically ambiguous" (Mosca 41). Since these "transgenic knockout pig host[s]" (OC 25) traverse the conceptual boundaries that purportedly exist between the 'human' and the 'animal,' the humans in both Atwood's pre-and-post-Flood worlds find it exceptionally difficult to interact with them in accordance with the orthodox guiding narratives that dictate the boundaries of the human and the animal identity. Jimmy finds it particularly troubling, as he is most well-acquainted with the Pigoons.

As the first chapter has maintained, as a child, he feels a deep sense of sympathy for these "slightly frightening" creatures (OC 29-30), which allows him to acknowledge and respond to them as subjective agents. His compassion, combined with his ability to recognize that, like him, the Pigoons did not have "a lot of say in what was going on" (OC 27), makes him question why his society has sanctioned the commodification, slaughter, confinement and enslavement of their bodies, as well as their "genome" (Edwards, "ChickieNobs" par. 20). Jimmy exhibits what Jennings calls an "affective and imaginative capacity for sympathy" when he critiques the lack of human concern for the Pigoons' welfare (16); a trait that is emphasized by his reaction to the possibility that he is probably eating "Pigoon pie" for lunch at the official compound café (OC 27). He is "upset [and] confused about who should be allowed to eat what. He didn't want to eat a pigoon, because he thought of pigoons as creatures much like himself" (OC 27). Nevertheless, Jimmy stills think of himself as superior to these "much bigger and fatter" pigs (OC 29): when *he is looking at the Pigoons* from behind the barricades that separate them from him, he wishes he "had a long stick, so he could poke them – not to hurt them, just to make them run around" (OC 30). The dominant position that Jimmy occupies in relation to the Pigoons is challenged, however, from the first time he sees *the Pigoons gazing at him*: "they glanced up at him as if they saw him, really saw him, and might have plans for him later" (OC 30). While Jimmy is able to temper his fears that they may "eat [him] up in a minute" because humanity still wields control over their bodies at this point in time (OC 30), once these omnivorous animals escape into the

world, Jimmy's anxiety escalates: as a human in a post-human world, he now recognizes that the Pigoons pose a very real threat to his person now that the physical "walls and barriers" that used to "keep them in" no longer exist (OC 242).

Jimmy's apprehension is palpable when he encounters a "quintuplet" (OC 275) of these creatures while making his way back to the "Rejoov Compound" to scavenge for supplies (OC 266). This is a pivotal moment for Jimmy, as it compels him to admit that, in contrast to his pre-Flood encounters with the Pigoons, he can no longer claim superiority over these "brainy and omnivorous animal[s] (OC 276). They have an "enormous bulk" that can be carried deceptively quickly on their "stubby legs" (OC 276), and Jimmy is exceedingly aware that the "short and flimsy" kitchen knives that he has gleaned from an abandoned house and repurposed as weaponry would not be able "to do much damage to a full-sized pigoon. It would be like trying to stick a paring knife into a truck tire" (OC 276). To protect himself, he decides to "take refuge inside the [compound's] checkpoint gatehouse [and] stay there till they go away" (OC 277). They do not, however, leave, and Jimmy observes that it is "as if they've known for some time that he was in the gatehouse and have been waiting for him to come out far enough out so they can surround him" and trap him (OC 314). During the course of his confinement, Jimmy is thoroughly taken aback by the distinctly anthropomorphic "cunning" that the Pigoons demonstrate (OC 319), as well as their ability to plan and co-ordinate their movements. This causes him to quip that "if they'd had fingers they'd have ruled the world" (OC 314). This comment draws the readers' attention to the far-reaching effects that Jimmy's recognition of the Pigoons' intellectual and physical superiority has on his conception of his human identity: by positioning the Pigoons as potential sovereigns over humanity, Jimmy is able to admit that the conceptual boundaries that he was suspicious of in his childhood are indeed fabrications that buttress the fragility of the human ego. Toby undergoes a similar journey of recognition when she encounters with the Pigoons during the course of *The Year of the Flood*'s early narrative present. Although she has no difficulty in acknowledging that boundaries that separate humans from animals are fictive cultural constructs inherent to the humanist worldview because of her tenure with the Gardeners, she stills needs to surmount the covert sense of human exceptionalism that informs the boundaries of her human identity in a post-human world and accept that she can no longer lay claim to any position of dominance over her "Fellow Creatures" now that the Anthropocene has ended (YF 13).

In contrast to Jimmy, Toby has had no direct pre-Flood contact with the Pigoons. When she spots two sows and a boar gathered around the "shallow end of the pool" in the

grounds of "AnooYoo" and sees their "plump pinky-grey forms" up close (YF 21), she does, however, wonder whether they are "[e]scapees … from some experimental farm or other" as they "seem too large and bulbous to be normal" (YF 21). She watches them "gazing at [the pool] as if in thought," and is intrigued when they "trot around the corner of the building" (YF 21). She thus decides to track their movements and discovers them "looking in" at her vegetable garden (YF 21), which is the only "long-term food supply" to which she currently has access (YF 22). When they begin to "tunnel under … the garden fence" (YF 21), Toby resolves to scare them off instead of shooting them with her rifle, as she is hesitant at the thought of taking a life: "[t]hey're God's Creatures. Never kill without just cause, said Adam One" (YF 21). Shortly thereafter, "it occurs to her they'll be back … and root up her garden in no time flat" (YF 22), and she therefore chooses to "shoot them [in] self-defence," killing the boar (YF 22). Although she feels guilty for what she has done, she is concerned that because "[p]igs are smart, they'll keep her mind, they won't forgive her" (YF 22). Toby's remark demonstrates that, even though she is unaware of their heightened intelligence at this point in the narrative, she sees them as clever and capable of demanding retribution for their felled comrade; a suspicion which is proven correct when she awakens the following day to find that the Pigoons have obliterated her garden in what she perceives of as a "deliberate act of revenge. The earth is furrowed and trampled: anything they haven't eaten they've bulldozed" (YF 383). Her comment also attributes the distinctly anthropomorphic traits of memory and emotion to these animals and gives the reader pause to consider whether these animals are capable of experiencing "suffering," one of the "profound *lack*[s] that we share with animals" (Derrida qtd. in Northover, "Strangers" 132).

This hypothesis is proven correct when Toby ventures into the "meadow" (YF 390) to retrieve "maggots" (YF 394) from the boar's corpse so that she will not "starve" following the destruction of her primary food source (YF 390). She is startled by what she sees: the Pigoons appear to have hosted a "funeral" (YF 394) for the boar as they have placed "ferns" on and around the "carcass" (YF 393). Her trepidation is further heightened when she realizes that the ferns chosen "don't grow in the meadow" surrounding the Spa (YF 393). The Pigoons must have travelled afar in order to collect these specific fronds; an act that speaks to deliberate forethought and decision-making. Toby also spies "rose petals" that have been plucked from the rose bushes that line the Spa's driveway (YF 393), which makes her wonder whether they are the Pigoons' interpretation of a "memorial bouquet" (YF 394). Toby is "truly frightened" by the thought that the Pigoons have performed funeral rites for their associate (YF 393), as this demonstration of grief urges her to consider the plausibility of the

following observation: if these animals "have funerals" then, according to her logic, they must necessarily believe in the afterlife and be in possession of "Souls" (YF 394). In addition, the ritualistic behaviours exhibited by these animals remind Toby of the "elephants" that she read about as a child (YF 393). Comparing the Pigoons – genetically spliced, possible future creatures – to animals with whom the contemporary reader is familiar in her present, allows both her and Toby to formulate an imaginative framework within which they can gauge the appropriateness of their emotional responses to the Pigoons. In the readers' contemporary context, elephants are perceived as wise, compassionate and sentient beings who are capable of experiencing grief and who have proven that they are able to emotionally respond to the needs of the other members of their herd (Fontana 66). Toby's direct reference to these animals as a means of comprehending the significance of the Pigoons' conduct encourages both her and Atwood's readers to seek out the parallels that exist between the elephants which have informed Atwood's imaginative construction of these animals, thereby encouraging the reader (and Toby) to view them as similar.

Toby's new-found awareness of the Pigoons' emotional and intellectual capabilities compels her to begin realizing that the boundaries of her human identity are coterminous with that of the Pigoons. In contrast to Toby's willingness to concede that "[i]dentities are far from being fixed" (Mosca 49), the scientists and ex-Gardeners who comprise the MaddAddamite community have, as preceding sections have argued, continued to adhere to the strict "web of meaning" that the orthodox guiding narrative of human exceptionalism weaved in their pre-Flood world (Harari 168), although they know that the Pigoons have "human neocortex tissue" in their brains (MA 19). The additional information the cobb-house humans glean about the Pigoons when they interact with them during the course of *MaddAddam*'s narrative present, however, encourages them to critique the suitability and contextual relevancy of their anthropocentric worldview in their definitively post-human world. Toby, who is the choreographer of identities in *MaddAddam,* also plays a significant role in influencing the MaddAddamites' perception of these animals.

