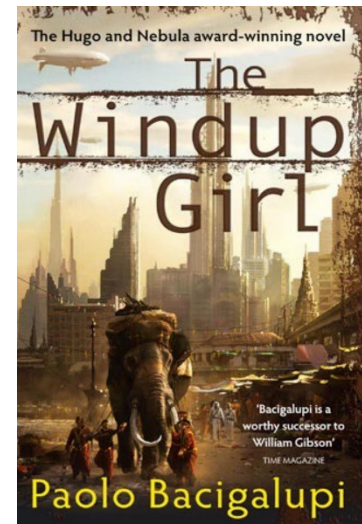
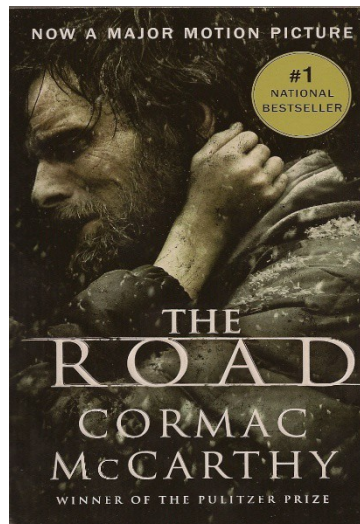
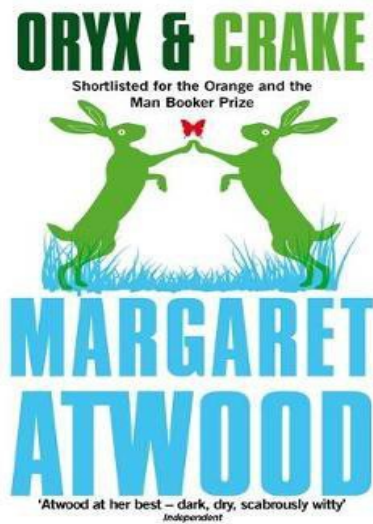


The Dramatisation of Environmental Degradation

Exploring Writing Strategies in Three Climate Dystopias



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Introduction

Literature's Influence on People's Worldview

Fiction has the power to influence people's lives. Literature can powerfully shape cultural

values that affect readers' behaviour, and stories can set cultural norms for people. Fiction can achieve this because it can help readers to experience "reality" (Said 31-53). For example: according to critics, *Jungle Book* (1894) endorsed nineteenth-century ideas about racism (Hotchkiss 435-449). In contrast, *Max Havelaar* (1860) attempted to stand up against the Indonesian subjugation by Dutch colonisers (Feenberg 817-835). In short, stories can be powerful because they are able to provide readers with experiences that could affect their worldview.

Moreover, fiction could also be written to have a positive influence on readers' environmental awareness. Most scholars consider environmental degradation to be an urgent problem. Would it be possible to shape new, helpful perceptions of the environment if writers were to draft stories that promulgate eco-friendly behaviour? Shaping eco-friendly worldviews is one of the aims that some contemporary authors of ecofiction have set themselves. Scholars in the field of ecocriticism investigate how authors dramatise nature in works of literature and also analyse interactions between humans and the environment in narratives. For contemporary ecofiction to successfully shape eco-friendly worldviews, writers dramatise character's relationship with nature (Murphy 1).

Writing ecofiction has its challenges. Timothy Morton calls current times "the age of asymmetry" because the relationship between humans and large scale problems like the slow destruction of ecological systems is asymmetrical (Morton 2). The impact of one single man's behaviour on something as huge as the environment is little, because the environment is immensely more extensive in time of existence and size than a single person. Moreover, a person is also part of the environment as a human consists of natural material. Their connection is thus asymmetrical. Morton calls the environment a 'hyper object'. According to him, hyper objects refer to "things that are massively distributed in time and space relative to humans" (Morton 1). He says that: "A hyper object could be a black hole, the biosphere, the

Solar System or the total of all the nuclear materials on Earth. These objects are ‘hyper’ in relation to one person” (Morton 1). Because of this asymmetrical relation between people and nature, environmental degradation is perceived as a slow process by humanity. Environmental change has taken place over a long period and is easily overlooked, because the earth does not dramatically change during an ordinary human lifetime.

The asymmetrical relation between people and nature leads writers to look for creative strategies to dramatise environmental change. To depict slow environmental destruction might collide with the general qualities of good storytelling. For instance, stories are generally about a few human characters, and a handful of people cannot noticeably destroy the environment themselves. Environmental change occurs due to a long process of human behaviour which slowly transforms the environment over several generations. In contrast, stories are usually not about millions of people and so many generations. Thus, writers of ecofiction have to apply strategies to depict the earth’s degradation in their stories.

Despite these challenges, dramatising environmental change is urgent because of the circumstances in which planet earth finds itself. The Nobel Prize-winning chemist Paul Crutzen introduced the term Anthropocene Age in 2000 (Nixon 12). This term denotes the historical period in which humanity started to affect the world’s ecological systems badly. Crutzen dated the beginning of the Anthropocene Age to 1784 when James Watt invented the steam engine. According to Crutzen and his colleagues, human activity and its effects on ecological systems worsened from 1950 onwards, and they call the time that followed the Second World War the great acceleration (Nixon 12). The term Anthropocene is also anticipatory in the sense that it indicates humanity’s impact on the globe that is still to come (Trexler 1).

Although the Anthropocene started in 1784, how effective have people been in countering environmental change? Environmentalism started to become significant during the

1970s (Trexler 3). Scholars saw that the levels of greenhouse gases were rising and Earth's climate had changed during the 1980s. Industrial organisations and those opposed to limiting gas emissions started a campaign to prevent governmental control (3). However, during the 1990s more evidence for a causal relation between gas emissions and rising temperatures was found. Better computer models and more extensive data have supported the case for this causal relation. Although in 2007, scientists already measured greenhouse effects in some regions, some groups continue to spread doubt, and this has persisted up to the present (3). With the election of Donald Trump, who does not prioritise environmentalism, and the emergence of populism in many western countries, curbing the greenhouse effects is receiving less attention than it deserved. Populistic parties tend not to be concerned with long-term outcomes but rather with policies and choices that lead to popularity with the people.

To provide an indication of the urgency of the problem of environmental degradation, scientists have attempted to predict what scale of destruction the earth might face in the future. To Crutzen, important provokers of unstable ecosystems are greenhouse gases because they increase global temperatures significantly (Trexler 1). Other significant developments are rapid population growth, the deforestation of the tropical rainforest, the artificial transformation of waterways and increased energy use (1). These developments are likely to have some consequences: global temperatures will probably rise between three and five degrees Celsius in less than one hundred years, which is predicted to lead to more extreme droughts, tropical cyclones, heat waves, crop failures, forest fires, floods and erosion. Water shortages and famines will probably become even more common which will lead to mass migration, and that will cause further conflicts. Coastal areas will have trouble keeping water away from the land due to storms and the rising sea-level. Fewer species will inhabit the earth, as many animals and vegetation will become extinct. Developed countries might have a stable economy to adapt to these disasters, but the financial costs are likely to be high and less

developed countries will not be able to afford adjustment to the new circumstances. Of course, the globe itself with its ecological systems will not be able to adapt to these events either (Trexler 2).

Scientists have argued that apocalyptic consequences could emerge because of the detrimental activities that were perpetrated over centuries. Speculations about the future do not flourish in the field of science because a scientist is trained to doubt one's premises. Perhaps future speculations should be explored in the field of arts. If literature has the ability to help people experience aspects of reality, writers might be able to play an important role. Fiction has proven to be efficient at conveying life-changing experiences to readers. Perhaps ecofiction can play an important role here.

Could Climate Dystopias Help Readers to Acquire More Environmental Awareness?

The popularity and literary appreciation of ecofiction has increased over the years (Hughes 2). Climate dystopias, a subgenre of ecofiction, can help readers to experience imagined ecological disasters. These dystopias dramatise environmental doom scenarios that are the imagined effects of magnified societal developments or values that reside in today's world. These stories encourage readers to think about their own behaviour that might contribute to the environment's degradation in the long run. Dystopias show the long-term destructive effects of mentalities and practices that lead to undesirable scenarios. In that sense, dystopian ecofiction might be able to provide readers with insight into how daily practices of individuals harm the environment over the long term, but precisely how effective are climate dystopias in raising environmental awareness according to scholars?

There are three positions that scholars take on how effective climate dystopias are in raising people's awareness of the earth's slow destruction. Firstly, the majority of scholars believe that stories of environmental apocalypses do help readers to become aware of their own contributions to harming the environment (Baratta 3, Otto 3). According to Suvin,

science fiction, and thus climate dystopias, provide a cognitive estrangement to its readers that disorients and defamiliarises them. That estrangement could help the readers to move outside of their culture and to view themselves more objectively. “SF distances us from the contemporary world-system only to return us to it so that we can see it with fresh eyes” (Suvin 372). According to him, it can powerfully raise people’s awareness of their culture (Suvin 372). If climate dystopias help readers to assess their own premises objectively, these literary works may help to educate people about environmental change.

