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The Representation of Nature and Non-Human and The Importance of Literature:

An Ecocritical Approach to Margaret Atwood's Oryx and Crake and Jeanette Winterson's The Stone Gods

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ABSTRACT

THE REPRESENTATION OF NATURE AND NON-HUMAN AND THE IMPORTANCE OF LITERATURE:

AN ECOCRITICAL APPROACH TO MARGARET ATWOOD'S ORYX AND CRAKE AND JEANETTE WINTERSON'S THE STONE GODS

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This dissertation examines the representation of nature and non-humans in two contemporary dystopian novels, Margaret Atwood's **Oryx and Crake** (2003) and Jeanette Winterson's **The Stone Gods** (2007). By their representation of the other and their ecologically sensitive narration, these two early 21st-century post-apocalyptic novels go beyond humanism's anthropocentric worldview and reveal blindspots of human-centred narratives and depict human and non-human as interconnected lives. They explore the alternative relationships between humans and nonhumans. I discuss the two novels to understand what they are telling us about the ecological degradation of the world since, without the representation of the other, there cannot be a solution to contemporary ecological and political problems we are facing. I also question the significance and function of literature both for the characters and for the readers. I speculate about what these texts can potentially offer us in the age of Anthropocene. I also focus on some examples from the texts to discuss that representation of the non-human has various challenges and cannot escape being logocentric.

Keywords: Margaret Atwood, Jeanette Winterson, Ecocriticism, Anthropocene, Animal Studies

ÖZ

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Bu tez, Margaret Atwood'un Oryx and Crake (2003) ve Jeanette Winterson'ın The Stone Gods (2007) adlı iki çağdaş distopik romanında doğanın ve insan olmayanın temsilini inceler. 21. yüzyılın başlarındaki bu iki kıyamet sonrası roman, ötekileştirilenleri temsil etmeleriyle ve ekolojik açıdan hassas anlatımlarıyla, hümanizmin insan merkezli dünya görüşünün ötesine geçerek insan merkezli anlatıların kör noktalarını ortaya koyar, insan ve insan dışı yaşamları birbirine bağlı hayatlar olarak betimler ve de insanlar ve insan olmayanlar arasındaki alternatif ilişkileri keşfeder. Bu iki romanı dünyanın ekolojik bozulması hakkında bize ne söylediklerini anlamak için tartışıyorum çünkü ötekinin temsili olmadan karşı karşıya olduğumuz çağdaş ekolojik ve politik sorunlara bir çözümden bahsedilemez. Bu tezde ayrıca edebiyatın hem karakterler hem de okuyucular için önemini ve işlevini sorguluyorum. Bu metinlerin bize Antroposen çağında potansiyel olarak neler sunabileceği hakkında tahmin yürütüyorum. Ayrıca insan olmayanın temsilinin çeşitli zorlukları olduğunu ve sözmerkezci olmaktan kaçamayacağını tartışmak için metinlerden bazı örneklere odaklanıyorum.

Anahtar Kelimeler: Margaret Atwood, Jeanette Winterson, Ekoeleştiri, Antroposen, Hayvan Çalışmaları

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INTRODUCTION

The devastating events such as the 9/11 attacks and the 2008 global financial crisis have shaped the early twenty-first century with insecurities, fear and chaos, mostly in the Western world. From the very beginning of the century, concerns about environmental degradation, terrorist attacks and natural disasters have affected societies around the world. These deep-rooted anxieties on individual and collective levels are reflected in the literary works of the time. While this century welcomes much dystopian fiction as a natural outcome of the political and social atmosphere, with COVID-19 dystopian narratives have already turned into a reality. The pandemic and ongoing wars around the world prove how writers are able to foresee future pandemics and catastrophes. While struggling with deliberate outcomes of a global pandemic and political problems, we are living in an age of undeniable ecological crisis. It has been no longer on a level that only endangers numbered species but threatens all life forms on earth, including the destructive force behind all, the human race.

In this dissertation, I examine the representation of nature and non-humans in two contemporary dystopian novels, Margaret Atwood's **Oryx and Crake** (2003) and Jeanette Winterson's **The Stone Gods** (2007) to understand what they are telling us about the ecological degradation of the world. Apart from interrogating the challenges of climate change, both novels criticise hyper-capitalist societies that usurp anything and anyone. They also bring a critical approach to technoscience that sees no boundaries or bears any ethical concern regarding the other. Furthermore, in both novels, the two epochs, the Holocene and the Anthropocene, can be traced down. Therefore, I examine pre- and post-apocalyptic worlds in two novels to see the differences between the two epochs. I look at the representation of less privileged members of societies, including women, animals and posthumans or machines. In both novels and in my thesis, when criticising anthropocentric worldviews, "humankind" does not refer to every person as they are not equally responsible for the destruction of the world. The criticism of the writers and mine are mostly pointed towards Eurocentric ideologies of Western or Northern (as Ecofeminists call it because they include wealthy nations such as the United States and Japan) societies.

With the help of ecocritical theory as well as animal theory and posthumanist theory, I try to expose the dualistic thinking patterns and anthropocentric worldviews and, by doing so, reveal the root cause of the ecological crisis and social injustice. I express how both writers depict nature and non-humans in pre and post-apocalyptic worlds. I also question the significance and function of literature both for the characters and for the readers because I claim

that without the representation of the other in literature, there cannot be a solution to contemporary ecological and political problems we are facing. I try to show how language can be used for manipulative purposes by capitalistic corporations. I am also aware that authors consciously or unconsciously contribute to the oppression of certain groups through their narration. Therefore, I also search for intertextual references in both texts and discuss their effects on the characters. These novels reveal how unprepared we are for the challenges we are facing more and more. Hence, I speculate about what both texts can potentially offer us in the face of Anthropocene. I also suggest that these texts are ecologically sensitive as they try to represent nature and non-humans in an ethical frame, even though they may not always be successful in achieving that.

The first reason that I choose to study **Oryx and Crake** and **The Stone Gods** is that as post-apocalyptic texts, both novels expose suffering as a result of ecological destruction. They portray worlds that are already in ecological turmoil; however, the pain is amplified by the fact that the leaders are not in search of alternatives inclusive of all beings; instead, even in the face of undeniable collapse, they are after short-term gains. Both novels are critical responses to globalised capitalism and a world which is homogenised in order to maximise the gain of a few owners. They display that so-called progress comes with the price of extinction. They both exemplify that without creating alternative ways of existing with so-called others and bringing an ethical frame for technoscience, exploitation, silencing, and annihilation are inevitable. Hence, the issues addressed in the texts are very alike, and they target a very similar mentality that causes this suffering. However, they differ from one another in their exemplifications and the way they struggle with these issues. They include many examples regarding interactions with non-humans. These examples are very parallel to the current discussion about ecocriticism and animal studies. With intertextual references, they also show the importance and function of literature in the texts for characters who are questioning their existence and willingness to live in apocalyptic settings. Both of these prolific writers reflect their political criticism and sensitivity consistently in their other texts as well. Having said those, I am also very well aware of the fact that while they are being very critical, at times, both writers cannot escape showing some anthropocentric traits in their writing pointed towards posthumanist horizons. I take these parts into consideration and include and criticise them in my dissertation. Consequently, as a reaction to the homogenising and restrictive heaviness of humanism, for all the reasons listed above, I prefer to discuss the two novels which present the existence of non-humans and nature, the multiplicity of voices and intertwined relationships between humans and non-humans.

CHAPTER ONE

THEORETICAL BACKGROUND

1.1 The Anthropocene and Extinction

The Anthropocene is the new geological epoch in which humans have become "the primary emergent ecological force affecting the future of the Earth System" (Angus, 2016: 9). Hence, the potential destructivity of this extreme power and the urgency of ecological problems are addressed in both fictional and non-fictional works of this century. Postcolonial historian Dipesh Chakrabarty states the rate of loss of species is similar to the time which wiped out the dinosaurs 65 million years ago (2009: 207). Since the Industrial Revolution, people have had a huge impact on the earth, yet our footprint increased enormously, especially from the 1950s onwards (207). He points out that humanity as a geological force requires a new kind of historicity (207).

The Earth is facing planetary warming, meaning it has happened on earth as well as on other planets before, with or without humans (Chakrabarty, 2014: 22). However, the difference is that the current one is "of human doing" (22). The scientists who are active key figures in debates about the warming of the Earth are those who actually studied other planets. One of these figures, James Hansen, "the godfather of the science of global warming in the US", was initially studying planetary warming on Venus and then "transferred his interests to Earth, out of concern and curiosity" (22). As the atmosphere of the Earth started to change in front of their eyes in the 1970s, and the burning of fossil fuels led to a change in carbon dioxide levels, Hansen shifted his research to planet Earth and thought it would be temporary (22). So Chakrabarty proposes that the imagination at work when discussing climate change is not human-centred because the scientific problem of climate change emerged from "what may be called comparative planetary studies and entails a degree of interplanetary research and thinking" (23). He further states that "the climate crisis is about waking up to the rude shock of the planet's otherness" (23). As humans, we are incidental and happen to inhabit this planet while it is actually "in the species of alterity, belonging to another system" (Spivak qtd. in Chakrabarty 23). Consequently, he suggests that "a comprehensive politics of climate change" should begin from this perspective and with the realisation of the fact that all humans, regardless of their backgrounds, dwell on earth more "in the position of passing guests than possessive hosts" and only after that we can be on a "legitimate quest for justice on issues to do with the iniquitous impact of anthropogenic climate change" (23). If people come to this realisation,

there can be solutions to the problems we are facing, literature plays a vital role in shaping these kinds of ideas and thinking patterns. This is why representation in literary texts has a critical role.

When talking about the climate and the future of the planet, the terminology is equally important. For this reason, in his introduction to **The Climate of History in a Planetary Age**, Chakrabarty talks about the distinction between the globe and the planet. He states that the globe puts humans in the centre while planetary means that it is related to the whole planet and its inhabitants, human or nonhuman, with its ecosystems. Thus, planetary decentres humans (2021: 19). Likewise, the atmosphere and oxygen are vital for every living organism, whereas the technosphere is vital for only humans (5). While humans shape the planet through technology, they produce toxic garbage. Everything we do in the world affects the planet. Geologists suggest that "modern industry is laying down indelible strata on the earth that will remain even after we have vanished from the surface of the planet" (Gan et al., 2017: 11). So instead of leaving huge amounts of ruins and garbage behind us, what can we do and what can literary texts provide us in the face of this crisis?

In the anthology **Arts of Living on a Damaged Planet**, the editors inform the readers that "the hubris of conquerors and corporations makes it uncertain what we can bequeath to our next generations, human and not human" (Gan et al., 2017:1). Their approach to this problem is to show readers how to pay more attention to human and nonhuman living spaces, which they call "landscapes" (1). With such attention, they hope to pinpoint "the constant barrage of messages asking us to *forget*—that is, to allow a few private owners and public officials with their eyes focused on short-term gains to pretend that environmental devastation does not exist" (1). As species continue to disappear from landscapes, their place is taken by ghosts (4). However, it is not only about the loss of individual species but "the destruction of long-evolving coordinations and interdependencies" (4-5). They also draw attention to the fact that "[a]n extinction is a local event as well as a global one. Extinction is a breakdown of coordination that has unintended and reverberating effects" (5). Furthermore, they state that when humans change and reshape a landscape, people gradually forget what was there before; this forgetting is called "shifting baseline syndrome" by ecologists (6). Through time, these "newly shaped and ruined landscapes become the new reality" (6). Yet, they claim that ghosts remind us of our forgetting and "that we live in an impossible present—a time of rupture, a world haunted with the threat of extinction" (6).

In “The Sixth Extinction?” Elizabeth Kolbert writes that Darwin “embraced extinction”, but he was wrong to think that while some species die out, new ones will be created (2020: 166). He also thought that this would happen very slowly. Although he was wrong, by the start of the 20th century, this was the dominant view. She informs that over the past half-billion years, “there have been at least 20 mass extinctions, when the diversity of life on earth has suddenly and dramatically contracted” (166). Five of these are called “Big Five” as they were so destructive that they are put in their own category. The fifth one was “the end-Cretaceous event exterminated not just the dinosaurs but seventy-five percent of all species on earth” (167). When a mass extinction occurs, it strikes down “the fit and the unfit at once”, and it takes “millions of years for life to recover, and when it does, it generally has a new cast of characters; following the end-Cretaceous event, mammals rose up to replace (or crept out) the departed dinosaurs” (167). As most biologists agree by now, a sixth one is under way and “if current trends continue, by the end of this century as many as half of earth’s species will be gone” (167). She quotes David Steadman, the curator of Ornithology at the Florida Museum of Natural History, “we expect extinction after people arrive on an island, survival is the exception” (qtd. in Kolbert, 176). She questions why first contact with humans was so catastrophic, and it is because “through global trade and international travel, humans have transported countless species into ecosystems that are not prepared for them” (176). While doing so, humans “have pumped enough carbon dioxide into the air to alter the climate and to change the chemistry of the oceans” (176). So at this point, in the Anthropocene, where we witness that “a mass extinction can be caused by human beings” (187), “the most deadly aspect of human activity” she suggests “may simply be the pace of it” (189). In **Arts of Living on a Damaged Planet,** it is underlined that in the Anthropocene, we need “more-than-human rhythms” (12). In the new politics and histories, we must:

> … share space with the ghostly contours of a stone, the radioactivity of a fingerprint, the eggs of a horseshoe crab, a wild bat pollinator, an absent wildflower in a meadow, a lichen on a tombstone, a tomato growing in an abandoned car tire. It is these shared spaces, or what we call haunted landscapes, that relentlessly trouble the narratives of Progress, and urge us to radically imagine worlds that are possible because they are already here. (Gan et al., 2017:12)

To construct these new politics and histories, we must realise and recognise that there is a problem. Literature as an art form is an important tool to achieve that, and dystopian literature is even more so.