The reason that the MaddAddamites are initially comfortable with killing and eating the Pigoons, despite their awareness that these animals are human-porcine splices, is because they signify a viable threat to the future survival of their human community. Toby begins catalysing the MaddAddamites' shift in perspective when she relays what she experienced during the "Enhanced Meditation" she undertook after she found out that Ren, Swift Fox and Amanda are pregnant (MA 222). She is particularly worried about Amanda, as the father of her child could be either a Painballer or a Craker. She tells Zeb that she needs "to do some

consulting" (MA 219) with Pilar, her mentor at the Gardeners before she passed away and who is buried in "Heritage Park" (MA 220), to seek advice on how to handle the birth of these "first little pioneer[s]" (MA 218). Toby's tenure with the Gardeners has made her comfortable using hallucinatory substances as a means of "crinkling … the window glass that separates the visible world from whatever lies behind it" and she hopes that this "shift" (MA 221) will help her access her "inner Pilar" or 'other' self (MA 219). After failing to hear Pilar's "voice" when she "gazes at the clustered flowers" (MA 222) that adorn her "elderberry bush" (MA 219), she asks Pilar to send her "a *message. A signal*" and at that exact moment, a Pigoon, a "sow, with farrow: five little piglets, all in a row" materializes (MA 223). The MaddAddamites who escort Toby in order to protect her immediately react with the intention of perpetrating violence against the sow, as their previous encounters with these creatures have taught them to fear them. Toby instinctively tells them to "[w]ait" (MA 223), even though the Pigoon's bulk presents a potential threat to both her and Blackbeard, who has also accompanied her. In her "becalmed" state, Toby sees the Pigoon mother and her children as a symbolic representation of the inevitable continuance of life: "Life, life, life, life, life. Full to bursting, this minute. Second. Millisecond. Millennium. Eon" (MA 223). Although the sow is a "perfect target," she "does not move" and "gives no sign of charging" (MA 223). This moment of vulnerability allows Toby to perceive that the piglets have "[e]lderberry eyes" (MA 223), and she takes this visual resemblance to Pilar's elderberry bush as the sign that she has been waiting for: as Northover observes poetically, the sow's "fecundity … reassures Toby that the pregnant humans – especially Amanda – need not fear bringing their pregnancies to term" (Northover, "Strangers" 134). Afterwards, Toby remarks that

> what the sow communicated to her is still with her, though she couldn't put it into words. It was more like a current. A current of water, a current of electricity. A long, subsonic wavelength. A brain chemistry mashup. (MA 261-262)

When Toby speaks to Rebecca about the strangeness of her encounter, she tells her that the sow gave her "a very strange look. I got the feeling that she knew I'd shot her husband. Back at the AnooYoo Spa" (MA 262). Rebecca dismisses Toby's clear recognition of the sow's subjectivity and sentience as an "illusion" that has been "'caused' by an ingested mix of psychoactive substances" (MA 227). Rebecca's unwillingness to concede that Toby may indeed be correct stems from a "web of meaning" (Harari 168) woven out of the following strands; the first of which is her Anthropocentric worldview. Rebecca cannot

comprehend how Toby could refer to "it [as having] a husband! It was a pig, for chrissakes!" (MA 263). Secondly, the community is "running out of bacon" (MA 262), one of their primary sources of protein and one which they would feel unable to consume should they acknowledge the personhood of these creatures – they already "feel kind of weird about eating them" because they know their genes contain human DNA (MA 19).[53] Toby finds herself unable to eat the ham Rebecca prepared for breakfast the day after her "vision" of the sow (223), which Toby now refers to as "she" (MA 263); a clear indication that she now views this Pigoon as an individual and subjective entity. Thirdly, the Pigoons clearly challenge the humans' perceived sense of intellectual superiority. Although they pose a physical threat to the cobb-house community's long-term survival, the humans' awareness of their intellectual capabilities scares them the most: even Rebecca is able to admit that the Pigoons are "smarter than ordinary pigs, even without the Meditation booster" (MA 263).

Shortly after this conversation takes place, Blackbeard alerts the cobb-house community to the presence of "The Pig Ones" who are bringing the humans a "dead" piglet (MA 266). This definitive moment marks the beginning of the expansion of the MaddAddamites' anthropocentric worldview and the first time that they submit to the Pigoons' agency. Most significantly, this is also the first time that the human community, including Toby, is overtly ousted from the dominant position that they feel that they occupy in relation to the Crakers.

The MaddAddamites' initial response to the Pigoons' apparent invasion mirrors their previous interactions with these creatures. Even Toby reverts to her former behaviour: she chastises herself for leaving her rifle behind and laments that "the down side of Meditations … you forget how to be properly aggressive" (MA 266). From the first moment that the humans gaze upon the "Pig Ones," they feel "weird" (MA 266), as it appears as if these animals are "marching. It's like a pig parade" (MA 267). Blackbeard tells Toby that she should not be "afraid" as the Pigoons have told him to relay to the humans that "they will not harm [them] today" (MA 268). Toby is, however, "far from sure about that" as she anticipates retribution for having "killed some of them" and turning them "into a smelly bone" (MA 268). Already defamiliarized by the inexplicability of the Pigoons' anthropomorphic entrance, the humans' perceived sense of exceptionalism is further contested when they are forced to concede that that the Pigoons possess language, rationality

[53] Northover observes that Shackleton echoes this worry ("Strangers" 134). When he sees that the sow and her piglets had "vanished," his first thought is "Crap … There go the spare ribs" (MA 223).

and a symbolic imagination, "those features and abilities that are believed to be exclusively human" (Mosca 46). When the "fifty or so" adults emerge into the clearing that lies at the front of the cobb-house (MA 267), Toby hears them *audibly communicate* among themselves in a manner that reminds her of "the murmuring of a crowd" (MA 268). Thereafter, two boars appear, carrying a "mound of flowers – flowers and foliage" across their backs (MA 268); an image that reminds both the reader and Toby of what she witnessed in the meadow surrounding the Spa at the beginning of *The Year of the Flood*. Toby does not, however, make the connection immediately: she wonders whether the heap of flora is a "peace offering [or] a pig wedding [or] an altar-piece" (MA 267). Toby is attributing agency, morality and rationality to the Pigoons when she perceives the visual similarities that exist between the human rituals with which she is familiar with and the Pigoons' expression of ceremonial symbolism. When Toby sees that "the flower-covered burden" holds the body of "a dead piglet. A tiny one, with its throat cut" (MA 269), she recognizes that the Pigoons are hosting a "funeral" (MA 269); an admission which jolts her into remembering what she saw at the Spa: "Elephants, she'd thought then. They do that. When someone they love has died. Crap" (MA 269). While Toby is more willing to concede that the Pigoons' are conscious, subjective agents because of what she had experienced the day before, the other humans only revise their previous assumptions about these creatures once Blackbeard has relayed the Pigoons' request. He tells the cobb-house community that "The Pig Ones" (MA 270) have come to ask the ones "with two skins [to] "help" (MA 270) them neutralize the Painballers:

> They want to stop those ones. Those ones who are killing their babies … The Pig Ones want those killing ones dead … They want you to help them with the sticks you have. They know how you kill, by making holes. And then blood comes out. They want you to make such holes in the three bad men. With blood. (MA 269-270)

Blackbeard goes on to say that "in return" for their help, the Pigoons promise to refrain from "eat[ing] your garden. Or any of you" (MA 270), as well as Toby's "bees and the honey" (MA 271). The Pigoons have one condition, however, which is that the humans "must no longer make holes in them, with blood, or cook them in a smelly bone soup, or hang them in the smoke, or fry them and then eat them. Not anymore" (MA 270).

It is important to recognize that it is the Pigoons who "initiate this pact, thus demonstrating animal agency" as they demonstrate the willingness to enter into a covenant with the humans (Northover, "Strangers 134). Most significantly, their assertion of agency provides the humans with undeniable evidence of both the similarities and the "*lack*[s]" that

they share with these creatures (Derrida qtd. in Northover, "Strangers" 132). The Pigoons have suffered at the hands of both the cobb-house humans and the Painballers, and their formal request to not be eaten shows that they view themselves as vulnerable. In addition, their demonstration of grief shows that they too are capable of experiencing the emotional pain that necessarily follows on from accepting the reality of mortality and experiencing the death of a loved one.

As the interspecies "mediator" (Northover, "Strangers" 134), Toby, with Blackbeard's help in translating the Pigoons' request, agrees to the "deal" on behalf of the cobb-house (MA 271), and after Blackbeard conveys to the Pigoons that the humans "accept their offer and will help them," they leave (MA 271). They leave the piglet behind, however, as symbol of good faith: when Toby asks Blackbeard why they forgot "the little one" (MA 271), he tells her that the Pigoons said the humans could eat it, if they choose, as "they have already done their sadness" (MA 271). When Toby exclaims that this act would be in contravention of their newly agreed-upon interspecies treaty, Blackbeard says that the humans "would not be killing it [themselves]. Therefore it is permitted … They would eat it themselves, otherwise" (MA 271).