Secondly, some scholars believe that dystopias could be counterproductive. For example, obviously exaggerated doom scenarios could lead people to completely dismiss the urgency of the environment as a political topic. It could backfire. *The Day After Tomorrow* is a good illustration of this. This film provided climate change deniers with ammunition to discard the topic (Starre 9).

Thirdly, the middle course entails that to convey environmentalist values to readers effectively writers should not only dramatise doom scenarios, but they should also dramatise the slow violence that humanity commits to the environment (Nixon 3). When a narrative only depicts a doom scenario but does not dramatise what caused the apocalypse in the first place, readers will indeed be shocked and see how the environment suffers from humanity, but they will not become sensitive to the workings of “slow violence” (Nixon 3). Moreover, slow violence “occurs gradually and out of sight, [it is] a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all” (Nixon 2).

The definition of slow violence is behaviour that damages over time instead of harming something immediately. People tend to focus on short-term gain rather than long-term pain, so slow violence is often overlooked. However, repetitive execution of slow damaging acts can also lead to a considerable amount of destruction over the years. For

instance, smoking a cigarette is not harmful, but when it is habitual, it can kill a smoker within several decades. Smoking is, therefore, an example of slow violence whereas committing suicide could be seen as fast violence. Fast violence is all damage that is immediately visible to an observer when the damage is done. When fast violence is committed, the victim knows who the perpetrator is. Normally, people are only aware of 'fast' violence. Our perception of violence is that it is quick and committed by an individual or a group, so people are less aware of the damage done over longer periods of time by millions of people. According to Nixon, "to confront slow violence requires [...] that we plot and give figurative shape to formless threats whose fatal repercussions are dispersed across space and time" (Nixon 9).

In the following fragment, Nixon urges writers to dramatise slow violence:

Politically and emotionally, different kinds of disaster possess unequal heft. Falling bodies, burning towers, exploding heads, avalanches, volcanoes, and tsunamis have a visceral, eye-catching and page-turning power that tales of slow violence, unfolding over the years, decades, even centuries, cannot match. [...] In an age when the media venerate the spectacular, when public policy is shaped primarily around perceived immediate need, a central question is strategic and representational: how can we convert into image and narrative the disasters that are slow moving and long in the making, disasters that are anonymous and that star nobody, disasters that are attritional and of indifferent interest to the sensation-driven technologies of our image-world? How can we turn the long emergencies of slow violence into stories dramatic enough to rouse public sentiment and warrant political intervention? (Nixon 3)

According to Nixon, stories and shaping awareness of environmental degradation do go together very well but only if authors create new types of narratives. Writers have to include

the damage that is “unseen” into their stories to dramatise humanity’s position towards the hyper object of the environment (Nixon 15).

To illustrate his point, Nixon provides examples of stories that dramatise the workings of slow violence. One of them is *Animal’s People* written by Indra Sinha (Nixon 51). This book is about the consequences of a disaster that caused indigenous workers of an outsourced factory to work in a poisonous area. The owners of the factory do not take responsibility for the disaster. They do not make amends for it, because the victims do not die immediately. They slowly become ill, so the connections between poisons and diseases is less easy to make. Furthermore, the factory owners’ propensity not to take responsibility for their employees comes with legal advantages; the cases of the victims expires over time (Nixon 51). This is an example of how Sinha strategized to dramatise slow violence into her narrative. She illustrates how factory owners exploit the intractability of the slow violence that their factory workers suffer from. She illustrates how slow violence harms individuals and how easily companies can get away with it. According to Nixon, a story like this one helps readers to become aware of inflicted damage over time.

General Features of Storytelling and Dramatising Slow Violence

Writers do have to take the general features of storytelling into account when they dramatise the slow degradation of the earth, and representing slow violence in narratives has the potential risk of thwarting these characteristics. A good exemplification of the fact that authors are bound by generic features of narratives is the Le Grand d’Aussy’s *Histoire de la vie privée des Français depuis l’origine de la Nation jusqu’ à nos jours* which was produced by a French historian named Le Grand d’Aussy in 1782 (Rigney 72). He wanted to write the history of food in France that was to be more accessible and relevant to ordinary Frenchmen (74). He incorporated most of his sources in his book which led to a three-volume work that turned out to be unreadable, and was never finished because it simply lacked the basic tenet of

narrativity (75). Le Grand d'Aussy failed to put the historical details into an 'overarching story or argument', because he did not invent characters and events (74). As Rigney put it: 'His systematic, impersonal presentation of aspects of food precluded any of that human interest which is such an important ingredient in full-fledged narrative.' (74).

Although climate dystopias portray the effects of slow violence, they do not necessarily dramatise the workings of slow violence. Critics have not yet addressed the strategies which authors have applied to dramatise slow and fast violence into their stories and how effective these have been. The aim of this thesis is to explore the dynamics between dramatised slow and fast violence in three cli-fi novels published in the 2000s, namely: Margaret Atwood's *Oryx and Crake* (2003), Cormac McCarthy's *The Road* (2006), Paolo Bacigalupi's *The Windup Girl* (2009). In this way, conclusions can be drawn about the dramatisation of slow violence in prizewinning and influential climate dystopias of the 2000s. This thesis will carry out an ecocritical reading of the novels by focussing on dramatisations of slow and fast violence committed by characters in the stories.

The reason for choosing these three books is because they have achieved critical acclaim as climate dystopias. If there had only been two climate dystopian titles that were culturally significant in the 2000s, I would have analysed two novels only. The relevance of the book's acclaim to this thesis has to do with the structure of the literary field. Bourdieu's theory of the field and value is relevant here. Pierre Bourdieu is one of the most influential sociologists of the twentieth century. He argued for a way of seeing how players of the literary field produce and distribute literary value. He used economic terms to articulate these dynamics. According to Bourdieu, there are different forms of capital within the literary field. One of these types of capital is symbolic capital: honour, prestige and recognition that institutions bestow on players of the literary field (Bourdieu 250).

This thesis discusses these three climate dystopias because these have accumulated the

most symbolic capital in their subgenre by receiving nominations and winning prizes. Since these stories received much attention, they must have a substantial readership. That is why it is relevant to see how these authors have incorporated a combination of slow and fast violence into their stories: these are the books that have the number of readers to have an impact. One could also expect that authors of cli-fi dystopias deliberately aim to inform readers about environmental degradation. Every chapter includes an explanation of how the book has gathered its symbolic capital to justify the book's inclusion into this thesis.

How are slow and fast violence dramatised in three prize-winning climate dystopias: *Oryx and Crake* (2003), *The Road* (2006) and *The Windup Girl* (2009)? This thesis intends to answer this question by doing a "slow violence / fast violence" reading of the three novels to discover how writers have honoured the generic features of storytelling and simultaneously dramatised these "violences". This thesis has three chapters discussing the novels in the order of their publication. Atwood's *Oryx and Crake*, McCarthy's *The Road* and Bacigalupi's *The Windup Girl*.

My approach will be as follows: each novel is subjected to an ecocritical reading which focusses on detecting both forms of violence. The overarching question for each book is: how is the depiction of fast or slow violence strategised for the purpose of raising environmental awareness? To answer this question, each chapter of the thesis discusses two issues. Firstly, to obtain insight into the context of the characters' world: what is the setting of the story? How does the setting help in raising environmental awareness? Secondly, to gather an idea of the types of violence that are committed: which instances of slow and fast violence are depicted in the novel and how do they help readers to become aware of environmental change? This thesis suggests that a combination of illustrative and explanatory representations of slow violence in narratives might help readers the most to become aware of environmental

change, and that dramatised apocalypses caused by environmental exhaustion could be more helpful than doom scenarios caused by human characters.

Atwood's Influence in the Literary World

If climate dystopias could contribute to readers' environmental awareness, *Oryx and Crake* (2003) is certainly a book with the proper amount of symbolic capital to achieve this (Bourdieu 250). Margaret Atwood is one of the most famous and popular contemporary writers in Canada, and her books are read all over the world. While her bestsellers are intelligible and accessible to any interested reader, school and university educators teach her work as well (Howells 1).

Moreover, Atwood has been celebrated internationally by winning awards and receiving university degrees. One of the most prestigious international literary prizes is the Man Booker Prize which is awarded to the most successful piece of English fiction. Atwood has been shortlisted for the Man Booker Prize five times, and in 2000 she won the Prize for *The Blind Assassin*. The book *Oryx and Crake* was shortlisted for the Man Booker prize in 2003.

Outline of the Characters' World

At the beginning of *Oryx and Crake*, a man called Snowman is introduced, who used to be called Jimmy in his previous life. After an apocalyptic global pandemic, Snowman is the only survivor. He lives in a community of artificially created humanoids who are perfectly designed to live in an eco-friendly way (Atwood 9). These 'Crakers' are named after their creator: Crake, who used to be Jimmy's friend before the global pandemic. The story begins at the end and looks back on how everything got this far. Snowman does not enjoy his time in the "new" world. As Giuseppina Botta puts it: "Memories, whether nostalgic, painful or pleasurable become a means by which the protagonist takes time to reflect on his experiences. The reader learns about his childhood and his scientist parents, his university career, his love relationships, and his friendship with Crake. Snowman's daily activities occasionally become a mere background to a book of memories which reveals all the traces of the past still

surviving in the harsh reality of the present” (Volkman, ed. 243-256).