1.2. A Critic of Apocalyptic Fiction and Cultural Ecology

The word “apocalypse” means to “unveil” as a result of a crisis; it imagines alternative

futures (Garrard, 2011: 86). As in fiction, in real life, futures are first imagined, and then they are constructed. Instead of using the word dystopia, Atwood prefers "ustopia" as a yin and yang arrangement, as "every dystopia has embedded within a little utopia, namely our idea of how things could be better and every utopia has within a little dystopia that is how awful things used to be but look we improved so much" (Atwood, 2021). As James Berger suggests the apocalypse resembles or explains the end; however, there is a paradox here as in almost all "apocalyptic presentation, something remains after the end" (Berger, 1999: 5-6). In **Ecocollapse Fiction and Cultures of Human Extinction** (2021), Sarah McFarland criticises exactly this point of apocalyptic fiction. She states:

> Our species may go extinct, a possibility that demands we accept and embody our worldly entanglements before individuals can begin to imagine and adapt to their potential experience of that diminishing future. Yet climate change fiction as a genre of apocalyptic and post-apocalyptic writing has resisted facing the potentiality of human species extinction, following instead traditional generic conventions that display a predilection for happy endings by imagining primitivist communities of human survivors with the means of escaping the consequences of global climate change. (2)

This applies to **Oryx and Crake**; however, in **The Stone Gods,** there is no such survival. Having said that, Greg Garrard has a different opinion regarding the survival of humans in apocalyptic fiction. He proposes that "[o]nly the 'drop of marrow' inside the human skull is capable of caring about the fate of rhinos or redwoods", so, according to him, for people to take action, environmental narratives should not be entirely pessimistic (2004: 103). "Only if we imagine that the planet has a future, after all, are we likely to take responsibility for it" (107). If there is no hope, then people will not be interested in those futures. He also states that "even a biocentric ethic must remain anthropogenic" because, after all, it is concerning human beings. Garrard also suggests that "the apocalypse encodes the vision of a prophetic imagination", with which I disagree (108). While some or even most apocalyptic narratives may work this way, this does not entirely apply to the two novels I am working with. There is no "prophetic imagination" at work; both writers look at history and contemporary politics and social dynamics and speculate about very probable futures. Some of these events they have described have already taken place by now. I will refer to them while discussing the novels in detail. They very much coincide with the current situation of the world and become even more relatable day by day. Post-apocalyptic fiction is one of the best ways to understand the future and the effects of today's actions and hence helps to explore ways of preventing a similar future, if not entirely the same, at least a milder version of it.

Sarah McFarland states that there have been many scientific warnings about climate

change for the past fifty years by the media, so "those warnings have not succeeded in creating a transformational emotional force in the real world that moves people and governments to affect meaningful change", instead, they created "apocalypse fatigue" (2021: 3). Accordingly, writing apocalyptic narratives that draw attention is even more challenging in contemporary fiction. McFarland informs that "global ecological disasters have been the topic of science fiction since before the Cold War fears of nuclear apocalypse" since the publication of Rachel Carson's **Silent Spring** in the 1960s (6). They continue to "fascinate us because end-of-the-world accounts can "provide both the voyeuristic satisfaction of terrible violence and the Robinson Crusoe excitement of starting over again"" (Curtis qtd. in McFarland 6). While nuclear terror was "the prime mover of the apocalyptic and dystopian imagination", climate change has replaced it (Hughes and Wheeler qtd. in McFarland 6). McFarland suggests that without a "redemptive ending", twenty-first-century fiction can incorporate "the effects of ecocollapse results in a much more radically multiplicitious and diverse view of what it means to be "human" in a climate-changed world" (7). She criticises most fiction which imagines itself in a climate-changed future but leans on "the promise of species survival and social rebirth, typically signified by pregnancy or children" (12). While there are children in **Oryx and Crake**, they are not human. Likewise, in **The Stone Gods,** there are no children.

Both novels have surviving protagonists to tell their tales. However, unlike in most post-apocalyptic narratives, there is no "white, heterosexual, familial reproductivity" (13). McFarland points out that post-apocalypse features the aftermath or starting over instead of "focusing on the source of whatever crisis brought down civilization" (10). However, both novels reveal what has happened and also how it happened. They reveal and criticise it. She adds that traditionally in post-apocalyptic fiction, the protagonist is a male, and as a survivor of the catastrophic event, he becomes the "heroic leader of a group of "good" survivors" (10). In **The Stone Gods,** there is no such survivor, and the narrator is a woman, except for one part of the novel. As for **Oryx and Crake**, the narrator is a male; however, in the second book of the trilogy, **The Year of the Flood** (2009), the same events are narrated through a female character. Atwood also states that she chose a male narrator because she was criticised for always having women characters telling the story in her novels, but then she got criticism for having a male narrating this novel ("Book Club with Margaret Atwood"). Yet, Jimmy becomes a leader of a group or rather the guardian of Crakers. In **Apocalyptic Fiction** (2017), Andrew Tate states that "[t]he apocalyptic tradition is sometimes highly misanthropic; the earth, it suggests, would be in better condition if *Homo sapiens* were no longer around" (qtd. in McFarland 11). Even though Atwood dwells on the idea, she does not really embrace it. I will address the issue in

detail while discussing the novel. Unlike in traditional post-apocalypses, there are no distinctively "evil" and "good" characters in both novels (11). Similarly, there is no character to give a moral message at the end of the novel. After all, in many ways, both novels challenge the characteristics of traditional post-apocalyptic fiction.

McFarland also criticises pregnancy in this genre as "a convenient signifier in human exceptionalist discourse, representative of a potential future and successful survival of the species" and because they allow their reader "the emotional security of posterity itself" (13). There is no such instance in the novel, both novels portray worlds where pregnancy as we know it does not any longer exist. As for human exceptionalism, it is a prevailing Western idea which proposes that "we are either the one species favored and nourished by a God or an unprotected species so superior to other forces and beings that we can deploy them endlessly for our purposes" (Connolly qtd. in McFarland 3). As McFarland states, it is "imbricated within the discourse of progressivism, a symptom of how Darwin's evolutionary concept is enlisted in support of a view of progress with humans at the apex of evolutionary innovation" (3). However, as she points out, "evolution is, in fact, indifferent". She adds:

> Even after Darwin's evolutionary theory forced humans to accept that we are related by descent to other animals, we have maintained a polite fiction that preserves a comfortable distance, entrenching human exceptionalism within humanist philosophies and environmentalisms: humans are intelligent and extraordinary, and therefore, our species will survive the consequences of ecological exploitation, a deeply experienced anthropocentrism that is hard to counter. (4)

Yet, as she points out, both climate change and mass extinction "make the imbrication of the human as an animal abundantly clear". "Definitional dualisms become irrelevant; humans are nonetheless animals, as embroiled in climate change as any other creature" (4). Nevertheless, human exceptionalism continues to triumph in discourses of capitalist states in both novels. That is why both writers criticise this deep-rooted idea that still exists even in the face of extinction.

In "Shimmer", anthropologist Deborah Bird Rose states that "the legacies of Western mechanism have manifested through repeated assertions of human exceptionalism—that man is the only animal to make tools; that man is the only animal with language, a sense of fairness, generosity, laughter; that man is the only mindful creature" (2017: 55). She adds that these claims to exceptionalism have been undermined and other beings make clever things. Humans are "not a unique outlier" but are part of various continua (55). Humans are also the only animal "to voraciously, relentlessly, and viciously wreck the lifeworld of earth. Man is the only animal systematically to torture members of its own species, as well as members of countless other

species, and to engage in seemingly endless and often wildly indiscriminate killing" (55). Those who have not been part of this violence are at least "called to recognize it, name it, and resist it; we are called to bear witness and to offer care" (56). She does not disregard cruelty which is "one of the great insignia of a distinctly human way", but she indicates that "there are other sides of our capacity that help us bring ourselves into fellowship with others" (56). According to Rose, care is "an ethical response involving tenderness, generosity, and compassion, and care is an ongoing assumption of responsibility in the face of continuing violence and peril" (58). She adds that "in the midst of terrible destruction, life finds ways to flourish, and that the shimmer of life does indeed include us" (61).

Finally and unfortunately, we are no longer in a state where warnings of climate scientists about the devastating effects of climate change are resisted but rather on display "globally and in every newspaper". As McFarland suggests, perhaps now humans can "turn to literature to see some ways authors have realistically speculated human extinction in ecocollapsed worlds" (2021: 10). What can the critical reading of ecologically sensitive and concerned texts contribute to our understanding of the world and crisis we are experiencing? In relation to that, Hubert Zapf states in **Literature as Cultural Ecology** that:

> [a]s an ecological force within culture, literature has presented human experience as part of a shared world of bodily natures and embodied minds … a fascinating closeness between human and nonhuman life that has pervaded literary narratives from archaic to modern times, from the Gilgamesh epic to Virginia Woolf. (2016: 90)

He mentions that since the eighteenth century, with the evolution of modern civilization and growing imbalances in the culture-nature relationship, the status and functions of literature have changed. Especially since the romantic period, literature has provided a space to become a cultural medium which developed "a special sensibility for cultural pathologies, for the ecopsychological and ecocultural impoverishment caused by conformist, standardized structures of a one-sided economic and technocentric modernization" (90-1). As Zapf states, literary texts stage and explore various complex relationships and interactions between nature and culture in new scenarios and hold "power of innovation and cultural self-renewal from the creative exploration of this boundary" (90). He underlines that literary texts are aesthetic structures in which the ethics of the unrepresentable other can be actualised, and in such structures, it is possible to fragment the self. He proposes that:

> The text becomes an ecological force within culture by translating the encounter of human and nonhuman life into a textual experience of intense communicational ambiguity, which undermines prevailing culture-nature binaries and inscribes the shared coexistence with the natural world into the long-term cultural imaginary. In its dynamic complexity and

> semantic indeterminacy, the text represents a source of ever-renewable creative energy, which can be activated by ever new generations of readers in always changing personal and historical contexts. 32

He also states that literary texts have included the "transcultural and (eco)global dimension in their aesthetic processes" at least implicitly long before the "contemporary debates about local vs. global issues in society and ecology" (267). Furthermore, it is pointed out by Zapf that literary texts are ecological metanarratives of their culture, and they follow an "underlying dynamics of transgression and polysemic excess which opens up a potential of revitalization and symbolic regeneration—even if this potential is almost never fully achieved on the level of mimesis and plot but only in an aesthetic reflexivity of discourse that is to be realized in the cognitive emotional participation of the reader" (266). Even if it may not be possible to have a text that is not entirely anthropocentric, it is important to weave stories that mind this sensibility.

While humans narrate non-humans, do they represent them as they are or do they attribute human characteristics to them? While doing so, do these texts reproduce the same domination mechanisms they criticise, or how far do they react against it? While examining both novels, I bear these questions in mind. So far, there are only a few studies which examine both novels, they are evaluated through the lens of queer theory, biotechnology, posthumanism and the use of science fiction. I make use of ecocriticism, posthumanism, animal theory and cultural theory, as well as looking at the texts from an interdisciplinary context. By exploring these connections, I discuss the two post-apocalyptic texts to be aware of what probable future scenarios these novels offer in the face of our contemporary ecological, social and political crises. Also, to see the way they reveal how oppressive capitalist and social systems work and, through their representation of the other, what alternative and hybrid relationships or possible futures they provide.

1.3. On Ecocriticism and Animal Studies

Ellen Swallow coined the term "ecology" and founded the science of "home ecology" in the late 1800s (Heller, 1993: 233). The term comes from the Greek words "oikos" and "logos" or "the way of the house" (234). In other words, ecology is the study of home. Chaia Heller states that "true oiko-logists" do not only care about their bodies or their homes but care for "the world home" in all of its social and ecological diversity without "the hierarchical separations between the privatized domestic realm of the home and the alienated public realm" (234). The term "ecocriticism" was coined by William Rueckert in his essay called "Literature and Ecology: An Experiment in Ecocriticism", and the first definition of the word was given in the introduction to **The Ecocriticism Reader** (1996):

> Simply put, ecocriticism is the study of the relationship between literature and the physical environment. Just as feminist criticism examines language and literature from a gender-conscious perspective, and Marxist criticism brings an awareness of modes of production and economic class to its reading of texts, ecocriticism takes an earth-centred approach to literary studies. (Glotfelty qtd. in Garrard, 2004: 3)

Examining the ongoing works in the field of ecocriticism, the scholar Greg Garrad gives the definition of ecocriticism as "the study of the relationship of the human and the non-human, throughout human cultural history and entailing critical analysis of the term 'human' itself" in his comprehensive book **Ecocriticism** (2004: 5). He underlines that ecocriticism is in a "close relationship with the science of ecology" (5). According to him, ecological and environmental problems are not only scientific issues, but they are also subject to literary and cultural studies, "[e]cocriticism demands attention to literal and irreducibly material problems such as ozone depletion, but it also depends upon the insight that scientific problems are never fully separable from cultural and political ones" (168). There have been a great number of studies in this field, especially after the second half of the twentieth century. Some of the discussions are around the question of whether a text can be in a sensible or right ethical position ecologically. However, ecocriticism is a heterogeneous field, and it includes many inconsistencies and discussions in itself. For that reason, Garrard differentiates and gathers some of the concepts which he calls "tropes" under the following categories; "Pollution, Pastoral, Wilderness, Apocalypse, Dwelling, Animals, The Earth".

In the field of ecocriticism, there are "four radical forms of environmentalism", such as deep ecology, ecofeminism, eco-Marxism and Heideggerian ecophilosophy. Each of these approaches is related to the environmental crisis and the concept of "human" in different ways (20). As in all theories, each new thinker criticises the ones before them and adds something new to the field. Deep ecologists demand "recognition of intrinsic value in nature" and a "shift from a human-centred to a nature-centred system of values" as they identify "the dualistic separation of humans from nature promoted by Western philosophy and culture as the origin of environmental crisis" (21). This approach, which is based on the idea that all beings are essentially the same and whole, is criticised by some environmentalists as it ignores individual differences. Furthermore, the mysticism of deep ecologists is criticised by social ecologists and Eco-marxism. They argue that environmental problems arise from relations of exploitation and domination stemming from capitalist modes of production and oppose power relations and hierarchy, which are thought to affect all societies (30). However, the thought system of Eco-marxist appears to be problematic since they put humans in the central position as the most evolutionarily developed species who have reason and are able to bring solutions to

environmental problems by turning the power relations existing in society upside down.