In a display of true interspecies empathy that speaks to the MaddAddamites' shift in perspective, they, under the influence of Toby's "imaginative and affective capacity for sympathy" (Jennings 16), decide to "bury the piglet [as] it would be right. Under the circumstances" (MA 275). Before, the humans would have had no problem consuming "that little porker" themselves (MA 269). Rebecca asks whether they should use the piglet's body to make a "suckling pig" (MA 273), a suggestion that elicits an "uneasy guilty laugh" from the others (MA 273), and Ren observes that she would not be able to eat it as it "would be like eating a baby" (MA 273). The humans' responses makes it clear that, following the revelatory nature of this cross-species meeting, they are now capable of comprehending that a "radical break" (Canavan 156) has occurred in terms of how they should conduct themselves in relation to these creatures going forward: there is now a "strident insistence that things [must] yet be otherwise" (Canavan 156) because the Pigoons' assertion of agency has made it fundamentally clear that they are not "mere objects" (Northover, "Strangers" 133). The cobb-house community have begun the psychologically challenging task of authentically broadening their "intersubjective reality" (Harari 175) so that it can include the personhood of the Pigoons, as well as the value of the Crakers' alterity, as the Crakers, unlike the humans, are able to understand the language of the Pigoons.

While the humans are deliberating about what strategy they should employ during

their fight with the Painballers, Zeb wonders if it would be dangerous for the pregnant women to participate. This makes Shackleton question whether this means that they can no longer "go into battle with the pig militia" (MA 275). Jimmy, who has always felt marginalized by the Pigoons in his post-Anthropocentric landscape, tells the others that they will be unable to "do it alone" as even though they are "fucking lethal … they can't climb stairs. If the pigs chase those Painball guys into the city, they'll just move up a floor and shoot down. The pigoons will be decimated" (MA 275). The rest of the human community accepts the validity of Jimmy's observation and therefore decide to set up a base camp of operations at the "AnooYoo Spa" in order to keep the vulnerable humans, the Crakers and the Mo'Hairs safe from any pre-emptive strikes by the Painballers (MA 281). Shackleton's question, Jimmy's seemingly innocuous statement, and the cobb-house's reaction to the issues they both raise highlights the magnitude of the shift in the humans' worldview that occurs as a result of the humans' first authentic interpersonal interaction with these creatures. The MaddAddamites and Jimmy have overcome their previous prejudice, which allows them to clearly perceive the "suffering, vulnerability and mortality" that these animals share with them (Derrida qtd. in Northover, "Strangers" 132-133). It is not, however, only the humans who are capable of transcending their former bias.

Two large Pigoons arrive to safely escort the cobb-house contingent to the Spa, where the "main force of the Pigoons" have already gathered (MA 280). The following morning, after Toby and Zeb wake up after having "dozed off," Toby feels guilty as they were supposed to be the "watchperson[s]" on duty (MA 339). In juxtaposition to his former role as the "hero" (MA 106), Zeb is at ease, remarking to Toby that "the Pigoons would have sounded the alarm" in the event of anything untoward occurring (MA 339). Zeb, who has always been the most assertive of Atwood's characters in this trilogy, is content to surrender some of his agency to these creatures at this point in the narrative, as the behaviour he witnesses from his vantage point atop the Spa elicits feelings of respect and admiration for the Pigoons. He tells Toby that their "porky pals have been busy" while they were asleep (MA 340). While the humans are concerned that human and animal predators could surprise them due to the "thigh-high" grass that now surrounds the Spa (MA 283), the Pigoons, whom Zeb now refers to as "[c]lever buggers" (MA 340), take it upon themselves to level the "meadow, all the way around the spa building" in order to avert any possibility of anyone "sneaking up on them" (MA 340). When Toby observes this, her first reaction is that the Pigoons have destroyed any possible food sources for the Crakers. She need not have worried, though: Zeb shows her that the Pigoons appear to have gathered "a heap of fresh

fodder" and both humans are astonished by this display of consideration (MA 340).[54] The Pigoons' ability to respond to the humans with compassion reveals itself once again when Toby discerns that these animals appear to have assigned "guards" to protect their "human allies" (MA 348) on the way to the "RejoovenEssence Compound" (MA 342). While the "gunbearers" have three each (MA 348), the other humans have been allocated one. Jimmy, by contrast, has five and Toby assumes it is because the Pigoons are "conscious of his fragility" (MA 348). Her conjecture proves correct: the Pigoons, through Blackbeard, tell "Snowman-the-Jimmy [that] he must ride" because "his feet are weak" (MA 349). Shortly thereafter, Jimmy is tied onto a female Pigoon who offered to carry him "like a parcel" (MA 350).[55] It is telling to note that during their march, Toby wonders that "[i]f we were carrying a flag … what would be on it?" (MA 246). This is a very patriotic statement to make, as a flag is a symbol of unity and identity. Toby's thinking demonstrates to the reader that, by this point in the narrative, she, and the other humans, feel a sense of kinship with those whom they previously fought against.

The Pigoons' ability to ethically respond to the needs of the cobb-house community, combined with the clear displays of organizational prowess to which the humans bear witness at the Spa and on the road to "Rejoov" (MA 351), facilitate the complete "transformation of [their] subjectivity" in relation to the Pigoons (Canavan 138). Zeb gives voice to this revolutionary moment when he observes that the Pigoons are "the generals" who have "their strategy all worked out" (MA 341), and the humans are "just the infantry" who have been included for the sole reason that they are the only ones who "can work the sprayguns" (MA 341). The military rhetoric Zeb employs when describing the subordinate rank that he feels the human underlings now occupy in relation to their Pigoon masters emphasizes that he clearly perceives of the Pigoons as more powerful and intellectually capable than the human survivors of the Flood. Their superiority is further accentuated when Pigoons and Blackbeard proceed towards "Rejoov" (MA 351).The Pigoon "scouts" (MA 342) who, in conjunction

[54] The humans are further taken aback when they discover that "[f]ive young Pigoons have been deputized to watch over" the Mo'Hair sheep while they will be gone (MA 346).

[55] Toby, when reciting the "Story of the Battle" (MA 364) to the Crakers "in later years" (MA 350), tells her captive audience that the Pigoon who carried Jimmy "flew like the wind" (MA 350), because she feels that using this turn of phrase in reference to a "fallen comrade-in-arms" is an appropriate way to enshrine the importance of her contribution to their interspecies cause (MA 350). She does have a name, but Toby cannot pronounce it "in any way that resemble[s] the grunt-heavy original" (MA 350). In order to make up for her incompetency, she therefore endeavours to use first-person pronouns when speaking about these creatures as they "were not objects. She had to get [it] right. It was only respectful" (MA 351) to refer to these sentient beings in a manner that recognizes their personhood and acknowledges that without their valuable and significant contributions, the humans would never have made it out alive.

with two "outriders" (MA 346), precede the interspecies contingent as they are capable of "picking up … vibrations well beyond [the humans'] blunted senses" (MA 346).[56] The humans know that even though Jimmy is familiar with the layout of the Compound, without the Pigoons' "[o]dour radar" (MA 346), trying to discern the whereabouts of the Painballers would be like looking for a "needle in a haystack. This place is a labyrinth" (MA 351).

The Interspecies Society of *MaddAddam*: The Conditions Under Which the Survival of the Human Species is an Ethical Good

The Pigoons and the cobb-house humans manage to claim victory over the Painballers, although their triumph is qualified: there were "ones who became dead, in the battle" (MA 357). The Pigoon who transports Jimmy, as well as Jimmy himself, are murdered by the Painballers during the conflict. Adam One, whom the Painballers capture while they were roaming around the countryside, also dies at their hand: "the bad men made a hole in him with his stick" (MA 362). Following the "battle" (MA 357), the humans, the Crakers, and the Pigoons return to the cobb-house enclave, and, in a display of communal mourning and respect, the Pigoons carry Jimmy and "Adam, on branches with flowers," as well as their own "dead Pig One" all the way back (MA 364).