This former world is set in our near future, but the exact time is not specifically mentioned. Food shortages and famines frequently occur within the former world. Thus, the scientists’ predictions of our planet’s future that are mentioned in the introduction of this thesis are dramatised in *Oryx and Crake*. For example,

Still, as time went on and 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, and meat became harder to come by [...] (Atwood 27).

And:

Jimmy and Crake graduated from HelthWyzer High on a warm, humid day in early February. The ceremony used to take place in June; the weather then used to be sunny and moderate. But June was now the wet season all the way up the east coast, and you couldn’t have held an outdoor event then, what with the thunderstorms. Even early February was pushing it: they ducked a twister by only one day. (Atwood 203).

Still, these environmental problems do not lead the people of Jimmy’s world to adjust their lifestyles. They keep trying to control nature through genetic modifications amongst other things. Science is a servant of commerce, and commercial science is the most powerful force of his society.

The story mainly describes the life of the social upper class who live in luxurious compounds in which Jimmy grows up. Wealth is unequally distributed. Jimmy’s father is a scientist who works at a company called OrganInc, and his duty is to genetically modify pigs to pigoons: animals who carry multiple organs that can be used for organ transplantations:

donor pigs (25, 29). Jimmy's family struggles with ethical questions about the pigoons: is it fair to mutate life forms like this to serve humanity, and most importantly, to make a huge profit?

The ethicality of meddling with lifeforms is one of the major themes of the novel: to which extent can nature be mutated into artificial forms for the elite's advantage, without compromising the essence of nature. In other words: when does the authentic become artificial or when does an environmental object become a cultural one? (Glover 53). Is it unethical if extensive parts of nature are cultured? Is a black-and-white distinction between culture and nature even useful? This question touches the Human-Nature paradox. People consist of natural material and are products of nature, but in a sense, they are also excluded from the environment, because they tend to see nature as the other (Soper 49). Are genetically modified pigs environmental or cultural creatures? Since the scientists are now serving companies, their views are affected by revenue models. Jimmy's parents disagree on the ethicality of working at OrganInc. Jimmy's mother had been employed for OrganInc as well, but she quit because she believed that her job did not contribute to a better world (33).

All in all, Jimmy's culture mostly values science and profits, and its people engage with battling diseases, producing food and controlling nature through genetic modification in the midst of environmental degradation. These priorities lead to many acts of slow violence that damage the environment. An example of this is the invention of the "Happicuppa coffee bush [that] was designed so that all of its beans would ripen simultaneously [amongst other benefits] (Atwood 210). To make huge profits, "[companies] are nuking the cloud forests to plant this stuff" (210).

Individual Behaviour

Now that the culture of Jimmy's social class and society has been described, this section will analyse his individual behaviour. Jimmy lives in the same compound as Glenn (79). One of

the most important aspects of their lives is that, next to passing tests at HelthWyzer High, they try to fulfil their broken and void lives with smoking weed and being distracted with extreme forms of entertainment, like watching extremely violent videos and playing violent games (99).

Later Crake gets access to illegal videos. During these extreme forms of ‘entertainment,’ Oryx enters the novel as an eight-year-old child on a child pornography website. When Jimmy sees Oryx in an online video, he immediately falls in love with her (103). The novel also tells the story of how Oryx was bought from her parents in an Asian country and sold into sex slavery (134-169).

The point of this section is to show that in *Oryx and Crake*, the characters live in a culture in which humaneness, norms and values and ethics are quickly disappearing, which goes together with the environment’s degradation. Their feelings are numbed by spending all their time and energy in watching ‘fast’ violence and sexual activities on websites to entertain themselves and distract themselves from reality (97). This is along the lines of Nixon’s ideas about today’s fast world in which people are not trained to be aware of the damage done over time: people are more concerned with short-term consequences and short-term spectacular events (Nixon 3). Perhaps these descriptions are not so far removed from some elements of contemporary society. According to Bouson, Crake and Jimmy personify the “scientific fools” that “mistake consumerism for peace of mind, sexual vigour for wellness, denial of aging for intuition of the immortal human spirit, and the genetic editing-out of human failings for the work of redemption” (Bouson 130).

Instances of Slow Violence

The aim of this section is to mention significant instances of slow violence and explain how these examples affect the story and support the writer’s purpose of helping readers to experience environmental change and simultaneously write an engaging narrative. The first

strategy that Atwood applies is to use Jimmy's mother's opinions as a voice for the environment. In the first quarter of the book, Jimmy and his mother suffer from slow violence on a personal level. The fact that Jimmy's father works for OrganInc and NooSkins burdens Jimmy's mother and because of that, Jimmy. His father works with genetically modified pigs called Pigoons. At OrganInc: "pigoons were being used to develop skin-related biotechnologies. [...] a young, plump skin cell that would eat up the worn cells in the skins of those on whom it was planted and replace them with replicas of itself, like algae growing on pond" (62). Jimmy's mother sees through this and believes that:

You hype your wares and take all [customer's] money and then they run out of cash, and it's no more treatments for them. They can rot as far as you and your pals are concerned. Don't you remember the way we used to talk, everything we wanted to do? Making life better for people – not just people with money. You used to be so . . . you had ideals, then. [...] There's research and there's research. What you're doing – this pig brain thing. You're interfering with the building blocks of life. It's immoral. It's ... sacrilegious. (Atwood 64).

She deplores her husband's daily activities but she cannot just leave her son Jimmy, so she is forced to live in this situation which is depressing her. She feels like a prisoner in their home (60). Each day, she sinks deeper into her depression. The fact that her husband is involved in this kind of work slowly harms her.

Readers can relate more easily to the emotions of Jimmy's mother than to the gradual damage that it does to people and the environment. The environment is voiceless, so Jimmy's mother speaks for the environment here. Simply put: from the start, at least one adult does not agree with the fact that scientists make so much money both by exploiting people's insecurities and genetically modifying animals and plants. Thus Jimmy (and the reader) experience that this world is far from perfect. Jimmy's mother loses her faith in the goodness

of her husband and feels trapped in the economic system. The compound in which Jimmy's family lives is only inhabited by the best scientists. Their homes can, therefore, be interpreted as a symbolisation of the controlling, manipulating aspects of the economic power structures; Jimmy's mother is imprisoned by the business scientists who are indifferent to the environment. The way in which Jimmy's mother suffers signals that the most influential people in Jimmy's world are not guided by green politics.

Jimmy's mother's gloomy mood affects Jimmy as well because he is now obliged to take care of his mother: "More than anything, Jimmy had wanted to make her laugh – to make her happy, as he seemed to remember her being once. He would tell her funny things that had happened at school, or things he tried to make funny, or things he simply invented. [...] most of the times these activities just irritated his mother" (Atwood 36). Jimmy's attempts to comfort his mother affect him; there is less room for his own emotions, and this burden frames his mind: he develops a low self-esteem and will turn out to be attracted to unhappy and damaged women only (114). This aspect of Jimmy's character manifests itself when Jimmy falls in love with Oryx, a "damaged" girl who has been exploited as a child in the sex industry. Eventually, Jimmy's mother decides to abandon her family and run away from the compound they live in (70). Jimmy suffers from this as well. One could say that the abandonment by his mother happened on a particular day and should be categorised as fast violence but from that day on, Jimmy is forced to miss his mother each day which is a form of slow violence.

The second strategy that Atwood applies is the use of Oryx as an allegory for the environment. *Oryx and Crake* describes Oryx's upbringing on another continent. Over more than 30 pages, Atwood describes how a white man buys Oryx from her mother in a remote village somewhere in Asia (Oryx does not know in which country she was born) and how she slowly ends up in the sex industry (Atwood 134-169). Oryx's forced labour as a sex worker

should can be categorised as “slow violence” because she has grown so used to it that it seems normal. She experiences a sense of worthiness through it:

[Oryx and others] had a money value: they represented cash profit to others. They must have sensed that – sensed they were worth something. Of course (said Oryx), having a money value was no substitute for love. Every child should have love, every person should have it. She herself would rather have had her mother’s love [...] but love was undependable, it came and then it went, so it was good to have a money value, because then at least those who wanted to make a profit from you would make sure you were fed enough and not damaged too much. Also there were many who had neither love nor a money value, and having one of these things was better than having nothing. (Atwood 147)

Presumably, Atwood incorporated Oryx’s history of abuse and exploitation into this narrative to give the victim of humanity’s activities a face. She creates this duality to Oryx’s situation. On the one hand, a villainous atrocity is committed: a child is habitually exploited through sexual activities. On the other hand, Oryx is kept alive and not damaged too much since she is of economic value. Of course, the reader knows that Oryx will be extremely damaged by this as she lacks the necessary love to develop a healthy personality. It could be argued that the environment is treated similarly: it is not loved – in the sense that it is not appreciated much more than for its monetary value. If the costs are low enough, natural resources are kept intact to reuse over and over again. Keeping the environment undamaged is then only done for moneymaking purposes. The textual basis for this interpretation of Oryx’s situation as an allegory for the environment is that Oryx is a representative of nature in some parts of the narrative. For instance, she is tasked to teach the Crakers botany and zoology which are specific environmental subjects (Atwood 363). Furthermore, in Crake’s new world, animals are called “the children of Oryx” (Atwood 110, 119). This is because Snowman reinvents her

as a goddess to the Crakers, who is responsible for the creation of words, animals, birds and fish (Hall 179). These fragments suggest that Oryx is allegorical for the environment. These specific environmental aspects that are attributed to Oryx do not seem to be a coincidence.