On the other hand, ecofeminists blame androcentric dualism as well as anthropocentric dualism as the ultimate source of anti-ecological beliefs and practices (23). Anthropocentrism distinguishes humans from "nature on the grounds of some alleged quality such as possession of an immortal soul or rationality and then assumes that this distinction confers superiority upon humans" while androcentrism "distinguishes men from women on the grounds of some alleged quality such as larger brain size, and then assumes that this distinction confers superiority upon men" (23). Ecofeminism suggests that these two forms of dualism share a "common logic of domination" and create a "common cause between feminists and ecologists" (Warren qtd. in Garrard, 23). Consequently, some ecofeminists claim that:

> If women have been associated with nature, and each denigrated with reference to the other, it may seem worthwhile to attack the hierarchy by reversing the terms, exalting nature, irrationality, emotion and the human or non-human body as against culture, reason and the mind. (Garrard, 2004: 24).

However, this inversion is criticised by posthumanist approaches on the grounds that it reproduces the dualist logic that ecological thought intends to overcome, as it carries the danger of making the alleged boundary between human and nature or mind and emotion even more evident. Finally, Heidegger's thoughts are "among the most profound critiques of industrial modernity" (30), and his starting point for his ecophilosophy is "the fundamental difference between mere material existence and a revelation of 'being', or the thingness of things" (31). According to him, "being" is not simply to be but to "show up" or "clearing" "Lichtung", and for this to happen, there is a need for human consciousness (Heidegger qtd. in Garrard, 31). In Heidegger's opinion, the relationship between being and clearing is a difficult one. He suggests that responsible humans have a duty to let things "disclose themselves in their own inimitable way, rather than forcing them into meanings and identities that suit their own instrumental values" and the best way to do this is through poetry (Garrard, 2004:31). Through poetry, humans learn that they are not "the lord of beings" (31). Heidegger's ecophilosophy is appreciated for striking a blow to the Cartesian understanding of the subject, which puts the human being in the centre and subordinates everything else to its use. However, it is also criticised by some posthumanists on the grounds that it reproduces anthropocentrism in a different way because of the importance it attaches to human consciousness to accept the existence of beings and also because it gives the task of saving the world to human beings and the work of art they produce.

According to posthumanism, ecological problems are largely due to some domination

practices of the humanist mentality. Like in ecocriticism, it is thought that the issues in ecology are not solely related to scientific knowledge but also to cultural structures. They claim that ecological problems root in certain oppressive practices and discourses of humanist mentality. As one of the leading figures in posthumanist theory and animal studies, Cary Wolfe conducts a discussion on the necessity of thinking beyond humanism for an ethical and ecological struggle in his work **What is Posthumanism** (2010). In his words, he attempts to formulate a perspective, which is:

> … far from surpassing or rejecting the human—actually enables us to describe the human and its characteristic modes of communication, interaction, meaning, social significations, and affective investments with greater specificity once we have removed meaning from the ontologically closed domain of consciousness, reason, reflection, and so on. (2010: xxv)

As another prominent figure of posthumanist theory, Rosi Braidotti defines becoming posthuman as "a process of redefining one's sense of attachment and connection to a shared world, a territorial space: urban, social, psychic, ecological, planetary as it may be" in her work titled **The Posthuman** (Braidotti, 2013:193). While traditional humanist thought has sharp distinctions and essentialist categories such as reason/feelings, culture/nature, male/female; posthumanist theory rejects them and draws attention to the ambiguity of the border between human and non-human. It argues that another world in which domination relations are absent or minimised can only be possible by transforming the understanding of "subject" and "being" that prevails in the humanist approach. It encourages a reevaluation of the definitions of existing concepts such as language, subject, human and nature. For this reevaluation, the posthumanist approach draws attention to the necessity of a new understanding of language for this new form of relationship, because according to the humanist understanding, language has been defined as a privilege that makes human beings superior to other beings, and this has led to many different representation problems. According to the posthumanist understanding, animals are no longer just a system of signs or symbols that support people's self-reflection and moral aspirations. According to this approach, the new vocabulary should include creative ways of thinking and representation, which invert familiarity with the dominant subject and construct many different imaginative and affective bonds of human-animal interaction and would not allow identification. In this regard, Braidotti also argues that adverse conditions such as environmental crisis and ecological disaster have a positive dimension in terms of restructuring our relationship with our complex habitat that we call "nature". Stereotyped ways of knowing and anthropocentric domination can only be challenged with such a repertoire.Furthermore, as a reaction to traditional linear and progressive narration of Western ideology and history,

posthumanism suggests "alternative representations of the subject as a dynamic non-unitary entity" (164). To defy "the established modes of theoretical representation", it proposes a non-linear narration, which Braidotti calls "zigzagging" (164). She claims that "non-linearity" is essential for the Humanities, "considering the complexity of contemporary science and the fact that the global economy does not function in a linear manner, but is rather web-like, scattered and poly-centred" (164-5). She explains the need for zigzagging with the following sentences, "[t]he heteroglossia of data we are confronted with demands complex topologies of knowledge for a subject structured by multi-directional relationality. We consequently need to adopt non-linearity to develop cartographies of power that account for the paradoxes of the posthuman era" (165). In both novels, the authors follow this non-linear pattern.

The human-nature relationship includes many different representational problems in relation to the importance that humanism attributes to human language. According to posthumanism, a new type of linguistic relationship should be explored; however, it is not so easy to identify this new relationship to be adopted because the humanist approach does not contain a homogeneous discourse in itself. Therefore, posthumanist approaches also vary in terms of literary representations. Posthumanists ground their arguments on Derrida's work. They claim that the world is full of meanings and signs, and signification is intrinsic to the activities of all beings. However, they differ in perspectives on how to interact with language and signs. According to some, it is impossible to run away from anthropocentrism as long as humans are in a position to represent the non-human. Similarly, they think that a text cannot refrain from being anthropocentric so long as it gives non-humans a human voice. On the other hand, others suggest that with alternative usage, language can be a powerful tool to criticise anthropocentrism. Likewise, the use of language can create human contact with animals. In these forms, non-human and human boundaries are likely to be blurred. All in all, they suggest language be transformed so that ecological ethics exist.

As for animal studies, Garrard states that "the study of the relations between animals and humans in the Humanities is split between philosophical consideration of animal rights and cultural analysis of the representation of animals" (Garrard, 2004: 136). Like in ecocriticism, this field contains quite diverse and conflicting approaches. The first works and figures that generally come to mind when talking about animal studies are **The Animal That Therefore I am** (2002) by Jacques Derrida and **Animal Liberation** (1975) by Peter Singer. In her work titled "Pussy Panic versus Liking Animals: Tracking Gender in Animal Studies" (2012), Susan Fraiman states that "[o]nce an obscure and idiosyncratic subfield, by 2009 animal studies had

been remade as a newly legitimate, high-profile area of humanities research" (91). These writers "identified with the "new" animal studies look for authorization to Derrida" including Cary Wolfe (91). Fraiman criticises Derrida as a thinker who is "notably more concerned with words than flesh" (91). Furthermore, she opposes the false classification in the field and even though Wolfe points to Derrida as the originary figure or the founding father, she underlines that "Derridean animal studies" can be only a part of a "larger, longer standing, interdisciplinary whole" (92). She gives references to a huge number of books going back forty years before "Derrida's essay was brought to the attention of English speakers" (92). Just like Wolfe, Derrida also passed over women writers. She underlines that her criticism is not directed only at Wolfe "but also at academic protocols tending to devalue scholarship marked as feminine" (93). Fraiman attributes much of the pioneering work to women and feminists, especially works of ecofeminists writing about animals since the 1970s, including "Carol Adams, Josephine Donovan, Brian Luke, Connie Salamone, Marti Kheel, Andre´ e Collard, Deane Curtin, Alice Walker, Deborah Slicer, Greta Gaard, Lori Gruen, Lynda Birke, and Karen Warren" (99). She adds that "it arose in dialogue with late-century liberation movements, including the second-wave women's movement" (92) and the mentioned women writers, among others, have challenged "deeply embedded humanist assumptions concerning gender and animality" (99).

While discussing the novels in detail, I give references to some of the women writers mentioned above as key figures for understanding the position and representation of the non-human, so in the introduction, I will briefly mention the other views on animal studies which are popular. Utilitarian philosopher Jeremy Bentham (1748-1832) suggested that cruelty to animals was analogous to slavery and claimed that the capacity to feel pain, not the power of reason, entitled a being to moral consideration" (Garrard, 136). The British philosopher identifies "the irrational prejudice" as the "basis of our different treatment of animals and humans" and Peter Singer simply labels this prejudice as "speciesism" (136). According to Bentham, as we share a capacity for suffering with animals, "[t]he boundary between human and animal is arbitrary and, moreover, irrelevant" (137). By basing his arguments on Bentham in **Animal Liberation**, Singer states that the suffering of human beings should not be counted for more than that of an animal (137). Descartes' Cartesian rationalism sees animals as complex machines that do not suffer, and Singer's approach objects to this view as in Bentham, he claims that animals can suffer just like humans and the separation between animals and humans is arbitrary and invalid. Thus, this approach is viewed as revolutionary by some. However, a liberating model such as Singer's, which tries to defend animal rights through its capacity to suffer and its similarities to humans, is questioned because it places humans in the centre again

and only recognizes rights to animals that are most similar to humans. Similar to Singer, Derrida, in **The Animal That Therefore I Am**, (which is published as a book based on Derrida's lectures given at the 1997 Cerisy Conference), states that defending the rights of animals through their suffering is an important step. However, he proposes to re-ask the question "can they suffer" by focusing on passivity rather than ability. By looking at the way Derrida describes the relationship between him and his cat, who returns its gaze to Derrida's naked body, Fraiman criticises Derrida saying that "Derrida's encounter is suffused with anxiety and, as he tells us repeatedly, a double dose of shame" (Fraiman 96). She adds that "[t]his is certainly a reasonable response to our history of defining animals as killable, and Derrida's self- ironizing essay is superb in its wish to hold us accountable" (96). She finds Derrida's impulse to cover himself as "nervous", and she agrees with Donna Haraway, who points out that "Derrida's worries about being exposed are such that the cat herself is soon all but forgotten" (Haraway qtd. in Fraiman 96).

Donna Haraway is another contemporary key figure in the field, and she struggles against anthropocentrism and traditional culture-nature dualism in animal studies with her work **When Species Meet** (2008). While the encounter between animals and humans can be extremely alienating for Derrida, according to Haraway, whatever exists in the world occurs with their actions and mutual interactions. "The partners do not precede the meeting; species of all kinds, living and not, are consequent on a subject- and object-shaping dance of encounters" (Harraway, 2008: 4). Garrard emphasises that animals make us humans in an ongoing process of reshaping us and that "becoming with", as Haraway suggests, is always transforming with many. Like Derrida, Haraway is aware of the limitations of animal rhetoric and uses the term "critters" to encompass animal, machine and human, emphasising the importance of building a positive vocabulary that will embrace both the technologies that surround us and the species we share life with. "Critters" and "becoming with" are key concepts for Haraway, and she sees critters as existing, surviving, developing, changing, and dying in mutual interaction with other, co-dependent living beings. Her "companion species" exist in this mutuality of sharing, change, and exchange that is "becoming with" (DeKoven and Lundblad 2012: 8). Haraway's "Cyborg Manifesto" (1985) is seen as a founding work for "cyborg studies". Garrard takes it as a "second frontier for ecocriticism", which has not been widely explored. In 'Cyborg Manifesto', Haraway "points out the ubiquity of the cyborg in science fiction, modern medicine and high-technology, warfare" (Garrard 145). Garrad gives patients with digital trackers and soldiers with gunsights as examples, and states that the human/cyborg boundary is "impossible to sustain" (145). Becoming quickly autonomous, the cyborg subverts "an apparently limitless

number of dualistic schema" including "animal/ human, organism/machine, male/female, physical/non-physical" (146). Since "computers begin to mimic and to incorporate biological processes" and transform the science of living organisms into 'a powerful engineering science for redesigning materials and processes' (Haraway qtd. in Garrard), the cyborg is "located at the nexus of change in both microelectronics and biology" (Garrard 146). Garrard points out that as well as the rights of domestic animals, liberationist criticism should cope with "the emergence of boundary figures such as the cyborg" and genetically engineered organisms, as known as GEO (159). Likewise, ecocriticism must come to terms with global biodiversity and GEOs, as well as individual species, only then "an enlarged 'common future' might be envisaged" (159). He points out that ecocriticism "shares with liberationist and cyborg criticism a sustained and sustaining interest in the subjectivity of the non-human, and in the problem of the troubled boundaries between the human and other creatures. All three critical discourses invite an encounter with the pleasures and anxieties of a possible post-human condition" (148). The novels I work with envisage animals and genetically engineered organisms along with humans and contain different representations regarding the dynamics and relationships between them.

CHAPTER TWO

ORYX AND CRAKE

2.1 An Overview of the Novel

Margaret Atwood's speculative fiction novel **Oryx and Crake** (2003), the first book of **the MaddAddam Trilogy**, envisions a near future in which the world is in complete ethical wreckage and has become mostly uninhabitable due to the devastating effects of climate change. Natural sources are scarce, the climate has changed drastically, and there is a rise in sea levels and temperatures. There are "more plagues, more famines, more floods, more insect or microbe or small-mammal outbreaks, more droughts" on the planet (Atwood, 2004: 254). In this near future, the elites and scientists who are working for large corporations live in the privileged and protected compounds with their families, while others live in urban "pleeblands", which are dirty, dangerous and open to various diseases. As a privileged group, the small elite is less affected by the ecological crisis, which brings scarcity of livelihoods in comparison to the people who are called the "pleeblanders".They are indulged in overconsumption while most pleeblanders are barely able to survive in the pleebs, which are specially designated places for the majority to live, where strange accidents and unexplained disappearances have become a part of their everyday life. In this world, voting does not matter, and nation-states are replaced by large corporations (64). The biotech corporations in compounds produce genetically engineered life forms and use them for many reasons, including food, medical purposes and security. Biotechnological advancement and capitalist over-consumption drastically affect both the environment and society.

This world order comes to an end when a global pandemic, which is genetically engineered by a scientist named Crake, takes place and wipes out almost the whole of humanity. His actual name is Glenn, but he chooses to rename himself "Crake", after an extinct species. This highly contagious human-engineered virus is distributed around the world in the form of birth control and libido-increasing pills. Crake's plan is to replace destructive humans with a genetically modified race. These posthumans are referred to as "Crakers" or the "Children of Crake." He believes that he has left faulty patterns of humanity out of them. He leaves his childhood friend Jimmy alive to take care of the Crakers. Jimmy, the protagonist of the novel, who renames himself Snowman, becomes a prophet figure and a guide for them. The novel starts in a post-apocalyptic setting with Jimmy wishing he was still asleep. He believes he is the only human survivor; however, later in the novel, Jimmy realises that there are a few other human survivors too. The story does not follow a linear narration. It is a trace of non-hierarchical posthumanist ideology and, at the same time, reflects Jimmy's post-traumatic state.