The day after their return, humans and the Pigoons "hold a trial" for the prisoners, as "what they've done isn't in question. The trial is about the verdict only" (MA 367). As they will be directly responsible for the Painballers' fate – they are the only beings who are capable of killing them if they decide on that course of action – the humans deliberate over the Painballers' punishment. White Sedge advocates clemency based on "moral standards" and the psychological hypothesis that "their viciousness [may be] a result of what was done to them earlier in their lives, by others," as well as the "harsh experience" of "Painball" itself (MA 368). Ivory Bill argues that they also need to consider the following "philosophical and practical" questions (MA 368), which draws the readers' attention to the possible challenges and difficulties that arise from this unexpected situation. Firstly, does the community want to take the Painballers' lives in retribution for the murders they have committed?[57] Secondly, does the cobb-house have "the facilities for correctional guardianship?" (MA 368). Furthermore, would they be willing to feed and house these prisoners, who have proven that

[56] The pigoons have also "deputized" a few adolescent "shoats" to act as messengers between the lead pigs and the "main van of older and heavier Pigoons" leading the "tank battalion" (MA 346).
[57] The reader should recall that the Painballers are not only guilty of killing Jimmy, a Pigoon and Adam One; they are also responsible for relieving Oates, the younger brother of Shackie and Croze, of both his life and his kidneys when they abducted Ren and Amanda in order to satisfy their depraved sexual appetites.

they are a threat to the future survival of the MaddAddamites' interspecies community? The third question that Ivory Bill presents for consideration is whether their pioneer community can afford to "waste any increasingly rare human DNA" in their post-human world (MA 369). Swift Fox, Amanda and Ren tell Ivory Bill that in no uncertain terms are "any of [the Painballers'] fucking generative fluids [coming] near [them]" (MA 369), and if he is so concerned about an "ingrown gene pool" he can use "a turkey baster … on [his] own self … Men are always telling women what to do with their uteruses. Excuse me, their uteri" (MA 369). This remark emphasizes that although the Flood has washed away contemporary human civilization, "the old … systems" and ways of thinking still remain (MA 369), and highlights that the end of human civilization does not necessarily mean the end of humanity's potential to perpetrate systemic and cultural violence; rather, it is, and has always been, a deliberate decision.

Following the humans' deliberations, the "two-skinned ones and the Pig Ones" (MA 371) vote for either "death [or] mercy" (MA 369), and come to the almost unanimous decision of "*dead*" together (MA 370).[58] The Crakers do not, however, participate or bear witness to the outcome of the trial, as Toby feels that "it would be hurtful to [them]" (MA 370). The concept of a prosecuting a being for maltreating another is foreign to them, because, as a people who are incapable of inflicting harm, they are unable to comprehend why perpetrating intentional violence against another being is necessary. When Blackbeard is relating "*The Story of the Trial*" to the other Crakers (MA 370), he tells them that they "do not need to have a Trial among us" (MA 371), and that "[p]erhaps we will understand it later, this Trial" (MA 370).

Once the "disposal of the two malignant Painballers" has taken place (MA 373), Toby, Amanda, Ren, Shackie and Croze venture back to the forest that surrounds "AnooYoo" to collect the bones of Oates (MA 373). This is where the Painballers strung his corpse up in a tree after they murdered him and took Amanda and Ren hostage. They decide to compost his skeletal remains, along with the bodies of Jimmy and Adam One "near Pilar" (MA 373). In a "sign of friendship and interspecies co-operation" (MA 373), the Pigoons offer to carry Adam One and Jimmy to their resting place and respectfully adhere to the humans' request that they refrain from eating them. The Pigoons have their "own funeral rites" for their fallen comrade (MA 374). As an "adult of note," she is "contributed to the general ecosystem"

[58] The humans use black or white pebbles to represent their decision. The Pigoons vote collectively for the Painballers' deaths "through their leader, with Blackbeard as their interpreter" (MA 369-370).

instead of being consumed by the others (MA 373). Her body is placed in the same park as the humans who have died, thereby creating a cross-species graveyard.[59] The other Pigoons cover her with "flowers and branches" and stand in silent vigil over her body with drooping tails (MA 374); a ritual that is accompanied by the Crakers' singing, which communicates to the Pigoons the sadness that they feel for their loss.

Following these funerals, the unified community of "the MaddAddamites and the God's Gardeners" (MA 367), the Pigoons and the Crakers, continue nurturing their post-Flood, interspecies cobb-house community. In contrast to the segregation, fear and violence that used to characterize the humans' and the Pigoons' conduct before the "deal" was made (MA 271), the humans and these radically different 'others' continue to live in harmony. Toby even " take[s] the liberty of adding [them] to the regular calendar of Gardener feasts" (MA 379) that the human survivors now use to mark the days in a world that is no longer regulated by the "official time" (OC 3) of capitalism, because they "deserve to have a day named in their honour" (MA 379). This shows that, like the Saints that the Gardeners used to evoke, celebrate and admire on their pre-Flood festival days, the cobb-house humans view these creatures as worthy, valuable members of their community whose contributions and personhood should be respected and remembered.[60]

In an amusing passage, that speaks to the Pigoons' memory and the sense of responsibility that they feel towards upholding the pact that they made with the humans before the "battle" (MA 357), Toby notes that when the humans detected that two young piglets had "dug under the garden fence and were discovered eating the root vegetables" (MA 377), an interspecies "conference" was called (MA 378). A "delegation of three adults" were sent to represent the Pigoons and they appeared "both embarrassed and cross, as adults put to

[59] The humans mark Jimmy's grave with a "Kentucky coffeetree, (MA 374), a decision informed by both pragmatism and sentimentality. Jimmy's arboreal headstone, which has "heart-shaped leaves" (MA 374), is chosen by his three lost loves, Ren, Amanda and Lotis Blue: they travelled all the way to the "Botanical Gardens … under the guidance of the Pigoons" in order select a plant that could symbolize their emotional connection to this person who played a decisive and formative role in their pasts. Their choice is also a practically minded as this plant "produces berries that can be used as a coffee substitute," thereby replacing the "roasted-root coffee" that the cobb-house humans have been drinking (MA 374). For Oates, Shackie and Croze choose "an oak tree, because it echoed his name" (MA 374,) and can therefore function as a way to keep Oates' name alive in the world. Toby observes that the Pigoons are "delighted" by this decision, "as later on there would be acorns" for them to devour (MA 374). Zeb, as Adam One's "Bestbuddy" (MA 363), decides to mark his brother's grave with a "native crabapple" tree, which is both "biblical [and] fitting" (MA 374). While the Gardeners were "conscious of symbolism, [they] were practical in such matters" (MA 374), and Zeb feels that Adam One would be pleased that they could make "a good jelly" out of the fruit that his body will feed (MA 374).

[60] This is also an additional example of how the human survivors of the Flood, the majority of whom are ex-Gardeners who joined MaddAddam have been able to recontextualize both the "orthopraxis" (Hoogheem 62) of the Gardeners' and the worldview of MaddAddam, so that they remain relevant to their post-Flood and post-human world. Toby, Ren and Amanda, who are former Gardeners but never joined MaddAddam, re-imagine the Gardeners' ideology.

shame by their young usually are" (MA 378). Through Blackbeard, the Pigoons state that this transgression will not be repeated: "[t]he young offenders had been threatened with a sudden transition to a state of bacon and soup bones, which seems to have made the desired impression" (MA 378). The sense of community that has been cultivated between the humans and the Pigoons, via the Crakers, makes it clear that the cobb-house humans have, by the end of *MaddAddam*'s narrative, completely untethered themselves from the notion of human exceptionalism.

The complete transformation of cobb-house humans' sensibility and community is symbolized by the following: the three human women who are pregnant, Amanda, Ren and Swift Fox, all give birth to human-Craker hybrids: their "large green eyes are unmistakable" (MA 379). The reader is aware from the opening pages of the trilogy's first text that she and Atwood's human characters cannot become the Crakers, but these human-Craker children symbolize of the kind of socio-cultural changes that need to occur should the reader wish to "make the future better than the present" (Canavan 152). These include living in harmony with the environment, resource-appropriate procreation, compassion and empathy.[61] In addition, although humanity is unable to subsist solely on leaves and caecotrophs and, as the cobb-house's gleaning shows, we need at least some of the basic products that capitalism produces in order to meet our needs for clothing, shelter, food and amenities like sanitary products and medication, we need to learn how to "tame [our] appetites" (Bergthaller 733) and practice the tenets of self-sustainability, restraint, and responsible consumption.

Even though some of Crakers' most laudable attributes are built into their DNA, the point Atwood is making by positioning the Crakers as an admirable people, who have defied their creator's intentions by developing a symbolic imagination and co-creating, physically and through narrative, with those whom they were supposed to replace, forms an integral part of Atwood's investigation into the malleability of human nature: humanity is capable of change, should we be open to the possibility. The birth of the hybrids makes it clear that we can, and we should embrace it.

[61] The reader should recall that Crake genetically engineered the Crakers so that the women would come "into heat at regular intervals" (OC 359), thereby circumventing the possibility of over-population.