In other words, Atwood cleverly concretises environmental exploitation by portraying how the same dynamics of profit seeking, slowly destroy Oryx's life. However, another interpretation of Oryx's upbringing in the sex industry is that this is Atwood's way to readdress the urgency of improving "women's sexual, political, and sometimes even religious autonomy [...] and the ability to speak about their own desires" which she has also done in *The Handmaid's Tale* (Hall 181).

Oryx's story is powerful, and helps readers to become aware of the potential effects of some companies in this world. However, describing Oryx's life is also a bit far fetched because her story is mostly disconnected from the protagonist's life. The only connection between Oryx and the plot is that Jimmy sees her in a child porn video and that she, all of a sudden, starts working for Crake in the last phase of the story (Atwood 103, 299, 364). In other words, despite the fact that Oryx's history as a sex worker provides readers with a concrete example of boundless capitalism in less developed countries, Oryx's part in the storyline seems artificially and unnaturally interwoven into the main plot.

Up to now, two strategies have been discussed. Firstly, Atwood connects corporate practices of Jimmy's father's company to Jimmy's mother's depression, and her voice speaks for the environment. Secondly, Oryx's upbringings in the sex industry could be perceived as an allegory for the environment.

The third strategy that Atwood applies to dramatise slow violence into her story is to embed it in dialogues. Jimmy and Crake contemplate the nature of humanity in several parts of the narrative. An example of such a dialogue is:

What Crake had to say was this: “Jimmy, look at it realistically. You can’t couple a minimum access to food with an expanding population indefinitely. *Homo sapiens* doesn’t seem able to cut himself off at the supply end. He’s one of the few species that doesn’t limit reproduction in the face of dwindling resources. In other words – and up to a point, of course – the less we eat, the more we fuck. [...] Men can imagine their own deaths, they can see them coming, and the mere thought of impending death acts like an aphrodisiac. [...] Human beings hope they can stick their souls into someone else, some new version of themselves, and live on forever. (Atwood 139)

That humanity tends to reproduce when food is scarce exemplifies how millions of individual, understandable choices could eventually lead to disastrous consequences. In this passage, reproduction is a form of slow violence. People’s individual decision to have children causes more people to inhabit the world which leads to increased consumption. Crake believes that this is one of the reasons why humanity’s destruction is inevitable which is certainly one of the ideas that is insistently promoted in this novel. This idea is later endorsed as both Jimmy and Crake believe that:

It had been game over once agriculture was invented, six or seven thousand years ago. After that, the human experiment was doomed, first to gigantism due to a maxed out food supply, and then to extinction, once all the available nutrients had been hoovered up. [...] Maybe there weren’t any solutions. Human society, they claimed, was 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 bio forms on the planet, grinding up life on earth and shitting

it out the backside in the form of pieces of manufactured and soon-to-be obsolete plastic junk. (Atwood 285)

In their dialogues, Jimmy and Crake talk about how humanity is doomed to slowly destroy the earth because people are too much focussed on their own short-term gain. Through this explanatory representation of slow violence, readers can acquire information about the workings of slow violence. These conversations are connected to the plot as they show Crake's reasons for exterminating humanity.

Instances of Fast Violence

This section will analyse how several instances of fast violence help readers to become aware of the environment and how these instances are connected to the plot. The first example of fast violence are the executions of the main characters' parents. Crake's father and Jimmy's mother were killed because they rose up against the rulers of their society (Atwood 248, 303). They both had information that, if they had spread it to others, it might have led to revolts. Crake's father discovered that companies were creating diseases to guarantee the sale of their medicines. He was pushed off a bridge to make sure he would not talk about this (Atwood 248). Jimmy's mother also knew about how large enterprises exploited people (Atwood 64). Jimmy witnessed in a video how his mother was executed.

These examples of fast violence affect the plot because it forces the protagonists to choose between siding with the ruling class, to which they have belonged since they have been born, or following in their parents' footsteps who revolted. This choice is difficult because both characters, especially Crake, belong to the most talented and thus to the most financially rewarded people of the world. Should they avenge their parents' death, or should they cynically enjoy the rest of their days on earth?

The second example of fast violence is when Crake destroys mankind. At the end of the book, Crake is employed at one of the most influential and successful companies. With his

colleagues, he creates the 'BlyssPluss Pill': a pill in demand, that supposedly protects users against sexually transmitted diseases, provides an unlimited supply of libido, gives a generalised sense of energy, eliminates feelings of low self-worth, and prolongs youth (346). Jimmy accepts a job in advertising Crake's pill and moves into Crake's compound that is airlocked to protect Crake and his colleagues from possible airborne diseases. Because Crake is one of the most brilliant and thus powerful scientists on earth, he could use his network to contact Oryx and get her to live in his compound.

Crake secretly added a virus to the BlyssPluss Pill that caused people to catch a highly contagious and lethal disease. Crake's belief in the inevitability of humanity's destruction and his possible loathing for mankind leads him to exterminate all people and create new artificial people who are perfectly adjusted to the environment: the Crakers. This makes him both a hero and a villain: he saves the earth but destroys humanity.

Since the apocalyptic event in this novel is not caused by the environment but by Crake, this novel might be less effective in communicating environmental change to its readers. Crake does destroy humanity to save the planet but since the apocalyptic event is not a result of the environment's deterioration, the environment is less emphasised than Crake is.

While the pandemic is still spreading and killing all people on earth, Crake returns to the compound with Oryx to speak to Jimmy again:

Crake let Oryx fall backwards, over his left arm. He looked at Jimmy, a direct look, unsmiling. 'I'm counting on you,' he said. Then he slit her throat. Jimmy shot him. (Atwood 385).

These instances of fast violence - killing humanity and killing Oryx - force Jimmy to move on and to live with the Crakers. There is no alternative for Jimmy to living with these "perfect" people. Being with the Crakers is the only purpose that his life still has (Atwood 115). There is no one else to live for.

Conclusion

The story of *Oryx and Crake* is set in the near future and the protagonists live in a world where scientific knowledge first and foremost benefits commercial companies. Science is not disinterested, and there is an over appreciation of science. They work for the most successful businesses that have the power to rule the world. Those companies use genetic modification to alter pristine bioforms to their customers' advantage.

Atwood dramatises slow violence via several strategies. Firstly, she uses Jimmy's mother's voice to speak for the environment. Secondly, the character of Oryx functions as an allegory for the environment. Thirdly, she establishes dialogues between Jimmy and Crake that explicitly mention the slow degradation of the earth by human activities.

In *Oryx and Crake*, the most distinctive difference in how fast and slow violence affect the plot is that when slow violence is dramatised, it demonstrates how it affects people. It does not necessarily show how it affects the environment. This could be the case because it is rather difficult to give nature a voice in a story or to turn nature into a character. The main effect of the dramatisation of slow violence is that it shows what leads people to gradually damage something or someone: when short-term advantages weigh heavier than long-term costs, slow violence may be the result of those priorities.

In this book, fast violence functions more clearly as hinges that swing the plot in another direction. For example, when Crake destroys humanity, it most clearly affects Jimmy's life as there is nothing else to do than to become the guide of the Crakers, but when Jimmy's mother suffers from the unethicity of her husband's job, she is not forced to leave the compound. Examples like these imply that instances of slow violence mainly provide context about the story world whereas instances of fast violence determine the plot more intensely.

Chapter 2 Cormac McCarthy's *The Road*

McCarthy's Influence in the Literary World

Cormac McCarthy is an American writer who enjoys authority in the American literary world. He won several prizes including the National Book Critics Circle Award for English fiction. McCarthy received this for *All the Pretty Horses* in 1992 (National Book Critics Circle). He also won the National Book Award, which honours top American authors (National Book Foundation). The most significant award that he won was the Pulitzer Prize which he received for *The Road* in 2007 (Pulitzer). McCarthy's *The Road* was also a finalist for the National Book Critics Award (National Book Critics Circle). These prizes contributed to McCarthy's fame, and it must have influenced the number of his readers significantly. *The Road* was adapted to film by John Hillcoat in 2009. Viggo Mortensen, renowned for playing Aragorn in the successful *Lord of the Rings* trilogy, takes up the role of the father in this film. Film adaptations tend to have a positive effect on public familiarity with a novel (Hutcheon 9).