Through his flashbacks and memories, the state of the pre-pandemic world and the aftermath of a man-made global pandemic, as well as the reasons leading to them, reveal themselves. Atwood presents a pre-pandemic world that is very similar to today's world in terms of technological, environmental and socio-political perspectives. As supposedly the sole survivor of the pandemic, Jimmy struggles to adapt to his new reality and makes use of language and literature to make sense of the world. The novel constantly depicts two worlds of contrasts and binary oppositions, which I will explore in detail in this chapter.

From the very beginning of the novel, quoting Jonathan Swift, Atwood foreshadows what she will reveal later in the novel. What the author does, as quoted from *Gulliver's Travels*, is to "relate plain matter of fact…to inform" the readers (1). The text is written as a warning, not as prophetic writing or simply presenting a dystopia, but rather as questioning the possibilities that await humanity and the world in the future. It questions what might happen if people continue to act as they are at the moment and also ponders upon what has gone wrong in the novel. Instead of referring to her work as science fiction, she prefers to call it speculative fiction since she speculates on what might happen in the near future. There are a great variety of subjects Atwood touches upon, such as the climate crisis, hypercapitalism, influence of the internet culture, human exceptionalism, exploitation, ethics, myth-making, use of humour and irony, personal and ecological traumas, colonialism, bioterrorism, repetitious and destructive human history. In my reading of the novel, I will be initially focusing on the ecological crisis, hypercapitalism and blindspots of humans. Next, I will explore the depiction of non-human animals and posthumans. Finally, I will be exploring the function of literature and language for Jimmy and for the readers in regards to achieving a hopeful idea for the future.

2.2 The Anthropocene, Hypercapitalism and Ecological Crisis (of Reason)

In this section, I will first briefly mention the narrative style of Atwood. Subsequently, I will explore the depiction of nature and weather conditions in the pre-apocalyptic and post-apocalyptic worlds and exemplify how they are correlated with everyday life. Then I will discuss how the capitalistic society functions and how this kind of logic and irrationality leads to the destruction of nature and living entities. Later, I will focus on the effects of this mindset on a larger scale and also reveal the dualism-based thinking in society.

Atwood does not directly tell the reasons accumulating for the ecocatastrophe which makes the world uninhabitable, the reader has to gather this information from the parts in the narrative. Wolfgang Iser points out that:

> The participation of the reader could not be stimulated if everything were laid out in front of him. This means that the formulated text must shade off, through allusions and

> suggestions, into a text that is unformulated though nonetheless intended. Only in this way can the reader's imagination be given the scope it needs; the written text furnishes it with indications which enable it to conjure up what the text does not reveal. (1980: 31)

The author complicates the reasons for the post-apocalyptic world she creates and as a result, enriches the narrative capability because the reader is encouraged to have active participation by filling the "gaps" and "indeterminate elements" in the novel. As Iser argues, "these gaps heighten our awareness, and their effectiveness lies in the fact that they conceal something of vital importance" (33). Furthermore, Atwood destabilizes "the typical affective coordinates of post-apocalyptic fiction, in which the post-apocalyptic landscape is a horror and the pre-apocalyptic landscape the longed-for object of nostalgia" (Canavan, 2012: 141). As Gerry Canavan points out, there is no nostalgia for the pre-apocalyptic world as it "turns out to be much worse than the post-apocalyptic, built as it is upon a nightmare of murder, rape, exploitation, and theft that is, as we know too well, the actually existing, entirely nonfictional history of European expansion" (141). What Canavan indicates becomes visible from the first pages of the novel. Jimmy suddenly remembers sentences from a book "written in aid of European colonials running plantations of one kind or another" (Atwood, 2004: 4). He thinks that colonials "would have been told to wear solar topis, dress for dinner, refrain from raping the natives" but he adds "it wouldn't have said raping". It would be put into words differently to cover what they do and they will not refrain from it. As mentioned in "Blood and Roses" game, the same atrocity applies to The Arawak Indians, who welcomed "Christopher Columbus with garlands and gifts of fruit, smiling with delight, soon to be massacred, or tied up beneath the beds upon which their women were being raped" (76).

As a typical feature of the genre, ecological catastrophe becomes a catalyst for change in **Oryx and Crake**. In her book club interview for Guardian, Atwood says that she chose to narrate a plague as this is a very old human story. She adds, "plagues have been very very definitive in human history, probably more so than wars, although the two of them go together" ("Book Club with Margaret Atwood", 2021). The reason why mad scientist Crake engineers a plague is because he believes that the remaining sources of the earth are very limited for humans and humans are faulty creatures to sustain life. He sees overpopulation as one of the biggest problems. However, as Maria Mies and Vandana Shiva explain in great detail in **Ecofeminism** that the idea of overpopulation as one of the primary reasons for the ecological crisis is a Western myth, pointed toward third world countries and less developed nations (1993: 189). They inform that the myth of overpopulation is used as justification for anti-fertility technologies (189) since "modern contraceptive technology is totally controlled by scientists,

the profit interests of pharmaceutical corporations, and the state" (288). So, what Crakes imagines as a utopia does not only turn out to be a dystopia, but it is also founded on a false idea.

In **Arts of Living on a Damaged Planet: Ghosts of the Anthropocene**, it is mentioned that "modernist futures have made the Anthropocene" (Gan et. al, 2017: 7) and the sixth extinction is "the product of modern industry" (4). As in today, technology and science have a great influence on climate change in the novel. While living on earth becomes harder day by day, people in compounds are fooled and tricked into buying services to enhance their beauty and living standards. In this fictional work, the extinction takes place as a result of a future that "requires ruthless ambition—and the willingness to participate in great projects of destruction while ignoring extinction as collateral damage" (4). Geologists and climate chemists suggest that "humans have become a geological force" in the Anthropocene (11). "*Anthropos* has become an overwhelming force that can build and destroy, birth and kill all others on the planet" (Gan et. al, 2017: 12), and this is exactly what Atwood envisions in her novel. But what does lead to this ignorance and illusion that in the face of extinction and ecological crisis, people are numbed enough to continue and even increase their destructive attitude? The answer to this question lies in human exceptionalism and dualism-based logic of thinking. Before explaining these two concepts in detail with specific examples, I will first elaborate on post- and pre-pandemic weather conditions and their related effects on the planet.

2.2.1 Post-pandemic Environmental Condition

The weather becomes one of the biggest challenges for Jimmy to survive after the plague. He names himself "Snowman"; however, Crakers do not know what it means as "they have never seen snow" (Atwood, 2004: 11). His name creates contrast in this sweltering setting as "despite the sunblock and the two layers of cloth", Jimmy "could still burn" and "the concrete gets too hot for him to walk on" (283). At the beginning of the novel, he gives the description of a wrecked city under the shade of the trees because of the "punishing sun" (6). His personification of nature is important as it tells much about his point of view as much as it tells about the weather. Nature is made hostile by the hostility of humanity, as it is not inherently hostile in itself. Heat is an important feature of this post-apocalyptic setting, as even the sea is depicted as "hot metal" (357). With its "glare and humidity", noon becomes the "worst" part of the day for him "because the evil rays bounce off the water and get at him even if he's protected from the sky" (37). As opposed to this hostile depiction, he finds the most comfort ironically in nature. While at first, he uses virtual bullets with his spray gun for protection (38), he later seeks

refuge on the branches of a tree (39). He also finds refuge in nature as he "retreats back into the forest" (37). In this wasteland of "tins of motor oil, caustic solvents, plastic bottles of bleach" (11), which show the treatment of people towards nature, he builds himself an island of car tires in the woods (44). Furthermore, he wishes to "find a cave" to feel secure (109). After living in highly secured compounds, where he used to go to movies at the mall "just to convince himself he was part of a group of other people" (253), a room where the electricity is out, and there is only a flashlight of the storm, "turning the room around him into an ancient cave, dark but protective" (238), serves him better than highly secured compounds.

As Dipesh Chakrabarty indicates in **The Climate of History**, "our abilities to shape the planet are largely technological" (2021: 5). He borrows the concept of the *techno-sphere* offered by the geologist Peter Haff. Techno-sphere is a concept "to characterize the global system of human technology" (5). Chakrabarty mentions that according to Haff's argument, the human population at its current size is "deeply dependent on the existence of the technosphere" without which it "would quickly decline towards its Stone Age base of no more than ten million . . . individuals" (5). He says that technology "has become a condition for biology, for the existence of humans in such massive numbers on the planet". When the techno-sphere collapses in the post-apocalyptic world, the existence of the human population is almost impossible and as clearly shown in the example above, Jimmy is almost "reduced" to living in an ancient time.

The narration naturally reflects the point of view of the narrator, and when Jimmy finds everything "so empty", "[w]ater, sand, sky, trees, fragments of past time" (357), it shows his anthropocentric worldview. Hopefully, not everything left behind stays as it is. In this setting, nature shows signs of healing and recovery. For instance, Jimmy is walking under trees, which used to be parkland and also there are "fungi sprouting from the decaying table, the barbecue covered in bindweed" (164). Just like what happened years after the Chernobyl disaster, nature starts to reclaim its rightful place. During a visit to the compounds where he used to live, Jimmy realises that:

> . . .the botany is thrusting itself through every crack. Given time it will fissure the asphalt, topple the walls, push aside the roofs. Some kind of vine is growing everywhere, draping the windowsills, climbing in through the broken windows and up the bars and grillwork. Soon this district will be a thick tangle of vegetation. If he'd postponed the trip much longer the way back would have become impassable. It won't be long before all visible traces of human habitation will be gone. (221-2)

While it may seemingly be an end to what is left of human civilization and habitation, there is renewal in nature. He is even more surprised as he notices that "the landscape has been rearranged since yesterday: more pieces of detached metal sheeting than before, more uprooted

trees. Leaves and torn fronds litter the muddy ground" (267). These bits show, given the opportunity, how quickly nature is capable of restoring itself. Surely, nature has its share of genetic engineering as well. Jimmy informs that there are thick weeds, "some exotic splice" and in a few years, they will "be overwhelmed" or they will spread and "choke out the native plants" (228).

2.2.2 Pre-pandemic Environmental Condition

As a result of the ecological destruction, the seasons and times of the days as we know them no longer exist. September and October are referred to as "one of those months that used to be called autumn" (71). Similarly, June becomes a wet season in the Northern Hemisphere, it is not sunny anymore. The rapid rise in sea level and tidal waves from volcanos wash away settlements, beaches and cities (63). When rains stop, the orchards dry up, and the lakes shrink to "a reeking mud puddle" (63). Halfway through the novel, the narrator informs that "it got so warm and began to rain every afternoon" that people stopped using outdoor barbecues before the plague. People interfere with nature, and as a consequence, it changes their lives drastically. As the following passage clearly shows, climate change and consumption behaviours cannot be thought of separately:

> 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, some people had their doubts. (24)

Ecological genocide results in drought, and the consequent shortage of food supplies change people's eating habits. Meat and dairy products become rare, "the Monday Special Fish Finger" is made of "20% Real Fish –pouring melted butter substitute" (66-7), "real Japanese beef" become "rare as diamonds" (292) while "the sugary cake, All Real Ingredients" create "lots of cackling over the fresh eggs" (176). Like in the contemporary world, soy products have become a key substitute ingredient for many food products, such as "SoYummie" ice cream made from soy (173). While "real" ingredients and food become a new luxury for those who can afford them, scarcity has devastating results for the poor. In **Climate Capitalism**, Peter Newell and Matthew Paterson draw attention to the fact that

"it is the people that will suffer most that currently contribute least to the problem, i.e. the poor in the developing world" (qtd. in Chakrabarty, 2021: 56).

In accordance with the weather conditions, agriculture is forced to change by capitalist compounds, and "Happicuppa" is a great example to show how interfering with nature, and natural practices affect lives. While formerly every coffee bean ripened at different times and

had to be handpicked and processed and shipped in small quantities, “the Happicuppa,” developed by a “HelthWyzer” subsidiary, is “designed so that all of its beans would ripen simultaneously, and coffee could be grown on huge plantations and harvested with machines” (Atwood, 2004: 178-9). This pushes “the small growers out of business” and reduces “both them and their labourers to starvation-level poverty” (179). The resistance movement becomes global, resulting in great chaos and death for both Happicuppa personnel and the peasants. Jimmy thinks that “the soldiers and dead peasants all looked much the same wherever they were” (179). This stresses how people are actually the same everywhere. Tools of violence, “tears gas and shootings”, are also the same (179). It is also critical that “they’re nuking the cloud forests to plant” Happicuppa beans (180). Unlike the branding denotes, Happicuppa does not bring happiness but only injustice, misery and death. In the name of profit, humans are ready to give up on already reduced sources of biodiversity. As happens in most riots, things take an unexpected turn, and those who are right in the first place make mistakes. Happicuppa products are dumped into the harbour, but none of the boxes sinks, so they create a huge amount of garbage and pollution. In one of the protests, Jimmy sees his mom Sharon, an ex-scientist who once worked for compounds when she thought she was working for a good cause. After realising the real motivation behind those projects, she becomes depressed. Finally, one day she leaves the house for good and leaves “a wordless message” (61). Namely, she smashes the computers with a hammer, an old tool, so on a symbolic level, she attempts to destroy this so-called order with an ancient method. Therefore, neither Jimmy’s father nor the CorpSeCorps men (the security unit for compounds) have no “idea of what coded messages she might have been sending, what information she may or may not have downloaded and taken out with her” (62). In their preface to **Ecofeminism**, Maria Mies and Vandana Shiva state that “the impact on women of ecological disasters and deterioration was harder than on men, and also, that everywhere, women were the first to protest against environmental destruction” (1993: 2-3). Unlike her husband and colleagues, Sharon becomes one of the protesters, along with many women (Atwood, 2004: 181).