Conclusion

The Book: The Ustopia of *MaddAddam*

In "Writing *Oryx and Crake,*" Margaret Atwood states that "[w]riters right about what worries them, and the world of *Oryx and Crake* worries me right now" (2). As an exploration into humanity's possible future, the world presented to the reader by Atwood's speculative fiction trilogy should concern her too, as Atwood's vision is becoming increasingly probable. As this thesis has argued, Atwood's texts afford the reader an opportunity to glimpse a future in which "our inventions" (Atwood, "Writing" 2) and our "potential" (OC 86) have been harnessed to serve the orthodox guiding narratives of capitalism, sustainability and human exceptionalism. As the trilogy demonstrates, however, these narratives can no longer be construed as contextually relevant, nor indeed, advantageous to human life, let alone the life of the planet as a whole. Atwood's texts thus suggest to the reader that contemporary technological society needs to re-imagine these narratives if she wants to experience a future that is better than the one presented to her by the trilogy.

In her explanation of the reasons why she wrote her *MaddAddam* trilogy, Atwood notes that her texts explore "what might be done" with our "tools" ("Writing" 2) in order to show the reader the importance of exercising deliberate choice in her present context. In Atwood's vision of our possible future, humanity has made the wrong decisions, and her narrative thus gifts the reader the opportunity to experience imaginatively the possible consequences with which she could be forced to contend if present humanity does not choose to change its trajectory. Within the context of *Oryx and Crake*, Atwood's statement can be taken as referring to the technology of science and the discipline of genetic engineering. *Oryx and Crake*'s vivid descriptions of the horrors produced by the genetic engineers at "Watson-Crick" (OC 231), Atwood's portrayal of "The Street of Dreams" (OC 339) and the wares pedalled by the "body-oriented Compounds" (OC 339) in our possible future, is capable of drawing the reader's attention what humanity may create when the human imagination and scientific ingenuity are exploited by oligarchic corporations who preside over every aspect of her technocratic society. In addition, Atwood's ability to reveal the way in which rhetoric structures and manipulates humanity's perception of reality through the names she has creates for her corporations, focusses the reader's attention on an additional "tool" in humanity's arsenal, which is language (Atwood, "Writing" 2). This technology is a double-edged sword, as it, and the stories we create and disseminate by employing language, are responsible for

regulating our worldview and behaviour. While language can be characterized as our greatest enemy, as the narrative past of Atwood's speculative fiction texts show, it can also be our greatest ally, as indicated by the narrative present of *MaddAddam.* As the trilogy itself demonstrates, the way in which contemporary humanity chooses to use language, will either avert or hasten humanity's possible "end" (Jennings 13). We can either decide to use it to restructure our society's social and moral order, or we can choose to continue employing it, and the fictions it creates, to maintain our technological society's status quo. *The Year of the Flood*, however, demonstrates the difficulty of encouraging society to change. As the second chapter of this thesis has argued, this text shows the reader how and why the God's Gardeners' re-imagined eco-religious narrative might be capable of reforming contemporary humanity's "intersubjective reality" (Harari 175). It also presents the reader with a detailed picture of how this community's "orthopraxis" (Hoogheem 62) could provide humanity with both the opportunity and the means to embrace a compassionate and self-reliant lifestyle. A society wherein the majority of the population remains caught up in the "web of meaning" (Harari 168) spun by our orthodox guiding narratives, however, inhibits the possibility of affecting broad-scale change. *The Year of the Flood* dramatizes the conflict that takes place between the narratives of capitalism and sustainability, and those advocating restraint and environmentalism. The Gardeners' community, who embrace the latter, provide a thorough-going example of the attempt by these human characters to adapt both their behaviours and beliefs to respond adequately to the resource scarcity, climate change and ecological degradation that modern human civilization has created and with which the reader must contend in her present. But it also presents the limitations of any worldview that becomes too dogmatic or rigid in its approach to change.

Atwood's short speculative prose piece, entitled "Time Capsule," and included in her essay collection *In Other Worlds*, gives the reader a glimpse of what humanity's possible future could be like if we do not choose to amend our worldview and conduct in the present. Atwood's story, "written as a warning from the future, in which all life on earth is extinct" (Northover, "Ecological" 83), looks back upon human history, and divides it into "ages" (Atwood, "Time" 230). The following extract is situated in the "fourth age" (Atwood, "Time" 230), a possible future created by the actions of our current human civilization:

> [w]e created deserts. Our deserts were of several kinds, but they had one thing in common: nothing grew there. Some were made of cement, some were made of various poisons, some of baked earth. We made these deserts from the desire for more

> money and from the despair at the lack of it. Wars, plagues and famines visited us, but we did not stop ... At last all wells were poisoned, all rivers ran with filth, all seas were dead; there was no land left to grow food. (Atwood, "Time" 230)

In Atwood's *MaddAddam* trilogy, Crake has taken it upon himself to extinguish most of humanity, as he believes that his society cannot heed this warning, re-imagine its orthodox guiding narratives, or stop its "industrious creation of deserts" (Atwood, "Time" 230). The implicit question raised by Crake's actions throughout the trilogy, is whether contemporary humanity is in fact capable of fundamental change. Will we be able to say that we have "enough" or will we kill the world where we live? (Atwood, "Arguing" 130).

MaddAddam, the final book in Atwood's trilogy, investigates the "tool" of language ("Writing" 2) and the means by which language and narratives are responsible for structuring identity, even in a post-human world. The unprecedented interactions between the humans, Crakers and Pigoons offer the reader an opportunity to see how these "tool[s]" (Atwood, "Writing" 2) can allow humanity to broaden its "intersubjective reality" (Harari 175). As Mosca notes, and the reader's engagement with world left behind by Crake's plague in *MaddAddam* demonstrates, "we cannot, indeed, help thinking and speaking in anthropological terms" (Mosca 47), even after the collapse of modern society. What we can do, however, as the human survivors of the Flood show, is use the opportunity provided by language and narratives to "make room for a 'different logic'" (Wolfe qtd. in Mosca 47) which should, ideally result in a shift in perspective and alternative conceptions of identity. *MaddAddam* thus presents the reader with "other side of the coin" of language (Atwood, "Dire" 66). While language can produce a dystopic reality, as the narrative past of the trilogy demonstrates, it is also capable of shifting our perceptions of reality and encouraging us to see the inherent value and worth of other life forms, as the narrative present of *MaddAddam* shows.

In addition, the genetically-engineered Crakers are capable of reading, writing and transcribing symbolic language, despite Crake's attempt to "edit [them] out" of his creations (OC 366). The Crakers' retention of this capability, despite Crake's intervention, and the human survivors' (and the Crakers) use of language during *MaddAddam*'s narrative present, shows the reader that language is potentially one of the "saving graces" that could help us avert Atwood's possible future (Atwood, "Writing 2). This is possibly one of the reasons why Atwood has situated the "utopia-facilitating element in [this trilogy] not in a kind of new social organization or a mass brainwashing, or soul-engineering program but inside the

human body" ("Dire" 94). Language is inherent to humanity, and if it is used responsibility, as the Gardeners do in their recontextualization of human exceptionalism, and as the MaddAddamites' use of it to broaden their "intersubjective reality" (Harari 175) shows, contemporary society would be capable of creating a society that is more of a "Heav'n" than a "Hell" (Milton, *Paradise Lost*, 1.255). The reader cannot become the Crakers, who, as Atwood maintains, "are well behaved from the inside out … because they have been designed to be so" ("Dire" 94), but what she can do, as the human survivors of the Flood are finally able to, is choose to re-imagine her orthodox guiding narratives, revision her identity, and subsequently change the way she, at present, relates to other sentient beings and her broader environmental context. Humanity has, as Atwood's trilogy shows, the potential to be better and to do better.

The trilogy's overarching focus is the instrumental use of language, and how it can be employed to actualize a better kind of future, but such a suggestion is not without complexities. Toby, who is the human responsible for teaching Blackbeard (and the other Crakers) how to read, write and interpret the symbolic imagination during the course of *MaddAddam*'s narrative present, wonders if she has given the Crakers the very means with which to repeat the mistakes that warranted Crake's extermination of humanity in the first place:

> Now what have I done? she thinks. What can of worms have I opened? They're so quick, these children: they'll pick this up and transmit it to all the others.
> What comes next? Rules, dogmas, laws? The Testament of Crake? How soon before there are ancient texts they feel they have to obey but have forgotten how to interpret? Have I ruined them? (MA 204)

What Toby has forgotten, however, is that the Crakers are not fully human, even though they are human-like (Canavan 147). They do not possess "the same emotions, the same preoccupations" as the human survivors with whom they co-exist (Atwood, "Writing" 2), and are therefore unlikely to follow humanity's "downward trajectory" (YF 224). Hypothetically speaking, one could argue that the birth of the human-Craker hybrids could prove to be detrimental to the interspecies community in the Post-Flood world in the sense that their 'human' part could gain ascendency over their 'Craker' component and subsequently lead to the repetition of humanity's previous errors. This is, however, only one possible answer to this conundrum. What if the hybrids are more Craker than human? As

Toby wonders towards the end of *MaddAddam*, besides their big green eyes, "[w]hat other [Craker] features might these children have inherited?" (MA 380). The trilogy asks the reader to consider what Craker-like capacities human beings might need to cultivate in order to survive the uncertain future ahead of us.