Outline of the Characters' World

The protagonists of *The Road* are a father and his son who are travelling to the south of America - a supposedly better place to survive. The protagonists do not have names. The story is set in a ruined environment, destroyed by an apocalyptic event. How the world turned into one big ashtray is unknown, but society, as it is currently known, vanished at the beginning of this story. The characters' world seems to lack a culture or civilisation. The narrator tells us that "the month was October but he wasn't sure. He hadn't kept a calendar for years" (McCarthy 4). That the central characters forget about time is one of the signals which suggests that modern society has stagnated and ended, because a sense of dates and hours is strongly connected to civilisation as it is known today.

Another element of the characters' world which suggests that many aspects of civilisation have disappeared is the non-existence of states. This absence of official, human

law and order result in a bigger role for the environment in *The Road*. When the father explains how he plans their journey towards the south he says:

These are our roads, the black lines on the map. The state roads.

Why are they the state roads?

Because they used to belong to the states. What used to be called the states.

But there's not any more states?

No.

What happened to them?

I don't know exactly. That is a good question.

But the roads are still there.

Yes. For a while. (McCarthy 43)

In other words, there are no states to protect the inhabitants of America anymore. The only law that is still active is the law of the jungle. Everyone is on their own. In this situation, the protagonists' fellowship is a vulnerable one: a father and a child.

Food is scarce. The apocalyptic event happened some years ago, so a significant share of the population has already starved to death. The survivors have already eaten all animals, and the only way to survive is by gathering the last food or by devouring other people. The father and son are determined not to eat other people; they decide to be "the good guys". The evil people eat all the other ones (McCarthy 127). The protagonists are fighting starvation throughout the whole book while they try to uphold their morality.

In this story, the love between the father and his son helps them to continue their road to a better place. His son's survival is the only reason for the father to go on: "he knew only that the child was his warrant. He said: If he is not the word of God, God never spoke" (McCarthy 5). Their relationship is special because most other survivors managed to save themselves by being the strongest; killing weaker people and eating them. "The world [was]

largely populated by men who would eat your children in front of your eyes.” (McCarthy 181). While self-centeredness drives the other survivors, love motivates the protagonists.

On their road, they have a supermarket cart in which they put the food and clothes they have collected to survive. They follow the state roads to the south. However, travelling on previously official roads makes them more vulnerable. They have equipped their cart with a mirror to see what is happening behind them. If others discover them, they will be caught and eaten. They also own a gun with two bullets in it to protect themselves from potential cannibals.

The environment manifests itself more clearly in *The Road* than in *Oryx and Crake*. McCarthy has positioned the environment prominently through several strategies. Firstly, the story often mentions the environment and its state. For example, the narrator explains what the surroundings look like. Smog clouds the sun and most people and animals are dead. The world is cold, grey, dead, silent, empty and incredibly dark at night.

Across the fields to the south he could see the shape of a house and a barn.

Beyond the trees the curve of a road. A long drive with dead grass. Dead ivy along a stone wall and a mailbox and a fence along the road and the dead trees beyond.

Cold and silent. Shrouded in the carbon fog. (McCarthy 117).

The grey and destroyed state of the earth adds a gloomy element to the atmosphere of the story. Regular invocations of how cold and grey the world has become ensure that the environment remains centre stage in the novel.

Additionally, the state of the environment contrasts with the father’s dreams several times. The father has experienced life before the apocalyptic event, and he dreams of the time before nature was damaged. When he sleeps, the world is a happy place, but when he wakes up, he is confronted with the grey, cold world.

And the dreams so rich in color. How else would death call you? Waking in the cold dawn it all turned to ash instantly. Like certain ancient frescoes entombed for centuries suddenly exposed to the day. (McCarthy 21)

These colourful fantasies amplify the impact of the depressingly monotonous environment. The surroundings do not encourage the protagonists to remain hopeful. It influences them. Death engulfs them.

A more subtle way in which McCarthy increases the role of the environment is by sporadically depicting “the environment” as a humanoid with emotions: by day the banished sun circles the earth like a grieving mother with a lamp (McCarthy 32). The text implies that the sun desires to restore the environment to take care of people again. Nature seems to have a voice in this story, because a non-human entity like the sun appears to desire something. This subtle fragment turns nature into a character to some extent. In *The Road*, the environment is more than just the setting. The next section revisits environment’s role in this story.

Instances of Slow Violence

The plot of *The Road* is rather simple: a father and his son travel to a more human-friendly area while they attempt to survive the dangers of starvation and hypothermia. “Evil” people who eat others to feed themselves also inhabit their area. The lack of food and warmth is a constant threat, whereas the cannibals might materialise at any given moment. The lack of essential goods is constant, in the sense that there is no solution to this shortage. It is definite that they are running out of food and will starve if they do not move to another place. This stable hazard alternates with the threat of cannibals. These two menaces drive the plot to its climax.

Slow violence as it was explained in the introduction, concerns collective, repetitive acts which slowly damages ecosystems if they are executed by millions of people over several generations. These instances of slow violence are not found in *The Road*, because there are

only a few people left on earth in this narrative. Another reason why *The Road* does not dramatise these instances of slow violence is that before the story begins, the apocalyptic event has already happened. Slow violence, as people perpetrate it in today's world, may have led to the dramatic event that occurred before the plot begins but the cause of the event is not mentioned. It only states how it affected the earth. Thus, it is not clear whether people's slow violence led to a planetary disaster or something else caused it.

The narrative does depict various instances of slow violence. The key strategy that is applied to depict environmental degradation is the dramatisation of the so-called "spaceman economy". Ecocritics argue that people practice "cowboy" economics or "spaceman" economics (Robinson and Canavan 6). The "cowboy economy" comes from the way colonisers and pioneers in America treated the resources that were available in the new world: there was so much land that they could exploit the earth as much as they wanted. There were enough raw materials. Many people today may still have the idea that there are sufficient resources to sustain humanity. However, ecocritics argue that people should practice a spaceman economy, which compares the environment to a "spaceship". This spaceship has limited resources to sustain humanity, and therefore people should strive to use the least amount of resources to keep themselves alive so that the earth can recover (Robinson and Canavan 6).

In *The Road*, the environment requires its survivors to use as little resources as possible, because there are not enough means to sustain the few people that are still alive. Primary needs are inaccessible to the characters of the story. The earth is in such a state that it cannot provide new produce. All that is left on earth is what can be consumed. Thus, the setting of *The Road* characterises and magnifies the "spaceman economy". The only difference is that "today's spaceship" can still be maintained whereas the earth in *The Road* is permanently damaged, but it portrays, along the lines of the theory, that the earth is

irreplaceable and must not be exploited. This depiction of extreme scarcity might help readers to comprehend their dependence on the earth for producing necessary goods, because the earth does not have unlimited resources either.

The second strategy to dramatise slow violence is done by making the environment is exceedingly noticeable. Natural surroundings seem to play a rather active role in the plot. The environment's role is both subtle and markedly present. Its role is subtle, because the environment cannot speak except from the few personifications that McCarthy put in the narrative. However, it is also strikingly present, because the natural surroundings significantly affect the well-being of the protagonists. The damaged state of the environment causes food, clothes and shelter to be scarce. In this story, scarcity is one of the most important aspects that move the plot: it causes the protagonists to undertake their actions. This collision between need and shortage creates the tension that makes this story engaging. The protagonists' difficulty in surviving emphasises the presence of the environment. Its damage is the main reason for the scarcity.

Since the environment is so noticeable in *The Road*, the book succeeds in what Robert Nixon urges for. Nixon's introduction explains that he encourages writers of ecofiction to dramatise slow violence. According to him, this requires that authors: "plot and give figurative shape to formless threats whose fatal repercussions are dispersed across space and time." (Nixon 9). McCarthy applies this strategy in *The Road* as well. The damaged environment is the non-human threat that slowly drives the last existing people to their extinction. While the last survivors nourish themselves, food becomes more scarce, so they also gradually shorten their lifespans.

Instances of Fast Violence

Fast violence does not occur often in *The Road*, because the protagonists are continuously avoiding confrontation. They are physically weaker than the other survivors, and their

commitment to not harm other people isolates them even more. The first case of fast violence is when the father looks back on his life. His wife commits suicide. She ends her life because she does not believe that they have a chance to survive the aftermath of the disastrous event. She kills herself with a flake of obsidian (McCarthy 58). He remembers her saying:

No, I'm speaking the truth. Sooner or later they will catch us and they will kill us.

They will rape me. They'll rape him [their son]. They are going to rape us and kill us and eat us and you won't face it. You'd rather wait for it to happen. But I can't.

I can't. [...] We used to talk about death, she said. We don't anymore. Why is that?

I don't know.

It's because it's here. There's nothing left to talk about.

I wouldn't leave you.

I don't care. It's meaningless. You can think of me as a faithless slut if you like.