Another desperate consequence of climate change in the lives of people is that on the verge of poverty, the shortage means selling their children for many. Weather plays a crucial role in agriculture, and “agriculture and related activities are the most important source of livelihood for Third World women” (Mies and Shiva, 1993: 231). Oryx, one of the main characters in the novel, whose real name is not revealed throughout the novel, is one of the many children who is sold at an early age. Although her motherland is not shared explicitly, the canals and the flowers, “smell of rice” point to Thailand or neighbouring countries (Atwood,

2004: 137). “The other village women” want her “to look pretty and healthy” so that she can be sold (116). “Children who were ugly or deformed, or who were not bright or couldn’t talk very well – such children went for less, or might not be sold at all”. The reason why other women help out is that if they need to sell their kids, they will get help in return. It is not called “selling” but “transaction”; they can be “sold, or thrown into the river” (116). For this transaction to take place, every village has their man, a white expensive-looking man. He becomes “villagers’ bank, their insurance policy, their kind rich uncle, their only charm against bad luck” (118). They start to need these sorts of buyers “more and more often” because the weather becomes “so strange and could no longer be predicted – too much rain or not enough, too much wind, too much heat – and the crops [are] suffering” (118). Little boys and girls are used in the porn industry, used as pimps, locked in garages, and sold to wealthy people. Oryx thinks it is a good thing as “they had a money value: they represented a cash profit to others. Also there were many who had neither love nor a money value, and having one of these things was better than having nothing” (137). Jack, the buyer, abuses Oryx and teaches her to read, so she says, “I traded him” (141). These kids “without families or homes” become “victims of poverty, underdevelopment, and poor environmental conditions — society's disposable people — surviving entirely on their own, without any rights, without any voice” (Mies and Shiva, 1993: 85). Even access to basic rights such as reading and writing becomes a luxury, an element of negotiation in exchange for horrible deeds. There are also adolescent girls who are “brought from their squalid countries-of-origin for their own good” they are found locked in garages, and when the men who lock them, “respectable men, accountants, lawyers, merchants dealing in patio furniture” are “dragged into court to defend themselves,” they say it is for their own good (Atwood, 2004: 254). It is also worth mentioning that Jimmy’s nanny Dolores is “the live-in from the Philippines” (30), she is another example to women who need to work far from her continent for privileged class. As the examples above show, appaling effects of droughts and unpredictable weather conditions associated with climate change shape the lives of all regardless of their social status. However, those who are poor become the most vulnerable to these changes. In **Women and Children Last** (1987), Ruth Sidel opens the book with an account of the sinking of the Titanic. Women and children are the first to be saved but only “those in the first and second class” while “the majority of women and children” in the third class die. She adds “the state of the global economy is in many ways comparable to the Titanic: glittering and affluent and considered unsinkable” (qtd. in Mies and Shiva, 1993: 70). Vandana Shiva suggests that “[l]ike the Titanic, the global economy has too many locked gates, segregated decks and policies ensuring that women and children will be first — not to be saved,

but to fall into the abyss of poverty" (70). Atwood's world mirrors realities of our world and thus women and children are indeed the first to be thrown to the abyss of poverty.

2.2.3 Capitalism and Dualism

As the examples above show, people in the novel live in an era where they reach "the biophysical limits of the planet" (Plumwood, 2002: 5). In **Environmental Culture: The Ecological Crisis of Reason**, Val Plumwood states that as humans we tend to have "a false idea of our own character and location, including an illusory sense of independence from nature" (1). The portrayal of the people in the novel before the pandemic shows that they are alienated from nature and from the reality of their dependence on other beings. Consequently, they live in complete denial. They are constantly encouraged to consume and demand more. Maria Mies writes that in these kinds of societies "shopping is the only adventure still allowed" (1993: 141). She adds that "it is a futile attempt to compensate for the lack of creativity, the sterility inherent in modern, urban lifestyles" (41). People are constantly bombarded with advertisements and enhancements. It is most visible in compounds where the idea of physical health and beauty is manipulated repeatedly so that companies can sustain their profits. With the pharmaceutical companies "asymmetries, deformities" and "bad teeth" are things from the past (289). People are unaware of the fact that their bodies are used to fabricate a need for constant consumption. Jimmy is a contributor to that culture as he works as copywriter for companies like "AnooYoo", which promotes "cosmetic creams, workout equipment" and "pills to make you fatter, thinner, hairier, balder, whiter, browner, blacker, yellower, sexier, and happier" (248). Again, like HappiCuppa (happy cuppa), AnooYoo (a new you) does not necessarily make anyone happy. On the contrary, it makes people miserable while at the same time making the owners of these brands richer. Jimmy uses words on packages that "sounded scientific and had a convincing effect" (249). He becomes successful "with these verbal fabrications"; however, it does not bring happiness to him. Conversely, he is "depressed by it". It is important to note that these fabrications are so powerful that he even accomplishes to fool himself. When his hair gets sparser, he buys a hair-regrowth product and thinks that "he ought to have known it was a scam – he'd put together the ads for it" (252). This example shows the power of language and how easily the human mind can be manipulated in the wrong hands.

What might be even more frightening is that when all existing diseases are cured, the compound HealthWyzer creates new ones as "illness isn't productive" (210). First, they develop "drugs and procedures that cure sick people", and they "make it impossible for them to get sick in the first place" (210). Then, they need new diseases for profit. The hostile bioforms

are put "into their vitamin pill" (211). As in our contemporary culture, in the novel, many people are taking vitamin pills, but they are unaware that they are actually making themselves sick. As Crake reveals to Jimmy, "[t]he best diseases, from a business point of view," are the ones that cause "lingering illnesses" "for maximum profit". This is why Sharon, Jimmy's mother, leaves her job and rebels against the system. The aim is that, ideally, "the patient should either get well or die just before all of his or her money runs out" (211). For a capitalist system that does not have any ethical concern regarding others, "it's a fine calculation". However, Jimmy unknowingly plays a role in the spread of the pandemic as he writes "catchy slogans" for "The BlyssPluss Pill" (312). Pandemic is distributed worldwide in the form of a pill. The examples above show that an uncontrolled corporate capitalist system does not only commodify nature and less privileged members of the world, but it makes people inhuman and instrumentalises everyone and anything continuously for short-term profit.

Although most readings of **Oryx and Crake** concentrate on the compounds and elites regarding consumption and capitalism, it is important to note that pleeblanders are not very different from elites in that sense. Even though life in the pleebs contrasts with sterilized life in the compounds, as Crake and Jimmy's visit to pleeblands shows, pleeblanders are not like how they are depicted in the compounds. Furthermore, during their visit, the depiction of the place becomes strikingly similar to Earth (287). Although air quality is worse compared to compounds, there are "rich pleeblanders in luxury cars" while "poor ones on solarbikes" (288). There are "neon slogans, billboards, ads everywhere" and "all skin colours, all sizes … gender, sexual orientation, height, colour of skin and eyes – it's all on order, it can all be done or redone" (288). There are "constant barrage of messages asking us to *forget*—that is, to allow a few private owners and public officials with their eyes focused on short-term gains to pretend that environmental devastation does not exist" (Gan et al., 2017: 2). People are constantly encouraged to consume more while being blinded to the reality of their ecologically critical condition. As Crake says this is where their stuff "turns to gold", "people come here from all over the world – they shop around" (289). The reader is informed that "the competition's ferocious, especially what the Russians are doing, and the Japanese, and the Germans, of course. And the Swedes" (289). So, when it comes to capitalism and the global market economy, even the division between compounds and pleeblands is blurred. To achieve this kind of ignorance in the face of an ecological crisis, Plumwood suggests that "rationalist culture" and "its 'success-making' characteristics, including its ruthlessness in dealing with the sphere it counts as 'nature', have allowed it to dominate both non-human nature and other peoples and cultures" (2002: 5). She says this attitude leads to "ecological and ethical failures" and "we must change

this culture or face extinction" (5). Indeed, a continuation of this behaviour leads to almost complete extinction in the novel. The names of the extinct species in the title foreshadow that other species will follow and go extinct.

As for dualism, there is a distinct separation in every layer of this world. As stated earlier, life is divided between compounds and pleeblands. Those living behind security walls of compounds are unaware that they are not very different from the lab animals they capture and confine as they cannot leave the compounds as they wish. Jimmy's scientist father calls the CorpSeCorps men "our people" and says that they should be "on constant alert" (Atwood, 2004: 27):

> When there was so much at stake, there was no telling what the other side might resort to. The other side, or the other sides: it wasn't just one other side you had to watch out for. Other companies, other countries, various factions and plotters. There was too much hardware around, said Jimmy's father. Too much hardware, too much software, too many hostile bioforms, too many weapons of every kind. And too much envy and fanaticism and bad faith. (27-8).

The ones holding power in the compounds are constantly creating an "other", a potential enemy, a dichotomy. They invest their energy in creating artificial enemies rather than focusing on unity and interdependence and searching for alternatives in the face of ecological change. The way that Jimmy's father relates it to his child shows plainly how dualism-based logic of thinking is deeply embedded in their culture and stories:

> Long ago, in the days of knights and dragons, the kings and dukes had lived in castles, with high walls and drawbridges and slots on the ramparts so you could pour hot pitch on your enemies, said Jimmy's father, and the Compounds were the same idea. Castles were for keeping you and your buddies nice and safe inside, and for keeping everybody else outside (28).

The class distinctions that keep elites apart from so-called commoners are a product of dual thinking. Since it is deep-rooted into the culture, it is very difficult to deconstruct this idea. As a father, he tries to implement and convey these ideas to his child, while Sharon says it is "all artificial" and "just a theme park" (27). While those sustaining this narrative stay alive, others confronting and challenging it are terminated by the system, i.e. killed with "a routine execution" (258).

Those in compounds are also divided within themselves as "numbers people" and "word people" (58). The education system is built accordingly. For instance, Crake as a numbers person (74), goes to a different school even though Jimmy and he are brought up in the same compound. There is a separation between science and art, reason and emotion. Atwood chooses the names for schools accordingly: Crake goes to Watson-Crick, which is named after the duo, James D. Watson and Francis Crick, who "uncovered the structure of the DNA" (Cobb,

"Watson and Crick"). Jimmy's school is named after Martha Graham, the leading modern dancer (Britannica, "Martha Graham"). He says studying at Martha Graham "was like studying Latin, or book-binding: pleasant to contemplate in its way, but no longer central to anything" (Atwood, 2004: 187). He feels resentment as "the system had filed him among the rejects" (196). Social sciences are ignored and made trivial and irrelevant. Atwood foresees the discussions of today as currently there is a discussion regarding English language and literature programs in the UK. Some universities drop English literature courses because "graduates struggle to get highly paid jobs" (Rowan, The Telegraph). Social sciences are being rendered obsolete and less valuable.

Power holders first divide people as "us and them" then as "number and word people". Moreover, they usurp poorer regions environmentally, as shown with examples before. Slyvia Mayer points out that:

> … the logic of domination that denigrates nonhuman nature and specific social groups is revealed: the socially, politically, and economically dominant position of predominantly male scientists and corporation managers has created a culture in which both human and nonhuman nature have become thoroughly objectified. Mind rules over matter, reason over emotion. (124)

Apart from regions, with science, both people and non-human animals become their prey for research and product development. There are "real" animals vs genetically engineered ones. They plan to apply the same logic to human babies with pre-ordered features (Atwood, 2004: 250). In a way, they go "further than simply exploiting existing nature" and create "new forms of genetic hybrids, designed for specific purposes (Schmeink, 2017: 82).

2.3. Technoscience: A False Approach in Terminology

There are many reasons behind gene splicing and producing new species in the compounds. Some are produced for domestic reasons or to enhance the living conditions of elites, some are used for security and food. Certain animals are produced to replace human organs when needed or simply created for pleasure by scientists who want to test their limits to the extreme. Uncontrolled science and experiments bring unexpected results. While some species obediently fulfil what they are designed to do, some animals evolve beyond what is destined for them and cause havoc. To mend the wounds they have created, people are in search of new species, but they end up creating even more problems in the end. Before analysing the depiction of animals in the novel, I first address a false approach in the terminology of technoscience.

2.3.1 Technoscience: Technology and Science

In **Environmental Culture: The Ecological Crisis of Reason** (2002), Val Plumwood indicates that science has a "double face" as "it is often identified as the ally and saviour of the environment, especially since scientists have spoken out on climate change and have added the authority of reason to environmental concern in many areas" (2002: 38). Yet, she adds, modern technoscience "has contributed to producing the environmental crisis at least as much as to curing it". She shows that technoscience is artificially divided into two, the bad part is called "technology" while "science" is attributed to the good part (38). This so-called division in terminology aims to "maintain the ideology that 'science proper' can do no wrong by displacing attention and responsibility for any ill-effects onto externalised activities or onto parties identified as 'outside'" (39). This logic is reflected in the novel, where science supposedly serves the benefit of society and technology is mostly referred to when talking about the internet culture. Margaret Atwood herself states that one of the primary themes in the novel was the internet ("Book Club with Margaret Atwood", 2021). She mentions how people have received it as a new sort of God and how destructive it can be in the wrong hands. As clearly shown in the first part of this chapter, people are not only detached from nature but also from their communities. As Jimmy's flashbacks show, it is to such an extent that it is as if they are living in virtual reality. Children are consumed by violent video games, and they have an online presence rather than living. It is important to note that these games are not entirely fictitious after all. They are mostly inspired by real events in history, the games such as "Barbarian Stomp (See If You Can Change History!)" or "Blood and Roses" are examples of that (Atwood, 2004: 78). The latter is a "trading game", while Blood represents massacres and genocides, Rose represents human achievements, artworks and helpful inventions (79-80). Atwood lists the horrors of history along with artworks in this game. Jimmy informs that the winner is mostly the Blood player, yet winning means that "you inherit a wasteland". While Jimmy does not like it, Crake says this is the point of the game. Similarly, the game "Extinctathon"' focuses on "every extinct species", which is a "couple of hundred pages of fine print and filled with obscure bugs, weeds, and frogs nobody had ever heard of", and the reasons behind are various such as pollution, habitat destruction and ignorant human centrism (81). Later, it turns out that MaddAddam, the master of this subversive game, uses the game and the players' ideas to create new viruses. Violence and indifference towards different species reveal themselves in these games. Furthermore, they are normalised in the eyes of the young generations, and their minds are shaped accordingly. Even though Jimmy says that he has "some severe nightmares" because of them, he gradually becomes numb (80).