The final chapter of *MaddAddam* is written by Blackbeard and entitled "Book" (MA 383). He tells the reader – and his Craker and human audience – that "this is the book that Toby made when she lived among us" (MA 385), and goes on to explain, in his own words, what a book is, how it is made, and how Toby taught him to read and write. He states that Toby

> made these words on a page, and a page is made of paper. She made the words with writing, that she marked down with a stick called a pen, with black fluid called ink, and she made the pages join together at one side, and this is called a book. See, I am showing you. This is the Book, these are the Pages, here is the Writing.
> And she showed me, Blackbeard, how to make such words, on a page, with a pen, when I was little. And she showed me how to turn the marks back into a voice, so that it is Toby's voice I hear. And when I speak these words out loud, you too are hearing Toby's voice.
>
> And in the Book too are the Words of Zeb, and of his brother, Adam; and the Words of Zeb … and the Words of Zeb's Helper's, Pilar and Rhino and Katrina WooWoo and March the Snake, and all of the MaddAddamites; and the Words of Snowman-the-Jimmy, who was there in the beginning, when Crake made us, and who led our people out of the Egg to this better place. (MA 385)

While some of these "[w]ords" (MA 385) are known to the Crakers, as they form an integral part of the re-imagined mythology Toby co-creates with them, Blackbeard's reference to Jimmy, Pilar and Adam gives the reader pause to question whether "this book" (MA 385) denotes the book that contains the stories of the Crakers' mythology, or whether "this book" (MA 385) refers to the trilogy as a whole? This is the moment wherein the reader realizes that, despite the ostensible bleakness of humanity's possible future as envisioned by Atwood, there is still the hope that at least some of humanity will experience a future, as "future reader[s]" and writers exist in the speculative future world of Atwood's texts (OC 45). This encourages the reader to question whether *MaddAddam*, the final book of the trilogy, and the

only work which engages the reader imaginatively in exploring fully the post-Flood landscape engendered by Crake's plague, functions in the same way as the "Afterword at the end of [*The Handmaid's Tale*], which describes a future in which Gilead … has ended, and has thus become a subject for conferences and academic papers" (Atwood, "Dire" 91). When the trilogy is looked at in this context, it is possible that these books' narrative past, the "radical break" of the Flood itself (Canavan 156), and "the MaddAddamites and God's Gardeners" (MA 367) struggles to find their place in their post-human world, could be subjects for scrutiny and study in a future that lies beyond the end of *MaddAddam*. My thesis has argued that these speculative fiction texts explore contemporary humanity's possible future by extrapolating current trends to their logical conclusions (YF 517), although within the boundaries of this observation, my project can be seen as an academic project that is looking back at and analysing humanity's potential past.

The notion that Atwood's *MaddAddam* trilogy presents the reader with the history of humanity's failure to act is particularly plausible when one considers that Toby keeps a number of diaries at the "AnooYoo Spa" while she is alone (YF 195), and brings her "old journals" (MA 282) back to the cobb-house after the "battle" (MA 357). In addition, she resumes her journal keeping when Zeb finds her some "school notebooks … rollerball pens [and] pencils" (MA 159) on a gleaning trip so that she can continue "keeping tracks of the days" (MA 159). Most tellingly, a few passages from *The Year of the Flood* are presented to the reader in the form of verbatim diary entries: "*Mole Day,* she writes now. *Year Twenty-five. Do the laundry. Gibbous Moon*" (YF 196). The same occurs in *MaddAddam* towards the end of the text. Some entries are written by Toby: "*The Feast of Cnidaria,* Toby writes. *Waxing gibbous moon*" (MA 372). Others are authored by Blackbeard himself: "I am Blackbeard, and this is my voice that I am writing down to help Toby" (MA 376). Moreover, when Blackbeard comes into Toby's cobb-house cubicle one day, he asks her "what have you been writing?" (MA 374). She answers that she is "writing the story [of] everyone" (MA 374). Toby hears about Jimmy's pre-and-post Flood experiences from him while she is helping him recuperate during the narrative present of *MaddAddam.* In addition, her experiences with the Gardeners, and her developing knowledge of Zeb's past and his relationships with Pilar, Katrina WooWoo, Black Rhino and Adam in the retrospective stories that he tells her, means that she is, plausibly, able to record their "words" as well (MA 384).

This does not, however, necessarily bode well for contemporary humanity. If "the book" (MA 367) of the trilogy is looked at as the beginnings of recorded human history following a man-made cataclysm that wipes out the majority of the human race, we must

have failed to avert both the possible future presented to the reader in the retrospective passages of Atwood's trilogy, as well as the possible course of action undertaken by Crake, wherein the only way to save some of humanity, and the planet, is by destroying the bulk of the human species.

Atwood's *MaddAddam* trilogy therefore present the reader with the possibility that there may not be hope for all of us, should we choose not to reimagine our orthodox guiding narratives and live without unnecessary excess. There is perhaps, however, still hope for a future that may be, even if it is not the one that we imagine ourselves experiencing. The reader should, however, question whether the possible future presented to her in *MaddAddam*, and the lifestyle that the human survivors of the Flood lead, is the only way in which contemporary humanity could hope to experience a future, seeing as the manner in which society conducts itself as present, cannot continue? Alternatively, should we fail to embrace a post-capitalist lifestyle and eschew human exceptionalism, the reader must ask herself whether the future presented by *MaddAddam* is possible, seeing as Crake's plague averted the logical conclusion to the Anthropocene, which is ecological collapse.

Thus, if the reader does not want her future descendants to experience the horrors related to her by the narrative past of the trilogy, which is her immediate future, and create the possibility of experiencing a future that is different to the one presented to her by *MaddAddam*, modern human civilization needs to make a collective effort to prevent it. In order to do so, humanity needs learn not only how to ethically respond to other humans, our environment, and the life forms with whom we share the planet, but, most importantly, hold onto the hope that we are capable of changing, as it is "hope that compels us towards … preservation" (Jennings 16).

As Atwood states in her review of McKibben's non-fiction text, *Enough*, however, she "isn't too sure we'll do it" ("Arguing" 140). Neither am I. This is why reading Atwood's speculative fiction is so important to the contemporary technological age. Atwood's *MaddAddam* trilogy should, like *The Handmaid's Tale*, occupy a special place within the popular consciousness: it is a means of telling us about the reality to which it is responding. These texts involve the reader, and her society, in exploring, imaginatively, the end of both modern civilization and the human species, in order to motivate us to revise the way we currently live. If, however, we continue to fail to read and respond to the urgency of our present situation, the narrative past of Atwood's speculative fiction trilogy could plausibly be "the last of all [contemporary society's] recorded days," whose "final words" are "Pray for us, who once too, though we could fly" (Atwood, "Time Capsule" 230).

Bibliography

Abrams, M. H., and Harpham, Geoffrey Galt. *A Glossary of Literary Terms*. 9th ed., Wadsworth Cengage Learning, 2009.

"About the Author." *Oryx and Crake*, by Atwood, Virago Press, 2013, pp. i.

Armstrong, Jennifer Keishin. "Why *The Handmaid's Tale* is so Relevant today." *BBC Culture*, 28 April 2018, http://www.bbc.com/culture/story/20180425-why-the-handmaids-tale-is-so-relevant-today. Accessed 9 July 2018.

Armstrong, Karen. *A History of God*. 1993. Vintage, 1999.

---. *A Short History of Myth*. 2005. Canongate, 2006.

Atwood, Margaret. Acknowledgements. *MaddAddam*, by Atwood, Bloomsbury, 2013.

---. Acknowledgements. *The Year of The Flood*, by Atwood, Virago Press, 2013.

---. "Arguing Against Ice Cream: *Enough: Staying Human in an Engineered Age* by Bill McKibben." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 128-140.

---. "*Brave New World* by Aldous Huxley." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 184-193.

---. "Burning Bushes: Why Heaven and Hell Went to Planet X." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 38-65.

---. "Dire Cartographies: The Roads to Ustopia." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 66-98.

---. "George Orwell: Some Personal Connections." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 141-149.

---. "Haunted by *The Handmaid's Tale.*" *The Guardian*, 20 January 2012, https://www.theguardian.com/books/2012/jan/20/handmaids-tale-margaret-atwood. Accessed 9 July 2019.

---. *In Other Worlds: SF and the Human Imagination*. 2011. Virago Press, 2012.

---. Introduction. *Brave New World*, by Huxley, Aldous, Vintage, 2007, pp. vii-xvi.

---. Introduction. *In Other Worlds: SF and the Human Imagination*, by Atwood, Virago, 2012, pp. 1-11.

---. "In Search of Alias Grace: On Writing Canadian Historical Fiction." *The American Historical Review*, vol. 103, no. 5, 1998, pp. 1503–1516. *JSTOR*, www.jstor.org/stable/2649966. Accessed 8 November 2019.