I've taken a new lover. He can give me what you cannot. (McCarthy 57).

In this scene, she chooses to take 'death' as her new lover instead of joining the other two in trying to survive.

Her choice to step out of life makes the story more realistic, because many readers will be able to understand her decision in this context. When this flashback is described, the reader already knows that the mother of this family has no part in the story, so the reader is already used to the effects of this "turning point". This fast violence does not affect the plot because the story already started with a father and a son only. It mainly provides the reader with information about the father and his son's family.

This instance of fast violence shows the reader that the protagonists are in an uncertain world with dangerous people and their journey might as well end in a disaster. Their mother and wife calculated the risks and concluded that stepping out of life is a better choice than

risking rape and being eaten. It also shows that the father is not some powerful superhero but just an ordinary, vulnerable man who is in as much danger as any other person would be in these circumstances.

When the flashback comes to an end, the second example of fast violence soon follows. The father and son discover that a diesel truck with armed men appear on the road behind them, so they flee into the woods (McCarthy 61). While they hide, one man walks into the woods to “take a crap” (McCarthy 63). It does not end well for the newcomer:

He dove and grabbed the boy and rolled and came up holding him against his chest with the knife at his throat. The man had already dropped to the ground and he swung with him and levelled the pistol and fired from a two-handed position balanced on both knees at a distance of six feet. The man fell back instantly and lay with blood bubbling from the hole in his forehead. (McCarthy 66).

In this example of fast violence, the father proves that he has the guts to kill someone to save his child. They run away and survive. A few hours later, when they get back to get their cart, they find out that:

The bones and the skin [are] piled together with rocks over them. A pool of guts.
He pushed at the bones with the toe of his shoe. They looked to have been boiled.
No pieces of clothing. (McCarthy 71)

The reader deduces from this that the truck people found the man that the father had shot down to protect his child and ate all of him. This confrontation with other people amplifies the distinction between good and evil people. From this moment onwards, the father and son want to survive without eating others. They want to be the good ones. The father uses this idea to convince his son to persevere: “This is what the good guys do. They keep trying. They don’t give up” (McCarthy 137).

Fast Violence and the Plot

The primary function of fast violence is to add unpredictable dangers to the protagonists' journey. If in *The Road*, the protagonists had been the only people on earth, their misery would have been defined mainly by constant factors like cold, hunger and lack of the right equipment. If there were no others in this story, but only the protagonists, it would be easier for readers to predict whether the protagonists will survive or not. Fast violence in *The Road* adds unpredictability to the plot. At any given moment, the evil people can discover them, overwhelm them and eat them. The fast violence increases the chance of engaging the reader, because it adds an unpredictable factor to this story.

The dramatisation of fast violence also adds a sense of morality. The protagonists are forced to choose between "good" and "evil". If they participate in fast violence – they belong to the evil ones. If they try to avoid executing fast violence – they belong to the good ones. The main characters would not be able to choose "the right path" if there was no fast violence in this plot, because their "righteousness" derives from their ability to compare themselves to the cannibals. In the end, the father dies and the boy is rescued by other "good" people that he meets (McCarthy 281).

Conclusion

In the story, an apocalyptic event has occurred, but the narrative does not tell why the disaster took place. This limits the narrative's emphasis on slow violence, which is a missed chance. When it comes down to McCarthy's strategies to represent slow violence in his narrative he does two things: he incorporates the dynamics of the "spaceman" economy in his plot, and he emphasises the role of the environment as a provider who is unable to provide.

In the narrative, there are only a few people left on earth, so it is impossible to detect depictions of contemporary slow violence. However, the book dramatises the slow destruction of humanity due to the damaged state of the earth. The apocalyptic catastrophe altered

humanity's habitat to such an extent that the essential needs of people are difficult to satisfy. McCarthy portrays the irrevocable damaged environment as a vague threat that causes people to slowly run out of food and die. Additionally, nature is more conspicuously present in this story than in *Oryx and Crake*. The poor state of the earth and the way it affects the protagonists might also inspire readers to be more aware of the environment, because there are no unlimited resources in the real world either.

In this novel, the fast violence adds extra tension to the protagonist's pursuit of survival. The other people could detect the main characters at any time, and the central characters risk being eaten. This other danger adds unpredictability to the story. Additionally, the dramatisation of fast violence adds the theme of morality to the story. The protagonists can distinguish themselves from the cannibals by deciding not to eat other people. They identify themselves as the "good" ones which would not have been possible if there were no cannibals with which they could compare themselves. The state of the earth hinders the characters in achieving their survival, and additionally, the fast violence adds extra tension and captivation to the story.

Chapter 3 Paolo Bacigalupi's *The Windup Girl*

Bacigalupi's Influence in the Literary World

The Windup Girl is famous within the field of climate dystopias. This book is Paolo Bacigalupi's debut novel, and it still won two big prizes. *The Windup Girl* won the Hugo and the Nebula award for best novel in 2010. These awards are given to the best works of science fiction and fantastic literature produced in the previous year (The Hugo Awards). Both prizes are awarded in the United States. The Nebula award is only given to American authors whereas writers of all nationalities can win the Hugo award (SFWA). These recognitions help Bacigalupi to create environmental awareness, because his readership expands. *The Windup Girl* is science fiction as well as a climate dystopia.

Outline of the Characters' World

The Windup Girl takes place in future Thailand. There are many important characters, so to keep track of the analysis, this chapter mainly focuses on the groups in which the characters participate. Bacigalupi put much work into developing the setting since it has historical, political, environmental and economic dynamics. It comes with many details that have to be explained to analyse the story. The following descriptions of the characters' world are written in the past tense because they occur before the plot begins.

The global economy stagnated decades before the beginning of the plot. Trading hardly occurs internationally. In this story, the world experienced a so-called "contraction" a few generations ago. There was not enough petroleum left to sustain international transport. Business people went back to their own countries, because they did not have enough fuel to travel (Bacigalupi 96). This "contraction" could be seen as an apocalyptic event because it had led to a high number of deaths. *The Windup Girl* is also set in a post-apocalyptic world. Alternative forms of fuel were required, and primitive forms of power were invented as decades passed. The "contraction" was caused by the workings of slow violence because too

much petroleum was used. To illustrate how this contraction changed the world, Anderson Lake thinks: “In his grandparents’ time [the time of the contraction], even the commute between an old [...] suburb and a city center was impossible. [...] To travel ten miles had been a great journey for them” (Bacigalupi 165).

Furthermore, the stagnation of international trade had several disastrous effects. All states had to develop a self-supporting economy again, but most nations did not succeed in this. In *The Windup Girl*, a minister of Trade says to the representative of an international trading company: “With the Contraction, you [...] left us starving and over-specialized” (Bacigalupi 216). This statement depicts the challenges that many governments faced. They had to develop strategies to rescue their citizens from famines while their economic policies were not oriented towards a self-supporting economy but to specialised one to trade internationally.

The plot begins a few generations after the “contraction”. Some major countries have ceased to exist when the plot starts. A character thinks:

We are alive. We are alive when whole kingdoms and countries are gone. When Malaya is a morass of killing. When Kowloon is underwater. When China is split and the Vietnamese are broken and Burma is nothing but starvation. The Empire of America is no more. The Union of Europeans splintered and factionalized. And yet we endure, even expand. The Kingdom [of Thailand] survives. Thank the Buddha that he extends a compassionate hand and that our Queen has enough merit to attract these terrifying [western] tools without which we would be completely defenseless. (Bacigalupi 306)

In this passage, one can read that many countries did not survive the contraction’s aftermath. The lack of food had not been the only problem that governments had to deal with; the results of environmental change also led to further misery. For instance, the greenhouse effect caused

the sea to rise and flood some countries (Bacigalupi 169).

Another significant reason for the death of many people had been the development of genetically modified food that eventually resulted in epidemics that spread around the world. How did this happen? Food scarcity led to the foundation of “calorie companies” such as AgriGen and PurCal that managed to create genetically modified food to feed the surviving population (Bacigalupi 5). These companies did not feed the world from charitable motives; they made huge profits from it. Many countries became dependent on these food companies; the countries’ overspecialisation rendered them unable to support themselves. Buying food from calorie companies initially worked, but it turned out that these genetically modified foods were also more susceptible to plagues. As most countries bought these foods, the new, subsequent plagues spread all over the world as well. From that moment onwards, the companies had to race against the clock, because they had to develop new genetically modified food that would not be affected by the plagues. However, as viruses adapt and evolve, they eventually infect these newly invented foods as well. Because most countries rely on the food that these calorie companies create, humanity’s existence is in the companies’ hands. However, there is one kingdom that does not fully rely on calorie companies. Thailand remained independent, because it had had patriotic gene rippers that had produced their own food in their own seed banks (Bacigalupi 173). The calorie companies want to access Thai intelligence so that they can use Thai knowledge to help themselves creating new food, but the Thai Environment Ministry does not want to sell their know-how. They want Thailand to be independent of the calorie companies. This is the historical context of the characters’ world.