Technology is not limited to video games. When they are not playing video games, they "surf the Net" to "see what [is] new" (81). By doing so, children also witness animals being murdered and watch open heart surgeries and suicides of political leaders online. There are also websites where people do all sorts of things for attention, including committing suicide. As these examples show, death is commodified in this twisted world order. Besides, porn sites are accessible like cartoons and underprivileged members of the society are used by this industry, as I mentioned in the previous part. This is how Jimmy and Crake come across Oryx for the first time. Jimmy mentions that those in porn "always struck him as digital clones" (90). He realises for the first time what they are doing is wrong only after he has eye contact with Oryx. This eye contact happens through the lens of the camera (91). He says that, unlike digital clones, "for some reason Oryx was three-dimensional from the start" (91). After witnessing more than they can or should take in online, kids become numb to others' feelings and suffering. These destructive technological tools and the influence of internet culture not only alienate them from the world they live in but also blur the line between what is real and what is not. While technology is associated with negative outlets and outcomes, science supposedly consists of only good endeavours for humans. To achieve this divine duty, science has no limitations or ethics regarding the subjects it uses or creates. As Plumwood states, "primary among the Others whose contribution is assumed but denied is nature, the sphere of the non-human, including animals, plants and the biospheric cycles and processes of which they are part" (2002: 28). The intrinsic value and contributions of non-human animals are denied; however, their superior features are selected for creating new species. They are not appreciated on their behalf, and interconnection with them is undervalued, but after all, their distinctive abilities are reflected in new engineered species.

2.4. Depiction of Animals and Genetically Engineered Species

Some genetically engineered animals and plants in the novel are quite obedient and used to increase the living standards of humans. To begin with, the mascot of the Watson-Crick Institute is "the spoat/gider", **"**one of the first successful splices … goat crossed with spider to produce high-tensile spider silk filaments in the milk" (199). It is used for fabric and clothing to build "bulletproof vests". Namely, this innovation helps to protect people from another invention of theirs, bullets. As for plants, in the Botanical Transgenics (Ornamental Division) department, there are "a whole array of drought-and-flood-resistant tropical blends". As a result of human destruction, which leads to increased droughts and floods, resistant blends are created. Another example is "huge fake rocks", which is a "combo-matrix of recycled plastic bottles and plant material from giant tree cacti and various lithops" (200). They look authentic but

weigh less and “absorb water during periods of humidity and release it in times of drought, so they act like natural lawn regulators”. They cannot replace real rocks though, as they are “known to explode” in the time of “heavy rainfalls”. In “Décor Botanicals”, a team develops “Smart Wallpaper that would change colour on the walls of your room to complement your mood” (202). They accomplish that thanks to “algae embedded in it”. Once they “solve the marine-life fundamentals”, the team desires to create a new “line of bathroom towels that would behave in much the same way”. As Plumwood states:

> Recognition of the respects in which non-humans are superior to humans is suppressed, thus nature and animals are judged as ‘lack’ in relation to the human- coloniser, and devalued as an absence of qualities said to be essential for the human, such as rationality. We consider non-human animals inferior because they lack, we think, human capacities for abstract thought, but we do not consider those positive capacities many animals have that we lack, such as remarkable navigational capacities and ultraviolet perception. (2002: 108-9)

Indeed, while the wonders of nature and animals and how they work are still not entirely understood by the greatest minds of the Watson-Crick, this does not prevent scientists or students from benefiting from the supremacies of different species. Even though species' abilities are observed closely and reflected in various inventions in moderate measures, it is never enough for the insatiable hunger of hyper-capitalist societies

2.4.1 Animals as Companions

Some animals in the novel, whether they are genetically engineered or not, accompany human beings. They make Jimmy identify himself with them. Through his example, Atwood shows that a different kind of relationship could be possible. The importance of animals for the protagonist reveals itself with the fact that the first complete memory of Jimmy as a kid is of a huge bonfire (Atwood, 2004: 15). On that day, he is wearing rubber boots and fears hurting the smiling ducks painted on each toe on his boots. He remembers his fear “because after seeing the bonfire he had to walk through a pan of disinfectant in those boots”. He is worried about spreading the poisonous disinfectant to ducks, and even though he is told that they are not real and have no feelings, he has difficulty believing that. The bonfire is “an enormous pile of cows and sheep and pigs”, which are burnt in the fire to prevent the disease from spreading and Jimmy, as a five-year-old, feels guilty for not rescuing them.

On the other hand, he wants to see the fire (15). His father assures him that they are like “steaks and sausages”; they do not feel anything as they are dead. However, unlike steaks, they have heads, which makes a difference for Jimmy as he feels “he could see the animals looking at him reproachfully out of their burning eyes”. The resemblance of these animals to humans,

seeing them in their full body form rather than as meat products on market shelves, irritates Jimmy. These animals are homogenised in themselves to "set up the typical polarised structure characteristic of dualism" (Plumwood, 2002: 103). To explain it more clearly, Plumwood states that homogenisation or stereotyping is a crucial step to separating animals from humans and making them lesser beings:

> Nature and animals tend to be seen as all alike in their lack of consciousness, which is assumed to be exclusive to the human, and the range and diversity of mindlike qualities found in nature and animals is ignored. The model promotes insensitivity to the marvelous diversity of nature, since differences in nature are attended to only if they are likely to contribute in some obvious way to human welfare. Nature is conceived in terms of interchangeable and replaceable units, (as 'resources', or standing reserve) rather than as infinitely diverse and always in excess of knowledge and classification. (108)

So, the two groups, humans and non-humans, are represented very differently from each other so that the domination of non-humans would seem natural. Within each group, "the members are very like one another" in such a manner that dominance of men and subordination of non-humans is supported by their appearance (Frye qtd. in Plumwood: 103). In other words, humans are like other humans and unlike animals, and animals are like other animals and very much unlike humans. Thus, the differences between cows, pigs and sheep are ignored compared to their difference from humans.

While Jimmy is irritated, he at the same time wants his father to lift him up to see it better as he thinks of it as "a beautiful sight – luminous, like a Christmas tree" (Atwood, 2004: 18). The contrast of feelings, feeling both guilt and also a desire to see, exemplifies the complexity of the situation and existing boundaries between humans and animals even before things have had a drastic shift in the timeline of the novel and become even more inhuman. Other than awakening guilt in humans for their actions, animals generate curiosity, empathy, appreciation and identification. Jimmy's narration includes many examples of this. While he remains indifferent and fails to appreciate other beings, including humans, he feels curiosity and love towards certain animals. When he sees a caterpillar "letting itself down on a thread, twirling slowly like a rope artist, spiralling towards his chest", he appreciates its moves and delicacy (41). He examines its colours and "feels a sudden, inexplicable surge of tenderness and joy". He thinks that it is "unique", "there will never be another caterpillar just like this one. There will never be another such moment of time, another such conjunction" (41). This moment of attention and admiration leaves him with "irrational happiness". As someone who was born into a rational order where emotions are cast aside, he struggles to make sense of his feelings. Consequently, he thinks that "it's probably a vitamin deficiency", while what he experiences is a simply blissful moment and witnessing an animal as it is without ascribing meaning to it. This

is one of the examples where Jimmy does not necessarily identify himself with animals but simply observes and admires their distinction and beauty.

When he is escaping from the pigoons and sees a land crab in the corner of a room, he identifies it with himself. At first, he cannot understand what it is, and when he does, he thinks that "it must have come in here to escape the twister, just as he did, and now it can't find its way out" (268). When it returns to its burrow, he feels he needs the same thing "a burrow of his own. A burrow, a shell, some pincers" (268). Hence, he experiences a moment of identification and appreciation. The land crab adapts to its surroundings, and in one instance, Jimmy states that "think of an adaptation, any adaptation, and some animal somewhere will have thought of it first" (164). Their ability to make adjustments so rapidly shows their willingness to survive on their own terms and becomes a great example to humans who are willing to sacrifice different species (including the majority of their own) even for short-term gains.

Alex the parrot is another animal who holds a special place for Jimmy. This is not a fictional character but a real bird, "perhaps the world's most famous talking bird," Alex was "a 31-year-old African gray parrot, knew more than 100 words and could count and recognize colors and shapes" (Carey, "Alex"). At school, he watches old CDs of him at the library, "his favourite from Classics in Animal Behaviour Studies" (Atwood, 2002: 54). He enjoys it when Alex "[invents] a new word – cork-nut, for almond" but what he likes the most is when he is fed up "with the blue-triangle and yellow-square exercise" and says "I'm going away now" (54). When someone pisses Jimmy off, he says, "hammer Cork-nut. No one but him and Alex the parrot [know] exactly what cork-nut means" (59). Jimmy feels a profound level of kinship with Alex. When Alex asks for an almond but is given "a cob of baby corn", it "bring tears to Jimmy's eyes" (59). He becomes very sorry for seeing that Alex is given something different than what he asks for, for the sake of the experiment. On his first nights after the pandemic, he imagines Alex the parrot. When his foot is infected, Alex appears to him in a dream (336). Seeing Alex flying in his dream, he "is suffused with happiness and love". Then with the effect of his infection, his dream turns into a nightmare, and Alex is gone. He wakes up "in the dark, drenched in sweat" (336). He has feelings towards Alex on such an intense level that he experiences these heartbreaking episodes, unlike what he experiences with people. He shares both joy and pain with him even though he has never actually seen him. What he is capable of feeling towards Alex exceeds what he feels towards those who are present in his life.

Appreciating the uniqueness and beauty of animals requires attention and intention; however, understanding their confinement and pain is not as easy. There are two examples

where Jimmy can relate to the captivation of the animals. When Crakers, genetically engineered humanoids, watch him eating fish, he feels like an animal being watched in a zoo:

> The people keep their distance and avert their eyes while he crams handfuls of fishiness into his mouth and sucks out the eyes and cheeks, groaning with pleasure. Perhaps it's like hearing a lion gorge itself, at the zoo, back when there were zoos, back when there were lions – a rending and crunching, a horrible gobbling and gulping – and, like those long-gone zoo visitors, the Crakers can't help peeking. The spectacle of depravity is of interest even to them, it seems… (101)

With the zoo reference, Atwood points to just another way of captivation of animals. As John Berger states, in zoos, animals become "the objects of the imperial gaze we turn on wild animals, in which our alienated distance is proportionate to our power" (Berger qtd. in Garrard: 150). Similarly, Randy Malamud suggests that zoos today are "marketed to flatter spectators' roles as active members of a gloriously affluent consumeristic [sic] society" (qtd. in Garrard: 150). However, in the end, these consumerist societies are doomed to consume themselves. When they do so, oppressors become the gazee instead of being gazers. The second instance happens after the apocalypse when Jimmy finds beer bottles he wishes to be full and thinks he "should not torture himself. He shouldn't dangle impossibilities in front of himself, as if he were some caged, wired-up lab animal, trapped into performing futile and perverse experiments on his own brain" (45). As Haraway asserts, the animals in labs "are somebody as well as something, just as we humans are both subjects and object all the time" (2008: 76). However, apparently understanding this requires a rather painful experience emotionally or physically so that it can create an awareness regarding the suffering of the other. After feeling like a lab animal, Jimmy weeps and says that often "he feels he has a listener: someone unseen, hidden behind the screen of leaves, watching him slyly" (Atwood, 2002: 46). Right after, it turns out that he has a listener, a little rakunk. He thinks, "if he worked at it, if he really tried, he could probably tame one of those, and then he'd have someone to talk to" (46). For him, in order for a little rakunk to listen to him, he needs to tame it. However, it is not surprising because this is how he is brought up, and he is not subversive enough to go much beyond that pattern. Animals as pets are still present in this near future, they continue to be a commodity to be bought and sold. By giving the example of the pig in the movie called *Babe* (1995), Plumwood draws attention to "the hyper-separation between the 'pet' animal and the 'meat' animal" that exists in our culture:

> The hyper-separation between emotion and reason, respect and use is reflected in the contrast between the only partially commodified 'pet' animal and the fully commodified 'economic' animal. 'Pet' and 'meat' animals are defined in dualistic terms as hyper-separated and complementary animal categories, with the hyper-subjectivised and

> emotionally-invested 'pet' privileged over the undersubjectivised and emotionally-devested 'meat' (2002: 160).

She points out that as people live in urban areas more and more, the main interaction with the animal world is mainly through pets (162). She finds it "unfortunate" since "the Modern Contract", as she calls it, "defines the pet in opposition to the meat animal and reflects and repeats many of the duplicities, denials and exclusions involved in the surrounding western institution of meat" (163). The production of rakunks in biolabs begins "as an after-hours hobby" (Atwood, 2004: 51). There is "a lot of fooling around in those days" like butterflies with "wings the size of pancakes" (201) and the creators of genetically engineered animals say that "create-an-animal is so much fun…it [makes] you feel like God" (51). Lori Gruen informs that every year millions of animals are killed in U.S. laboratories in the name of scientific progress (1993:66). They are "routinely suffocated, starved, shocked, blinded, burned, beaten, frozen, electrocuted, and eventually killed" and all of it is done "under the guise of scientific inquiry" (66). Equally disturbing, "a majority of the experiments are conducted to satisfy curiosity rather than to improve anyone's health". The same logic exposes itself in the novel.