---. *MaddAddam*. London, Bloomsbury, 2013.

---. "Of the Madness of Mad Scientists: Jonathan Swift's Grand Academy." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 194-214.

---. *Oryx and Crake*. 2003. Virago Press, 2013.

---. *Payback: Debt and The Shadow Side of Wealth*. 2008. London, Bloomsbury, 2009.

---. *The Blind Assassin*. 2000. Virago Press, 2009.

---. "*The Handmaid's Tale* and *Oryx And Crake* 'in Context'." *Science Fiction and Literary Studies: The Next Millennium*, special issue of *PMLA*, vol. 119, no. 3, 2004, pp. 513-517. *JSTOR*, http://www.jstor.org/stable/25486066. Accessed 26 February 2014.

---. *The Year of the Flood*. 2009. Virago Press, 2013.

---. "Time Capsule Found on the Dead Planet." *In Other Worlds: SF and the Human Imagination.* 2011. Virago Press, 2012, pp. 229-230.

---. "Margaret Atwood On What *The Handmaid's Tale* Means in the Age of Trump." *The New York Times*, 10 March 2017, https://www.nytimes.com/2017/03/10/books/review/margaret-atwood-handmaids tale-age-of-trump.html. Accessed 9 July 2018.

Austen, Ian. "Farley Mowat, Author, Dies At 92; A Champion of the Far North." *The New York Times*, 7 May 2014, https://www.nytimes.com/2014/05/08/world/americas/farley-mowat-canadian-writer-and-wildlife-advocate-dies-at-92.html. Accessed 11 April 2019.

Baudrillard, Jean. "The Precession of Simulacra." *Simulacra and Simulation.* Translated by Sheila Faria Glaser, The University of Michigan Press, 1994.

Before the Flood. Directed by Fisher Stevens, produced by Leonardo DiCaprio, National Geographic, 2016

Bergthaller, Hannes. "Housebreaking the Human Animal: Humanism and the Problem of Sustainability in Margaret Atwood's *Oryx and Crake* and *The Year of The Flood*." *English Studies*, vol. 91, no. 7, 2010, pp. 728-743. *Taylor & Francis*, DOI: 10.1080/0013838X.2010.518042. Accessed 14 March 2014.

Blackburn, Simon. *The Oxford Dictionary of Philosophy*. 2004. 2nd ed, revised., Oxford UP, 2008.

Bland, Archie. "Comic Book Superheroes: The Gods of Modern Mythology." *The Guardian*, 27 May 2016, https://www.theguardian.com/books/2016/may/27/comic-book-superheroes-the-gods-of-modern-mythology. Accessed 12 December 2018.

Boedeker, Hal. "*Handmaid's Tale* Author Margaret Atwood: 'I'm not a Prophet." *MSN News*, 9 July 2019, https://www.msn.com/en-us/news/world/%E2%80%98handmaid%E2%80%99s-tale%E2%80%99-author-margaret-atwood-%E2%80%98i%E2%80%99m-not-a-prophet%E2%80%99/ar-AAGUCqV. Accessed 15 November 2019.

Booth, Wayne. C. *The Rhetoric of Fiction*. 2nd., University of Chicago Press, 1983.

Bouson, J. Brooks. "'It's Game Over Forever': Atwood's Satiric Vision of a Bioengineered Posthuman Future in *Oryx and Crake*." *The Journal of Commonwealth Literature*,vol. 139, no. 39, 2004, pp. 139-157. *Sage*, DOI: 10.1177/0021989404047051. Accessed 25 February 2014.

---. "'We're Using Up the Earth. It's Almost Gone": A Return to The Post-Apocalyptic Future in Margaret Atwood's *The Year of The Flood*." *The Journal of Commonwealth Literature*, vol. 46, no. 9, 2011, pp. 9-26. *Sage*, DOI: 10.1177/0021989410395430. Accessed 20 March 2014.

Bradshaw, David. Introduction. *Brave New World*, by Huxley, Aldous, Vintage, 2007, pp. xvii-xxvii.

Campbell, Joseph, and Bill Moyers. *The Power of Myth*, edited by Betty Sue Flowers. 1988. Intro. Bill Moyers. Anchor Books, 1991.

Canavan, Gerry. "Hope, but not for us: Ecological Science Fiction and the end of the World in Margaret Atwood's *Oryx and Crake* and *The Year of The Flood*." *Lit: Literature Interpretation Theory*, vol. 23, no. 2, 2012, pp. 138-159. *Routledge*, DOI: 10.1080/10436928.2012.676914. Accessed 27 March 2014.

---. "The Suvin Event." *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, by Suvin, Darko, Peter Lang, 2016.

"Capital Gazette Received Death Threats, Emails Celebrating Shooting After Attack." *CBS News*, 2 July 2018, https://www.cbsnews.com/news/capital-gazette-shooting-annapolis-maryland-newspaper-received-death-threats-emails-celebrating-rampage-after-attack/. Accessed 30 October 2019.

Chakrabortty, Aditya. "The Hounding of Greta Thunberg is Proof that the Right has run out of Ideas." *The Guardian*, 1 May 2019, https://www.theguardian.com/commentisfree/2019/may/01/greta-thunberg-right-environmental-activist-attacks. Accessed 26 September 2019.

Changizi, Parisa, and Ghasemi, Parvin. "Humanity Cast as the Other in the Tragedy of Life: An Ecocritical Reading of Margaret Atwood's *Surfacing*, *The Handmaid's Tale* and

MaddAddam Trilogy." *Journal of Humanistic and Social Studies*, vol. 8, no 1, 2017, pp. 55-73. http://jhss.ro/downloads/15/vol_8_1_2017.pdf#page=55. Accessed 25 July 2019.

Dalcher, Christina. *Vox*. 2018. HQ, 2019.

Dikeç, Mustafa, et al. "Extending Hospitality: Giving Space, Taking Time." special issue of *Paragraph*, vol. 32, no. 1, 2004, pp. 1–14, DOI: 10.3366/E0264833409000376. Accessed 28 November 2019.

Diamond, Jared, and Dawkins, Richard. "The Use of Religion." *Youtube*, upload by The Weidenfeld-Hoffman Trust, 15 December 2015, https://www.youtube.com/watch?v=8rAY5P03EdU.

Dunlap, Allison. "Eco-Dystopia: Reproduction and Destruction in Margaret Atwood's *Oryx and Crake*." *Journal of Ecocriticism*, vol. 5, no. 1, 2013, pp. 1-15. https://ojs.unbc.ca/index.php/joe/article/view/389. Accessed 6 August 2018.

Eastern Religions, edited by Michael D. Coogan, Duncan Baird Publishers, 2005.

Edwards, Russell. "Animism." *Medium*, 17 January 2016, https://medium.com/culture-dysphoria/animism-a029d604a11. Accessed 13 March 2019.

---. "ChickieNobs And Ecological Dignity." *Medium*, 30 September 2015, https://medium.com/culture-dysphoria/chickienobs-and-ecological-dignity-cdfcfec4d5eb. Accessed 13 March 2019.

---. "Culture Dysphoria." *Medium*, 10 September 2015, https://medium.com/culture-dysphoria/culture-dysphoria-89565e0e0abe. Accessed 13 March 2019.

---. "Ecological Culture in Margaret Atwood's *MaddAddam* Trilogy." *Medium*, 22 September 2019, https://medium.com/culture-dysphoria/ecological-culture-in-margaret-atwoods-maddaddam-trilogy-fbf2daa1f5df. Accessed 13 March 2019.

---. "Inherently Ecocidal?" *Medium*, 8 October 2015, https://medium.com/culture-dysphoria/inherently-ecocidal-41fb340cf2d4. Accessed 13 March 2019.

Evans, Arthur. "The Origins of SF Criticism: From Kepler to Wells." *Science Fiction Studies*, vol 26, no. 2, 1999, pp. 163-186. *JSTOR*, https://www.jstor.org/stable/4240782. Accessed 25 February 2014.

"Excerpt of Author Margaret Atwood's dramatic performance from her novel, *The Year of the Flood.*" *Youtube*, upload by DePaul Newsroom, 23 November 2009, https://www.youtube.com/watch?v=BvIpWyWVTdE.

Fontana, David. *The New Secret Language of Symbols*. Watkins Publishing, 2010.

Freeman, Lauren. “Book Review: *The Testaments* by Margaret Atwood.” *BBC Culture*, 6 September 2019, http://www.bbc.com/culture/story/20190906-book-review-the-testaments-by-margaret-atwood. Accessed 8 November 2019.

“Greening the Tour.” *theyearoftheflood.com*, http://yearoftheflood.com/greening-the-tour/. Accessed 30 April 2018.

Harari, Yuval Noah. *Homo Deus: A Brief History of Tomorrow*. 2016. Vintage, 2017.