A Struggle for Power

There are two important political organs in this story: the Environment Ministry and the Trade Ministry and a power struggle ensues because these organs want different things. The

dangerous circumstances caused by the contraction had helped the Environment Ministry to accumulate much power, because the people longed for a group that protected them from environmental disasters. The Environment Ministry had the support of both the Queen and the Thai people. It is in the Environment Ministry's interest to save the Thai people from the dangers of environmental change which are predominantly caused by traders. This ministry is also nationalistic as it protects Thailand's independence. The Trade Ministry, however, would not mind sharing their intelligence for a good price. As the environmental threats increased, the ministry's purview expanded:

The plagues were but the latest insult to the Kingdom's survival. First came the rising sea levels, the need to construct the dikes and levees. And then came the oversight of power contracts and trading in pollution credits and climate infractions. [...] And there was the tracking of human health and viruses and bacteria: H7V9; cibiscosis 111.b,c,d; *fa'gan* fringe; bitter water mussels, and their viral mutations that jumped so easily from saltwater to dry land; blister rust ... There was no end to the duties of the Ministry (Bacigalupi 174).

The Environmental Ministry thwarts the interests of the Trade Ministry. The Environment Ministry uses assault troops called "white shirts" that use several strategies to hinder traders in furthering environmental change (Bacigalupi 75). This assault group is led by Captain Jaidee "the Tiger of Bangkok" who is popular with the people and ill-reputed with the Trade Ministry.

The Environment Ministry used to be very powerful and domineering. However, it has been too successful for its own good; the Kingdom is functioning again, so the people are not as afraid of environmental disasters as they have been before. The Ministry of Trade desires to restore international trade and gradually succeeds. Global trade is slowly coming back again. One of the characters who works for a calorie company thinks:

And beyond the factories, the rim of the seawall looms with its massive lock system that allows the shipment of goods out to sea. Change is coming. The return to truly global trade. Supply lines that circle the world. It's all coming back, even if they're slow at relearning. (Bacigalupi 91)

In other words, because the environment ministry curbed immediate environmental threats, people's short-sightedness causes them to desire wealth and international trade again. They start perpetrating slow violence again, because the short term effects are too appealing to ignore (Bacigalupi 174). The Environment Ministry is shocked by the newly emerging business activities while the Trade Ministry welcomes them. These different political perspectives lead to a power struggle and form the most relevant background information.

Instances of Slow Violence

This section discusses a selection of slow violence dramatisations. The first strategy that Paolo Bacigalupi used is to explain the workings of slow violence explicitly. For instance, when the narrator explains what the Environment Ministry does, it becomes abundantly clear what it wants: to diminish the effects of slow violence to the environment.

All life produces waste. The act of living produces costs, hazards and disposal questions, and so the Ministry has found itself in the center of all life, mitigating, guiding and policing the detritus of the average person along with investigating the infractions of the greedy and short-sighted, the ones wish to make quick profits and trade on other's lives for it. The symbol for the Environment Ministry is the eye of a tortoise, for the long view – the understanding that nothing comes cheap or quickly without a hidden cost. And if others call them the Turtle Ministry, [...] because they are not allowed to manufacture as many [products] as they would like, so be it. (Bacigalupi 174)

This explanation describes that by living, many people affect the environment negatively. The accumulation of “costs, hazards and disposal questions” harm the planet. Next to the waste that the average person produces, there are also greedy and short-sighted people who add even more damage to the environment. The Environment Ministry punishes those people. In this fragment, *The Windup Girl* explicitly explains how slow violence works which is one of Bacigalupi’s strategies. The fragment states that people are not aware of the long-term costs of their actions and do not care about the expenses that the next generations have to pay. This passage informs readers with slow violence and shows them what the Environment Ministry wants: to protect the Thai Kingdom from another apocalyptic destruction. It introduces readers to the power struggle that is about to take place between the Environment Ministry and the Trade Ministry.

The second strategy that Bacigalupi applies to dramatise slow violence is to demonstrate an individual character is compelled to contribute to environmental destruction. One passage shows how a factory worker’s short-sighted decision leads to a disaster. Anderson Lake is Hock Seng’s superior at a factory. Hock Seng does not function well enough according to Anderson which leads to Anderson Lake’s punitive rebuke:

‘I don’t care about your explanations and excuses! Your words are shit! I don’t care what you say. I don’t care what you think, what you feel, what you say. All I care about is results. Bring the line up to forty percent reliability within the month. You have a month before I fire your ass and find another manager.’ (Bacigalupi 185)

A few moments after Anderson Lake rebuked Hock Seng a terrible decision is made. Hock Seng discovers that his factory is contaminated. If they do not replace their tanks, potential vectors might spread diseases to other people. Hock Seng’s response is a clear illustration of people’s short-term, blinding concerns:

‘The tanks and cultures cannot be fully cleaned. Eventually it will be a vector. And the rest of the tanks will be contaminated.’ ‘Eventually? Is that all? Eventually’ Hock Seng scowls at him. ‘I don’t care about this ‘eventually’ you speak of. [...] Don’t worry about tomorrow. Worry about whether Mr. Lake throws us all out on the street today. Use your imagination. Find a way to make this [work]’ (Bacigalupi 189)

This shows readers that some perpetrators of slow violence are hardly able to do otherwise. Hock Seng’s decision eventually leads to the beginning of a new plague which causes Anderson Lake’s death, so this short-sightedness eventually kills the protagonist (Bacigalupi 489).

Bacigalupi put many examples of environmentally conscious behaviour in *The Windup Girl*. He juxtaposes correct behaviour to polluting acts. The juxtaposition causes the acts of slow violence to stand out. High-status people travel by bikes or rickshaws instead of cars (Bacigalupi 174). One passage states: “When Lieutenant Kanya is finished here, she’ll give you a ride back on our tandem” (Bacigalupi 171). It is striking that employees of one of the most powerful ministries use tandems to commute. In today’s world, most politicians travel by car and travelling by tandem might diminish a politician’s social status. This means of transportation might strike contemporary readers.

These bike transports are frequently and casually mentioned while much more emphasis is put on people who travel by car. Characters are even shocked to see cars. This might help readers to realise that travelling by car contributes to environmental change.

‘What’s the matter? You’ve never seen a car before?’ [...] ‘You’re a fool,’ he mutters. ‘Do you know how this exposes me?’ How people will speak of an extravagance like this, parked in front of this factory?’ [...] ‘Is it coal diesel?’ [...] ‘The boss does so much for the carbon load...’ He shrugs. ‘This is a small

extravagance.’ [...] Even in his wealthiest days in Malaya, Hock Seng would never have considered such an extravagance. (Bacigalupi 193).

The environmentalists travel on muscle power whereas gangsters or the trade minister travel on diesel. This juxtaposition might help readers to see more clearly how the “wicked” people slowly destroy the earth by making short-term choices. In this story, when people travel by cars, they are (always working for) the biggest perpetrators of slow violence whereas the majority of people travel by bike.

All in all, slow violence is dramatised through different strategies. Firstly, a character explains how short-term focus might harm the environment. Secondly, it is demonstrated through Hock Seng’s decision to use the contaminated tanks, because he is unable to take the long-term effects into account when he makes his decision. Thirdly, instances of slow violence are juxtaposed to eco-friendly behaviour, so that acts of slow violence strike readers more clearly. The Trade Minister and his friends drive cars whereas the environmentalists ride bikes. Also, characters are astonished when they see cars, which puts a greater emphasis on harmful behaviour.

Instances of Fast Violence

At the beginning of *The Windup Girl*, the environmentalists still have enough power to violently punish perpetrators of slow violence. In comparison to contemporary environmentalists, they are very radical. They seem to commit the most instances of fast violence throughout the whole plot to realise their vision of protecting Thai independence and saving humanity from potential environmental disasters.

Captain Jaidee, the leader of the white shirts, manages to intercept and destroy many valuable trade goods which is agonising to the Ministry of Trade, calorie companies and other business people. This act of violence sets the stage for the civil war that is to come. The Environment Ministry angers traders in many other ways. At a given moment, a Chinese

businessman is arrested by Jaidee, because his factory's coal ration has been exceeded (Bacigalupi 169). Jaidee uses violence:

Jaidee is sitting atop that man's chest now – with a black baton over his windpipe – explaining the finer points of respect due a white shirt. [...] The man gurgles and tries to get free, but the baton crushing his throat prevents him. Jaidee watches him carefully. 'You of course understand that we have coal rationing because we are a city underwater. Your carbon allocation was exceeded many months ago.' [...] The ocean is not some marching army. Once we accede to the waters, we will never again throw it out. And so we must all do our part. We must all fight together to keep this invader from our streets, don't you think?' (Bacigalupi 169, 170)

Jaidee has good reasons for curbing short-sighted behaviour. The traders, however, are angered and have accumulated enough power over the years to demote and humiliate Jaidee in public (Bacigalupi 183). Jaidee is brutally killed. His death is understood as an invitation to war (276).