Some animals turn out different than the students and scientists at compounds intend to, and they "get rid of those" (Atwood, 2004: 51). Jimmy's father, a "genographer" at OrganInc farms (22), says the rakunk has "no smell to it, not like a skunk… It's a clean animal, with a nice disposition". Cleanliness, neatness, and no smell are desired features embedded into the rakunks as the father says, "racoons never made good pets once they were grown up, they got crabby, they'd tear your house to pieces. This thing is supposed to be calmer" (57). For his tenth birthday, he gives Jimmy a rakunk "in a carry-cage" as a gift (51). Jimmy instantly falls in love with *this thing.* He calls her "Killer", and unlike his mother, his father approves of this choice (52). Jimmy is allowed to take her to school. When Wakulla Price, on whom he has a crush, strokes Killer's fur, he feels "shivery, as if her fingers were running over his own body" (55). He identifies himself with her. Killer becomes "his secret best friend". He thinks it is "pathetic, that the only person he could really talk to is a rakunk" (59). Even though he finds it pathetic as a child and it shows his loneliness to a certain extent, it is significant that although he cannot communicate with Killer verbally, she is the one with whom Jimmy has the closest bond. It is important to note that Jimmy is not able to experience the same or even a close level of appreciation and love towards other beings, except Oryx. He says that Killer always forgives him (60). When one day, Jimmy's mom leaves the house with Killer with a note saying, "I have taken Killer with me to liberate her, as I know she will be happier living a wild, free life in the

forest", he becomes "enraged" (61). He thinks that "Killer was his!" and fears as "a tame animal, she'd be helpless on her own, she wouldn't know how to fend for herself, everything hungry would tear her into furry black and white pieces". He mourns for her for months and does not know if he is mourning the most for "his mother or an altered skunk". "In secret, in the night, he [yearns] for Killer" he loses both his mother and his closest friend in one day (67). As an adult, when he reflects on it, he realises that his mother must have been right, "Killer and the other liberated rakunks must have been able to cope just fine, or how else to account for the annoyingly large population of them now infesting this neck of the woods?". After the apocalypse, he sometimes hears the rakunks "through this private dump of his, searching for a free meal among the leavings of catastrophe, as he himself has often done, and is about to do again" (152). Once again, he identifies himself with the rakunks and sees the similarity and interconnectedness between himself and other species. As discussed above, while Jimmy does not feel any sympathy towards people killing themselves and streaming it online, he feels devastated when it comes to Alex the parrot and identifies himself with different animals, including the rakunk and the land crab. However, his love towards certain animals cannot be extended to all, nor does it prevent Jimmy from consuming animal products.

2.4.2 Animals as Food

Animals have been used for different purposes for centuries, and they have been one of the main food sources for human beings. Using animals as food is quite a familiar method, even for pre-humans as old as about 2.6 million years ago (Kluger, "Time"). They are categorised as less worthy than humans (under the broad scheme, which is called "others") so that humans can more easily justify the way they use and consume animals. As Plumwood points out:

> In the historical rationalist imaginary, women and other 'lesser beings' are the Others of reason… It is not only women that have been constructed as oppositional to western rationality, culture and philosophy, but also the slave, the animal, and the barbarian, all associated with the body and the whole contrasted sphere of physicality and materiality. (2002: 19-20)

As a result of the ecological deterioration and compulsory scarcity of stock farming, the urge to create new species as a food source manifests itself in genetically engineered animals in the novel. They are "reduced to objects to be consumed" (Gruen, 1993: 74). Although it is rare and animal products are mostly replaced by soy versions, meat-eating is still present in the novel. It exists as a metaphor for the elites and also as an indicator of their wealth. As Lori Gruen states, "in times of shortage, it is men who eat flesh" (74). Carol Adams emphasises that "people with power have always eaten meat… Dietary habits pro-claim class distinctions, but they proclaim patriarchal distinctions as well" (qtd. in Gruen 72). When Crake works for

“RejoovenEsense”, he orders “kanga-lamb”, which is an “Australian splice that combines the placid character and high-protein yield of the sheep with the kangaroo’s resistance to disease and absence of methane-producing, ozone-destroying flatulence” (Atwood, 2004: 292). People in power are able to choose and afford new animal products in which they eliminate harmful sides and combine prominent aspects of animal meat.

There are also “ChickieNobs”, “chickens without head, just breath, just a hole for the nutrients no eyes or beak” (202). Jimmy feels irritated and thinks that “this thing [is] going too far”, and Crake opposes him saying that “it is quick...and the animal-welfare freaks won’t be able to say a word, because this thing feels no pain” (203). By quoting Bentham and Rousseau, Josephine Donovan states that both philosophers assume that “the common condition that unites humans with animals is sensibility, the capacity to feel pain and experience pleasure” (1993: 172). When rationality and feeling pain is out of the equation, animals are not granted moral consideration. While Jimmy is initially irritated by the idea of headless chickens, later, he also consumes them. What one chooses to consume becomes an indicator of who they are. When with his girlfriend Amanda Payne and her two roommates from pleeblands, Jimmy brings home “ChickieNobs” to eat and afterwards, the roommates barely speak with him (Atwood, 2004: 242). His diet, which includes “ChickieNobs”, becomes a clear indicator that they have different value systems. Even though Jimmy eventually adapts to the mainstream diet amongst his class, as the ChickieNobs example shows, when he is a child, he feels “upset” and “confused about who should be allowed to eat what” (24). Also, during his childhood, when as a result of the ecological crisis, “meat becomes harder to come by”, residents of OrganInc Farms doubt whether what they consume as pork is genuine or if it is actually “pigoons” (24). The staff joke about the “pigoon” food and urge Jimmy to eat it, but he does not want to eat it since he thinks of the pigoons “as creatures much like himself” (24). He is uncomfortable eating them because pigoons resemble human beings, and eating something like himself would feel like cannibalism. Sarah McFarland explains what cannibalism means in regards to the relation between the human and non-human animal:

> Carnivory is marked by a rigid ideological commitment to the division between humans and other animals: a categorical cut. Cannibalism erases difference by collapsing species boundaries. It breaks down the exceptionalist construction of humans as superior to all other “consumable” animals, proving that all flesh is flesh, and human meat is animal meat and tastes recognizably as such, too. (2021: 18)

So as a human being, eating one of your kind proves that humans are just another source of flesh, and they are as consumable as any other animal. Cannibalism is addressed in some

post-apocalyptic narratives, but Atwood refrains the topic by leaving only a few people alive and getting rid of most of them very early in the novel. The main way she avoids it though, is through Crakers, who are herbivores. So Crakers do not even need to eat animals, let alone eating one of their kind. Jimmy is the only human in the novel who eats animals after the apocalypse. However, the fact Jimmy later turns into a potential food source for pigoons, which evolve more than the scientists anticipated, complicates further the relationship between animals and humans. Humans are defined in relation to their difference from non-human animals; however, as animals become similar to them on intelligence level and become the hunters rather than the hunted, they jeopardise the position of humans in the so-called great chain of being. Consequently, they blur the division between what is human and non-human. Plumwood mentions that contemporary science fictional works which imagine humans "as food" by "alien invaders", for instance, have become quite useful to show the position of being reduced to a food source (2004: 204). The same thing happens when Jimmy becomes a possible "non-human food animal" for pigoons and becomes a "very powerful vehicle for such imaginative transpositions" (204).

2.4.3 Animals as "Nuisance

As explicitly shown with the examples above, nature and animals, engineered or not, are used for different purposes be it for domestic reasons, for food or as companions. While the ones mentioned so far stay rather obedient and fulfill the purposes of their creators or owners, in this part I focus on those who go out of control or go beyond the reason for their creation and rebel against anthropomorphic humans. These animals include house mice, rabbits, wolvogs, bobkittens and pigoons. As exciting as it can be, genetically engineering new species comes with a huge risk of calculation errors even if they are not designed for the evil purposes of mankind. For instance, "a new form of the common house mouse addicted to the insulation on electric wiring overrun Cleveland, causing an unprecedented number of house fires" (Atwood, 2004: 216). Hence, "control measures" continue to being tested. After the apocalypse, Jimmy comes across a rabbit which "glows in the dusk, a greenish glow filched from the iridicytes of a deep-sea jellyfish in some long-ago experiment. In the half-light the rabbit looks soft and almost translucent, like a piece of Turkish delight…" (95). This reminds him of "luminous green rabbits" in his boyhood who were not "this big" "with gigantic teeth" and who have not yet "slipped their cages" and after breeding "with the wild population" become "a nuisance" (96). The sight of rabbit "fills him with carnivorous desires" but he prevents himself in order not to offend the Children of Oryx as rabbits belong to them.

As for wolvogs, they are engineered as a commodity in “BioDefences” for protection, a better option to replace alarm systems (205). They are “bred to deceive” while they look like dogs there is a “large pit-bull component” in them (205). Everything is considered for their use value not in its essence. Upon first seeing wolvogs, Jimmy asks Crake “what if they get out? Go on the rampage? Start breeding, then the population spirals out of control – like those big green rabbits?” (206). However, Crake assures him saying that “but they won’t get out. Nature is to zoos as God is to churches” (206). Worrying about the ChickieNobs and the wolvogs, Jimmy reflects upon it thinking “why is it he feels some line has been crossed, some boundary transgressed? How much is too much, how far is too far?”. These ethical questions are not addressed by the scientists engineering them. Crake says “those walls and bars are there for a reason … not to keep us out, but to keep them in. Mankind needs barriers in both cases” (206). According to Jimmy, the worst thing about wolvogs is that although they still look and behave like dogs, “pricking up their ears, making playful puppy leaps and bounces, wagging their tails, [t]hey’ll sucker you in, then go for you. It hasn’t taken much to reverse fifty thousand years of man-canid interaction” (108). This new breed is not only designed to be manipulative in their looks, but what is worse is that the wolvogs kill the “real dogs”. Real dogs cannot stand a chance, and the wolvogs kill and eat “all those who’d shown signs of vestigial domesticated status”(108). As a consequence of this interrogation, real dogs suffer and are killed, and the actual guilt is not wolvogs but on mankind. The reasons which put them into a domestic status in the first place cause their death. Wolvogs turn into “nocturnal hunters” (164). Jimmy witnesses “a wolvog advance to a yapping Pekinese in a friendly manner, sniff its bum, then lunge for its throat, shake it like a mop, and canter off with the limp body” (108). After the apocalypse, some neglected house pets beg with their “eyes to be taken in by some human, any human” (108). They are still in need of human affection. Jimmy finds it “hard to resist their ingratiating wriggles, their pitiful whining, but he couldn’t afford to feed them”, and he drives them “away with stones, feeling like a complete shit”. However, he later regrets it thinking that he “let them go to waste. He should have eaten them. Or taken one in, trained it to catch rabbits. Or to defend him. Or something” (108).

Another example of engineered animals that become a “nuisance” is bobkittens. When “the big green rabbits become such a prolific and resistant pest”, bobkittens are “introduced as a control”, yet they eventually go out of control as well (163). According to calculations by scientists, bobkittens are “supposed to eliminate feral cats, thus improving the almost non-existent songbird population”, but when soon after they go out of control, “small dogs [go] missing from backyards, babies from prams; short joggers [are] mauled” (164). Arrogance and

self-assurance do not prevent plans from going wrong, and every intervention affects other species, be it real or engineered, and while trying to repair a mistake, humans bring about more damage.

The most important splices are pigoons, both skin and neocortex tissue grow in them (66), and they are "transgenic pigs, bred to grow replacement organs for humans" (22). Pigoon is only a "nickname" for them, "the official name is sus multiorganifer", and sometimes it is called "Organ-Oink Farms, but not as often" (22). Namely, a nickname is used to make it sound more organic or medical rather than "sus multiorganifer", which sounds like a machine. Pigoons are used to grow multiple organs simultaneously to make them more cost-effective, no ethical questions whatsoever are addressed regarding them. As their name connotes, they are like balloons; these pigs are "much bigger and fatter than ordinary pigs, to leave room for all of the extra organs" (25). While being "kept in special buildings, heavily secured", they are simply designed to fit and answer the demands of the market and the newly appearing microbes and viruses:

> The goal of the pigoon project is to grow an assortment of foolproof human-tissue organs in a transgenic knockout pig host – organs that would transplant smoothly and avoid rejection, but would also be able to fend off attacks by opportunistic microbes and viruses, of which there are more strains every year. A rapid-maturity gene is spliced in so the pigoon kidneys and livers and hearts would be ready sooner, and now they were perfecting a pigoon that could grow five or six kidneys at a time. Such a host animal could be reaped of its extra kidneys; then, rather than being destroyed, it could keep on living and grow more organs, much as a lobster could grow another claw to replace a missing one. That would be less wasteful, as it took a lot of food and care to grow a pigoon (22-3).

As if growing these animals to usurp them is not enough, scientists also splice in a rapid-maturity gene so that pigoons get ready sooner. Moreover, they can be customized like an instrument or commodity: "the pigoon organs could be customized, using cells from individual human donors, and the organs are frozen until needed", so in a way, pigoons and humans merge with one another. As a host, a pigoon consists of human cells, and when that organ is transplanted, humans, in return, become a host for the pigoon that was used for his organ. In the same way, big companies make a profit by producing specialized equipment, these companies make a commercial profit by modifying the pigoons. Lori Gruen gives a similar example from 1988 when guinea pigs were mass produced and advertised like automobiles, "[w]hen it comes to guinea pigs, now you have a choice. You can opt for our standard model that comes complete with hair. Or try our new 1988 stripped down, hairless model for speed and efficiency" (1993: 66). The same anthropocentric logic exists, proceeds and leads to even more trouble in this near-future. While there are compounds like "CryoJeenyus" where "two

thousand frozen millionaires' heads awaiting resurrection" (225), pigoons are "much cheaper than getting yourself cloned for spare parts – a few wrinkles left to be ironed out there or keeping a for-harvest child or two stashed away in some illegal baby orchard" (23). For those who can afford it, different ways of immortality are promised with different options. "In the OrganInc brochures and promotional materials, glossy and discreetly worded, stress [is] laid on the efficacy and comparative health benefits of the pigoon procedure" (23). To ease the customers, "it is claimed that none of the defunct pigoons end up as bacon and sausages: no one would want to eat an animal whose cells might be identical with at least some of their own" (23-4). Again the matter, the question of eating your kind arises. Also, the wording "defunct" is subtle as they are not referred to as dead but rather as defunct, which connotes nonfunctioning. When it comes to transplanting organs, natural and organic vocabulary is used, but when it comes to their demolition, people are distanced from the pigoons by carefully selected words.

The use of pigoons is not limited to OrganInc Farms, they are used at NooSkins as well, but these are "smaller" and "being used to develop skin-related biotechnologies" (55). Instead of replacing the epidermis with "laser-thinned or dermabraded short-term resurfacing", "the main idea [is] to find a method of replacing the older epidermis with a fresh one" that would make "a genuine start-over skin" possible so that the skin will be "wrinkle- and blemish-free" (55). To actualise this "neuro-regeneration project", the scientists have "genuine human neocortex tissue growing in a pigoon" (56). The human neocortex distinguishes humans from animals as it enables abstract thinking. By having it grown in pigoons, scientists actually bring them ever closer to humans. As a former microbiologist, Sharon criticises it and calls it "a moral cesspool" and says what his husband and his colleagues are doing is "interfering with the building blocks of life" (57). She adds that "it is immoral. It is . . . sacrilegious", and the father is surprised by her remarks as she is "an educated person" and also because she was a part of this project. It is "just proteins", he says ", there's nothing sacred about cells and tissue, it's just…" (57). Just as the dialogue shows, there is a clash between reason and ethics. One sides with biotechnology, while the other is against using them for humans in such a way that scientists are interfering with the natural order. Meanwhile, pigoons become the ultimate challenge against the ontological division between humans and non-humans.