---. *Homo Sapiens: A Brief History of Humankind.* Vintage, 2014.

Haynes, Clarence. “Modern Myths in Movies and What’s Missing.” *Huffpost*, 6 December 2017, https://www.huffpost.com/entry/modern-myths-in-movies-an_b_3895816. Accessed 8 Decemeber 2018.

Heinlein, Robert A. “On the Writing of Speculative Fiction.” 1947. https://mab333.weebly.com/uploads/3/2/3/1/32314601/writing_sf_01_on_the_writing_of_speculative_ficiton.pdf. Accessed 31 January 2019.

Hoogheem, Andrew. “Secular Apocalypses: Darwinian Criticism and Atwoodian Floods.” *Mosaic: An Interdisciplinary Critical Journal*, vol. 45, no. 2, 2012, pp. 55-71. *JSTOR*, http://www.jstor.org/stable/44030681. Accessed 24 April 2019.

Hopkins, A. G. “Lessons of ‘Civilizing Missions’ Are Mostly Unlearned.” *The New York Times*, 23 March 2003, https://www.nytimes.com/2003/03/23/weekinreview/lessons-of-civilizing-missions-are-mostly-unlearned.html. Accessed 30 October 2019.

Houpt, Simon. “Authoritarianism in *The Handmaid’s Tale* on TV Strikes Eerie Echoes in Donald Trump’s America.” *The Globe And Mail*, 2 April 2018, https://www.theglobeandmail.com/arts/television/article-authoritarianism-in-the-handmaids-tale-on-tv-strikes-eerie-echoes-in/. Accessed 9 July 2019.

“Human Genetic Modification.” *Center for Genetics and Society*, https://www.geneticsandsociety.org/topics/human-genetic-modification. Accessed 25 May 2019.

Ingersoll, Earl. G. “Survival in Margaret Atwood’s *Oryx and Crake*.” *Extrapolation*, vol. 5, no. 2, 2004, pp. 162-175, DOI:10.3828/extr.2004.45.2.6. Accessed 25 June 2018.

“In the Wake.” *theyearoftheflood.com*, http://yearoftheflood.com/in-the-wake-of-the-flood/ Accessed 26 September 2019.

“In the Wake.” *FilmsWeLike*, https://www.filmswelike.com/films/in-the-wake-of-the-flood. Accessed 26 September 2019.

“Introduction.” *Gulliver’s Travels*, by Swift, Hyde Park Editions Ltd, 2015, pp. v-vii.

Iser, Wolfgang. *The Act of Reading: A Theory of Aesthetic Response*. 1978. The Johns Hopkins UP, 1980.

---. *From Reader Response to Literary Anthropology*. The Johns Hopkins UP, 1989.

Jennings, Hope. "The Comic Apocalypse of *The Year of The Flood*. *Margaret Atwood Studies*, vo. 3, no. 2, 2010, pp. 11-18. *CORE Scholar*, http://corescholar.libraries.wright.edu/english/192. Accessed 7 December 2018.

Le Guin, Ursula, K. "National Book Awards Speech." *The Guardian*, 20 November 2014, https://www.theguardian.com/books/2014/nov/20/ursula-k-le-guin-national-book-awards-speech. Accessed 25 May 2019.

---. "*The Year of The Flood* by Margaret Atwood." Review of *The Year of The Flood* by Margaret Atwood, *The Guardian*, 29 August 2009, https://www.theguardian.com/books/2009/aug/29/margaret-atwood-year-of-flood. Accessed 25 May 2019.

"Manufacture of Consent." *Oxford Reference*, https://www.oxfordreference.com/view/10.1093/oi/authority.20110803100132197. Accessed 9 June 2019.

"Margaret Atwood: *Handmaid's* Relevance after Election." *Youtube*, upload by Q on CBC, 22 May 2017, https://www.youtube.com/watch?v=BvIpWyWVTdE.

"Margaret Atwood and Leah Kostomo at the Green Gala." *Youtube*, upload by A Rocha Canada, 9 June 2017, https://www.youtube.com/watch?v=GhhEIILThaw.

McKibben, Bill. *Enough: Staying Human in an Engineered Age*. Henry Holt and Company, 2003.

Miller, Arthur. "Why I Wrote *The Crucible.*" *The New Yorker*, 13 October 1996, https://www.newyorker.com/magazine/1996/10/21/why-i-wrote-the-crucible. Accessed 8 November 2019.

Milton, John. *Paradise Lost*, edited by Barbara K. Lewalski, Blackwell Publishing, 2007.

Mosca, Valerie. "Crossing Human Boundaries: Apocalypse and Posthumanism in Margaret Atwood's *Oryx and Crake* and *The Year of The Flood*." *Altre Modernità*, no. 9, 2013, pp. 38-52, DOI:10.13130/2035-7680/2985. Accessed 28 September 2019.

"Myth." *The Concise Oxford Dictionary*, 6th ed, Oxford, Claredon Press, 1976, p. 721.

Northover, Alan. "Ecological Apocalypse in Margaret Atwood's *MaddAddam* Trilogy." *Studia Neophilologica*, vol. 88, no. 1, 2016, pp. 81-95. *Taylor & Francis*, DOI: 10.1080/00393274.2015.1096044. Accessed 30 November 2018.

---. “Strangers in Strange Worlds: Margaret Atwood’s *MaddAddam* Trilogy.” *Journal of Literary Studies*, vol. 33, no. 1, 2017, pp. 121-137. *Taylor & Francis*, DOI: 10.1080.02564718.2017.1290384. Accessed 30 November 2018.

Nussbaum, Martha. “The Window: Knowledge of Other Minds in Virginia Woolf’s *To The Lighthouse*.” *New Literary History*, vol. 26, no. 4, 1995, pp. 731-753. *JSTOR*, http://www.jstor.org/stable/20057316. Accessed 17 October 2018.

“Objective.” *The Concise Oxford Dictionary*, 6th ed, Oxford, Claredon Press, 1976, p. 752.

Patey, Dougalas Lane. “Swift’s Satire on ‘Science’ and the Structure of *Gulliver’s Travels*.” *ELH*, col. 58, no. 4, 1991, pp.809-839. *JSTOR*, http://www.jstor.org/stable/2873283.

Reilly, Phoebe. “How *The Handmaid’s Tale* Became TV’s Most Chilling Trump-Era Series.” *Rolling Stone*, 25 April 2017, https://www.rollingstone.com/tv/tvfeatures/how-the-handmaids-tale-became-tvs-most-chilling-trump-era-series-113356/. Accessed 9 July 2018.

“Religion.” *The Concise Oxford Dictionary*, 6th ed, Oxford, Claredon Press, 1976, p. 946.

Rúa, Paula López. “The Manipulative Power of Word Formation Devices in Margaret Atwood’s *Oryx and Crake.*” *Revista Alicantina de Estudios Ingleses,* vol. 18, 2005, pp. 149-165. https://rua.ua.es/dspace/bitstream/10045/5215/1/RAEI_18_07.pdf. Accessed 9 June 2019.

Sloterdijk, Peter. “Rules for The Human Zoo: A Response to the *Letter on Humanism*.” *Environment and Planning D: Society and Space*, vol. 27, 2009, pp. 12-28, DOI: 10.1068.dst3. Accessed 11 October 2018.

“Subjective.” *The Concise Oxford Dictionary*, 6th ed, Oxford, Claredon Press, 1976, p. 1148.

Suvin, Darko. “Preface”. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, edited by Gerry Canavan. 1979. Peter Lang, 2016, pp. xxxvii-1.

---. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, edited by Gerry Canavan. 1979. Peter Lang, 2016.

Swift, Jonathan. *Gulliver’s Travels*. 1726. Harper Collins, 2010.

Verne, Jules. *Twenty Thousand Leagues Under the Sea*. 1869. Hyde Park Editions Ltd, 2015.

Watts, Jonathan and Vidal, John. “Environmental Defenders Being Killed in Record Numbers Globally, New Research Reveals.” *The Guardian*, 13 July 2017, https://www.theguardian.com/environment/2017/jul/13/environmental-defenders-being-killed-in-record-numbers-globally-new-research-reveals. Accessed 26 September 2019.

Watts, Jonathan. “Environmental Activist Murders Double in 15 Years.” *The Guardian*, 5 August 2019, https://www.theguardian.com/environment/2019/aug/05/environmental-activist-murders-double. Accessed 26 September 2019.

---. “Greta Thunberg, Schoolgirl Climate Change Warrior: ‘Some People Can Let Things Go. I Can’t’.” *The Guardian*, 11 March 2019, https://www.theguardian.com/world/2019/mar/11/greta-thunberg-schoolgirl-climate-change-warrior-some-people-can-let-things-go-i-cant. Accessed 11 April 2019.

“What is Asperger Syndrome?” *National Autistic Society*, https://www.autism.org.uk/about/what-is/asperger.aspx. Accessed 11 April 2019.