War is to come. After Jaidee's end, Kanya is promoted as the new captain of the white shirts. During her role as captain, the protector of the queen is brutally murdered and the Trade Ministry thinks that the Environment Ministry is behind this (Bacigalupi 368). The Minister of Trade called Akkarat starts a civil war, which he wins because he has the financial means to beat and control the Thai Kingdom. The white shirts are ill-equipped for warfare, so they quickly lose (Bacigalupi 467). Because all Kanya's superiors died in that civil war, she is the new leader of the Environment Ministry. Akkarat made sure that she will follow his orders.

Subsequently, the Minister of Trade gives the calorie companies access to the Thai seed bank which will allow them to create new genetically modified food and sell it around

the world (Bacigalupi 491). Kanya guides the foreigners to the Thai seedbanks, while she deeply resents the fact that Thailand loses its independence in this way (Bacigalupi 494). She decides to defend Thailand's independence and "she draws her spring gun and fires it point blank into the [foreigner] woman's head (Bacigalupi 495). Eventually, Kanya drowns the city and relocates the citizens (Bacigalupi 500).

Interestingly, Bacigalupi offers the readers a new perspective on environmentalism. Contrarily to today's world in which environmental change is an international problem, environmentalism is linked to nationalism in this narrative. In this Thailand, it is of the utmost importance to prevent further environmental change according to the Environmental Ministry. They use fast violence to curb polluters. Today, people might still perceive environmental change as a problem which all countries have to solve together, but *The Windup Girl* experiments with the idea of seeing the environment as the responsibility of a nation to its inhabitants.

Conclusion

Regarding slow violence, Paolo Bacigalupi uses several strategies to dramatise slow violence and raise environmental awareness. Firstly, he explicitly explains how life produces waste and how people's short-term focus produces long-term costs and dangers. Secondly, he illustrates how Hock Seng makes a wrong decision, which leads to a disaster in the long run. Thirdly, he juxtaposes acts of slow violence to eco-friendly behaviour.

In this story, most fast violence depicts the battle between the nationalistic environmental ministry and the internationally oriented trade ministry. There is a struggle for power going on. Nowadays, environmentalists struggle with those that seek short-term profits above long-term effects. War is waged to defend the environment; this foregrounds nature.

Conclusion

This thesis responds to Rob Nixon's view on the effectivity of climate dystopias in helping readers to become aware of the slow destruction of the environment. Nixon argues that writers of ecofiction should dramatise how humanity slowly destructs the environment (Nixon 3).

This slow destruction of the earth is what he calls "slow violence". Nixon urges writers to represent forms of slow violence but doing this could lead to boring stories. If writers were to represent slow violence, they would have to invent strategies to keep their stories engaging as well. There is a particular focus on how authors put in instances of both fast and slow violence to achieve these two goals and how both fast and slow violence affect the storyline.

The research objects are three climate dystopias that have accumulated enough symbolic capital to have large a large readership. These books have the popularity and the influence to inspire many people to become acquainted with environmental change. The books were published in the 2000s. This thesis analyses Margaret Atwood's *Oryx and Crake* (2003), Cormac McCarthy's *The Road* (2006) and Paolo Bacigalupi's *The Windup Girl* (2009).

Apocalyptic Events

An apocalyptic event occurs in all three novels. In *Oryx and Crake*, the apocalyptic event happens at the end of the story and is caused by a man called Crake. Since the apocalypse did not occur because of the deteriorated state of the earth but due to Crake, most emphasis is on the character of Crake which could have been put on the environment.

In the two other novels, an environmental apocalypse happened before the beginning of the plot. Characters, therefore, have to deal with the consequences of such a dramatic event. Authors can use this to give the environment a bigger role in the narrative. In *The Road*, the environment's lack of resources causes the protagonists to starve slowly. In *The Windup Girl*, the characters constantly have to survive pandemics due to the genetic

modification of food which caused the earth to be unable to produce an abundant amount of ordinary, natural food. The environment's poor state is a clearer threat in these two novels. However, since it is unclear what had caused the apocalyptic event in *The Road*, *The Windup Girl* might raise even more environmental awareness as it explains that the apocalypse happened because of a petroleum shortage which is a result of slow violence. The poor state of the earth was caused by the slow exhaustion of the earth in *The Windup Girl*.

Strategies to Dramatise Slow Violence

There are some strategies that authors of these climate dystopias have applied to dramatise slow violence. These strategies can be identified as follows: to use dialogues that contemplate environmental change, to use an individual's suffering as an allegory for environmental exhaustion, to show how an individual is compelled to choose short-term gain over long-term pain, to juxtapose good practices to bad ones, to describe the workings of slow violence explicitly and dramatise how an exhausted environment slowly causes humanity to become extinct. I suggest two categories in which these strategies could be placed: an illustrative or an explanatory presentation of slow violence. The one shows the phenomenon, and the other explains it.

The illustrative passages are used in all novels. They show the workings of slow violence. In *Oryx and Crake*, one of the strategies that Margaret Atwood utilises is to use Oryx as an allegory for an exhausted environment. By using the character of Oryx instead of an ecosystem as a sufferer, a regular convention of storytelling is respected. In other words, Atwood shows how the workings of slow violence affect an individual, because Oryx could be a representation of nature.

In *The Road*, McCarthy also shows the workings of slow violence. He appears to foreground the role of the environment more than the other stories do. An apocalyptic event damaged the land to such an extent that it is unable to produce new food, so the remaining

people can only eat the leftovers on this earth. Thus humanity is slowly becoming extinct in this novel because the remaining people are “eating up” the only food that is left. The state of nature and the way it affects the protagonists might also inspire readers to be more aware of the environment, because there are no unlimited resources in the real world either.

Additionally, Bacigalupi juxtaposes eco-friendly behaviour to polluting behaviour and emphasises this “evil” behaviour through characters’ responses. The “good” people use bikes as means of transport whereas the wrong ones travel by car. Characters who see a car are shocked when they see it. With this strategy, Bacigalupi demonstrates good and bad practices. *The Windup Girl* also shows how Hock Seng is compelled to choose short-term gain over long-term gain. This is also demonstrative of how people’s choices lead to slow violence.

Explanatory strategies are passages that explicitly explain the workings of slow violence. This strategy is executed in *Oryx and Crake* and mostly in *The Windup Girl*. The dialogues in *Oryx and Crake* explain how human behaviour exhausts the earth. Similarly, in *The Windup Girl*, the aims of the Environment Ministry are made clear by explicitly explaining how humans have been deteriorating the earth. These passages clarify that the earth’s conditions and human behaviour are related. They describe the workings of slow violence to the reader.

Best Practices

To objectively argue which strategy is most effective is impossible since this thesis lacks the evidence to make such a point. However, I would like to suggest that narratives which have a combination of illustrative as well as explanatory representations of environmental change are the most effective in communicating the workings of slow violence to their readers. Thus, I believe, authors of eco dystopias should strive to show and explain environmental change to their readers.

Consequently, I argue that *The Road* is rather ineffective in communicating

environmental change compared with *Oryx and Crake* and definitely *The Windup Girl*, because *The Road* does not include explicit explanations of the slow destruction of the earth. The narrative does not explain how the earth came to be in such a poor state; it was a given fact. In contrast with *The Road*, *Oryx and Crake* depicts and explains the workings of slow violence which is done even more frequently in *The Windup Girl*. The latter narrative has the most illustrative and explanatory passages on environmental degradation. My argument could be seen as a remark on Nixon's theory. Authors of climate dystopias might not only benefit from showing the workings of slow violence, but they could also explicitly explain it to their readers to increase the chance of effectively conveying environmental awareness to readers.

Fast Violence

In *Oryx and Crake* and *The Windup Girl*, the depiction of fast violence helps to foreground the problem of environmental change. In *The Road*, however, fast violence merely manages to keep the story more engaging, because the dramatisation of fast violence adds an element of unpredictability to the storyline. Nevertheless, in *Oryx and Crake* and especially *The Windup Girl* fast violence is committed against polluters of the environment. In Bacigalupi's work, the Environment Ministry (physically) punishes people who exceedingly exploit nature. In *Oryx and Crake*, one of the protagonists destroys humanity to save the planet. That "environmentalists" behave violently against polluters emphasises the magnitude of the problem of environmental change, because polluters are not physically punished in contemporary times.

Further Research

This thesis provides insight into which strategies writers' applied to communicate the urgency of stopping environmental change, but it remains rather speculative to state if these strategies, in fact, helped readers to become more aware of environmental change and their own contribution to it.

For further research, it would be interesting to analyse the effects of these titles. Social cataloguing websites such as Goodreads could be used to ask readers about how climate dystopias have helped them to become more aware of the problems of environmental change. Both qualitative and quantitative analyses could explore the effectivity of writing strategies that authors apply to raise environmental awareness and simultaneously respect the characteristics of a good story. Such analyses could also provide new insights into the debate on the effectivity of climate dystopias and Rob Nixon's argument that climate dystopias need to dramatise forms of slow violence to make a change.

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