After the catastrophe, the human neocortex tissue growing in pigoon's heads pose a threat to Jimmy's life (243). They have long memories, and normally when they see a stick, they associate them with electroprods. However, Jimmy witnesses that they do not hold back from sticks anymore but hold their ground (243). They plan a trap to catch Jimmy. He thinks

that they are “brainy and omnivorous” animals (so they are just like a man) and “if they’d had fingers they’d have ruled the world” (268). As pigoons are “team players”, it can be said that they hold a better chance of surviving in this setting compared to self-centred humans. Jimmy refers to the gleam in their eyes and thinks that it is a grinning expression as he realises that they are “waiting for him, using the garbage bag as bait” (271). “They must have been able to tell there was something in it he’d want, that he’d come down to get. Cunning, so cunning”. Upon this instant, the word “cunning” reminds one of the Greek hero, Odysseus. Because Homer’s famous hero is “almost the incarnation of *metis*, the ancient Greek word we translate as cunning” (Herzog, 2006: 15). As one of the earliest famous heroes in literature, he is an example of intellect. Figuratively speaking, pigoons have been through a long journey, just like Odysseus. They were genetically engineered, then enhanced with the human neocortex, which allows them to think and now they are starting to write their own stories while trying to return home. Their home is not a picturesque place like that of Odysseus; instead, they are in the process of creating a home for themselves because there was no place for them to claim as home. This post-catastrophic setting which is not a wasteland but instead a place where life revives itself holds the possibility of being a home for them.

The capitalist system in the novel detaches nature from culture, and humanist technoscience regards animals as disposable economic resources for human use and commodifies them. However, as the pigoon example above shows, Atwood challenges this mechanistic and reductionist system by providing transgenic species which evolve beyond their genetic programming. Eckhart Tolle states that the process of developing inventions and destructive tools, which make use of nature and are developed just for profit, requires intelligence. However, it is “not ultimately intelligent” but rather “intelligence in the service of madness” (Tolle, “Essential Teachings”). He calls it “egoic cleverness” and underlines that it is not “true intelligence”. The novel reveals the danger and destructive potentiality of this “egoic cleverness”. As the examples above show, “the ethics of commodification” is a vital topic in the novel and Plumwood’s idea of “the Cartesian-mechanistic reduction of the non-human animal to its body, and the refusal of recognition of animal kinship as beings of mind, intention and communication” is very applicable to the text (2002: 157). As opposed to Carol Adams, who argues against any use of the animal other (for food or anything else), by claiming that it means instrumentalising them, Plumwood has a more realistic approach (159). She suggests that Adams misdefined instrumentalism “as involving any making use of the other, rather than the treatment of the other as no more than something of use, as merely a means to an end” (159). She asserts that it is inevitable to “treat the natural world to some degree as a means, for

example, to food, shelter and other materials we need to survive, just as we must treat other people to some degree as means". However, she suggests that while "we cannot give up using one another", we can stop "reducing others to means" and explore ways in which we can respect and work "towards ethical, respectful and highly constrained forms of use" (159).

Atwood provides examples where humans mimic animals and plants in their inventions to enhance the living conditions of humans, as I mentioned in this chapter. However, technoscience becomes increasingly aggressive and demanding, and it systematically suppresses any criticism or riot against it. In this hypercapitalist system, anything can be commodified and sold, dead or alive. It is not only non-human animals that become "merely a means to an end" but also human animals. Many experiments are conducted on people living in pleeblands. After all, nature and a big majority of people do not only suffer from the ecological crisis but also from capitalist systems and narratives which put them into ecologically damaged environments in the first place. To challenge that, Atwood provides genetically engineered species that transpasses boundaries between human and non-human animals. Other than including these species in the narrative, with numerous examples, Atwood underlines the vital importance of a comprehensive approach and interconnection with animals to prevent facing a similar catastrophic future. With flashbacks and the aftermath of the apocalypse, she points to the problems of dualistic thinking and its effects of it on the techno-science, the environment and non-humans. By showing the root cause of the problem, she opens a different way of thinking for the readers.

One way of preventing extinction or at least slowing down its speed and minimising the number of endangered species is to understand how they are represented and categorised in culture and language. The text shows us that if we continue our anthropocentric ways of thinking and devalue the uniqueness and interconnectedness of non-human animals, we will face a very similar future. By putting stress on capitalism and technoscience and showing their power to destroy and manipulate, the text points to the fact that in order to prevent this, technoscience should be regulated, and the motives behind experiments should be questioned. The ethics concerning the other should be taken into consideration. As can be deducted from the examples, if we do not find ways to extend our understanding and empathy towards species other than those we see as pets or familiars, we cannot find ways to survive. Our attention and care should not be narrowed down to a few but should be expanded as much as it can to all the remaining species. By introducing genetically engineered species that threaten the well-established categorisation of humans and non-humans and also establishing a post-apocalyptic setting where nature starts to flourish again and hosts new transgenic species and humanoids,

Atwood hints that humans may become the ones who are disposable. However, this posthumanist approach is not completely promising as she does not bestow some of the fundamental features to her posthumans.

2.4.4 Babies and Genetically Engineered Humanoids

Scientists in the compounds are not only busy with engineering new transgenic species but also with improving reproductive technologies. The elites do not only become a source of income by buying pharmaceutical products or treatments but also by choosing specific features for their children through genetic "agencies" such as "Infantade, Foetility, Perfectababe" (250). The parents want "the best for their money"; moreover, they are referred to as "buyers" (305). In a way, babies are turned into properties in the same way
animals are commodified. An organic or biological bond between the mother and the baby starts to dissolve. "RejoovenEsense" hopes to "hit the market with the various blends on offer" and to "create totally chosen babies that would incorporate any feature, physical or mental or spiritual, that the buyer might wish to select" (304). In this capitalist order, life is regulated in such a way that anything or anyone can be turned into commodities with features that can be changed or enhanced. However, this project narrated by Crake is only one side of the story. Compounds finance Crakers thinking that they are "floor models" for genetically engineered children to come while Crake is actually on a mission to create a new race to replace human beings.

As I have mentioned earlier, Crake sees overpopulation as a big part of the ecological problem. He also thinks that humans are doomed as destructive species that do not learn, so he comes up with a plan to eliminate the human race and replace them with Crakers. Atwood states that the question in the novel is whether we want there to be a human race "because that is the backstory of the climate crisis" ("Book Club with Margaret Atwood", 2021). So Crake looks at human beings to see "what they are" and to realise "the characteristics that get them into trouble" then, he "reverse engineers" them. To begin with, Crakers have different skin colours like "yellow, white, brown", and they do not register skin colours, so there is no racism (Atwood, 2004: 301). They have no beards, so they do not shave, which means that they do not produce any plastic garbage or need artificial products. Their green eyes are "luminescent in the semi-darkness" like rabbits so that they can easily see one another and do not need light or electricity (102). There are chemicals inside them which protect them from mosquitoes. Similarly, Crakers have built-in sun blocks, so they do not need clothes or the clothing industry. Therefore, they do not require animals or grow cotton or use chemicals. Besides, they do not need to exploit underdeveloped countries for cheap labour to manufacture clothes. They only

eat leaves like cloves, so they do not need land to grow specific foods. Consequently, there is no need for agriculture or animal breeding. They heat themselves with twigs and dung, so they are not killing anyone or need any fuels, so they do not harm nature (158). They eat their own poop, and their digestion system and how they eat are inspired by rabbits.

There are chemicals programmed into the men's urine which are effective against animals, such as rakunks and wolvogs. Men scent marks their territories with a morning ritual. This feature is added to them so that men will have something serious to do. This way, they will not feel left out because they cannot have children (154). Plus, they do not need guns or the war industry, thanks to scent-marking. They have a "self-healing mechanism, easily cured by purring", so they do not need medical professions or services (156). As for sexual needs, men's penises turn bright blue "to match the blue abdomens of the females" (162). Men do courtship dances, which are modelled on crabs and present some gifts to women. When women accept the gift, they "find a secluded spot and go at it until the woman becomes pregnant" (164). Consequently, there is no prostitution, rape or sexual abuse. As they are adjusted to their habitat, they do not feel the need to create houses or tools. As can be seen from the examples above, many features they have are based on other animals. So another "function" of animals in the novel actually is that they become a model, a prototype as to how to design the children of Crake.

As Crake leaves out destructive features from the "ancient primate brain", which are "responsible for the world's current illnesses", they feel no need to "invent any harmful symbolisms, such as kingdoms, icons, gods, or money" (305). There is no property to inherit, so there is no need for disputes over who the father is. Crakers are "the next-to-end result of seven years of intensive trial-and-error research" (302). Ordinary human embryos are altered at first, but then they start to reproduce themselves. They are "sui generis", and they do not need humans to produce them anymore (303). The rapid-growth factors incorporated in them allow them to grow quickly, and they are also "programmed to drop dead at age thirty– suddenly, without getting sick". They have no anxiety about getting old or dying because they do not age, and they have not witnessed any of them dying yet. As they have no such fears, in a way, they are immortal, as Crake points out. Crake also informs that different compounds in other countries are also developing their own prototypes, so they are not alone in this. The idea behind the Crakers, or the Children of Crake and their features give a summary of everything which has gone wrong with humans. They become much more integrated into nature, and they ideally will not have any disruptive behaviours as they will not have any

intangible concepts in their minds. Also, the fact that the compounds think that they are floor models for babies "that would incorporate any feature, physical or mental or spiritual, that the buyer might wish to select" is a criticism of the societies in the compounds (305). Besides, world leaders are interested in docility as a primary feature in order to create whole populations with these characteristics (304). However, this is exactly where the problem with Crakers starts. They are, in a way, incomplete and childlike as the alternative name for them, "the Children of Crake," denotes itself. They lack characteristics, and after Oryx is killed by Crake, they are left with Jimmy. So they are in need of a teacher or a leader. They are still in the process of learning.

After the catastrophe, Crakers finally leave their bubble-dome. Ironically what Crake tries to leave out of them starts to emerge in them. There are already two things that Crake wants to eliminate but realises that he must include in them, which are dreams and signing. He knows well from his high school experiments that virtual cats who could not dream went crazy during their REM-sleep study (218). Besides, as humans are "hard-wired" for dreams and singing and both are "entwined", he cannot eliminate the two things (352). As Matthew Walker, a professor of neuroscience and psychology, points out in **Why We Sleep: Unlocking the Power of Sleep and Dreams** (2017), sleeping and having dreams is a crucial part of human beings and their evolution. Sleeping made humans very unguarded towards any danger out in the wild for so many hours, so it had to be left out during evolution:

> No matter what vantage point you take, sleep would appear to be the most foolish of biological phenomena. When you are asleep, you cannot gather food. You cannot socialize. You cannot find a mate and reproduce. You cannot nurture or protect your offspring. Worse still, sleep leaves you vulnerable to predation. Sleep is surely one of the most puzzling of all human behaviors. (Walker, 2017: 18)

Yet it has persisted "heroically" because the sleeping cycle is such a significant component of being human, and it is an inseparable part of us (19). For this reason, Crake is not able to leave out sleeping from Crakers, which brings them closer to human beings from a crucial point. The fact that they sleep and dream signals that they are prone to repeat the same patterns humans have gone through and may repeat the same mistakes Crake wants to eliminate. While Crake refrains from metanarrative such as religion, Jimmy, as their guardian, comes up with the fabrication of stories to convince them to kill a fish once a week for himself. He says it is a request by Crake, and he becomes a God-like figure for them. Women point at the fish, and men kill it (Atwood, 2004: 100). This way, "the unpleasantness is shared among them, and no single person is guilty of shedding the fish's blood" (100). So, after all, Crake cannot prevent them from following a mythological narrative, not only because Jimmy manipulates them but

also because a part of them which enables them to sing and dream also allows them to follow a religion or such narratives. The features that Crake wants to eliminate in them come to light gradually. Towards the end of the novel, when Jimmy is gone for a few days, they wonder about him. When he comes back, he is surprised by an "unusual sound", men and women are singing in high and deep voices, and it is more like chanting (360). Moreover, they are sitting around a figure, "a scarecrow like effigy"; he realises they have made an idol for him (360). He mistakes their calling "Snowman" for "amen", but the chanting and the idol show that they have started to practice art and symbolic thinking is at hand, just as Crake feared (361).

Apart from their positive aspects or human-like features that Crake fails to eliminate in them, Crakers lack some traits to make them complex beings or characters. For instance, they cannot make jokes because to make jokes, one needs "a little malice" (306). However, just as the novel itself exemplifies, a sense of humour and a satirical tone is necessary for survival. At least, it is portrayed this way by Atwood. As the chanting example hints, they may start to do that at some point, but in the novel, it does not actualise. More importantly, there is "no self-consciousness" in them, "none at all" (301). It is a striking point because if there is no self-consciousness, then there is no way to take independent decisions or to be an existential being. Besides, if there is no self-consciousness, one cannot be autonomous. It makes them easily manipulated. This is also implied when Jimmy lists their "irritating qualities – among which he counts their naive optimism, their open friendliness, their calmness, and their limited vocabularies" (153). Inadequate vocabulary is yet another problem as words become a vital tool for non-humans to challenge humans who use language to restrain them. The fact that, as a guardian, Jimmy shapes their culture by creating a web of myth around Crake is also problematic. Crakers mostly remain to be passive beings, they are not entirely posthuman as they are not yet beyond human. As Jovian Parry states "The Children of Crake, for all their innocence and peaceful ways, are fundamentally nonhuman—are fundamentally subhuman, in point of fact" (Parry, 2009: 252). There may be some advanced features of them compared to humans, but they are not present as profound characters. By their depiction in the novel, they do not really pose a threat
for humans as beings who can populate the earth after humans.

Another representation problem with them is that even though they are designed in a way that they will not be under the influence of hormones or sexual desires, they misread the human female body thinking "they smell very blue" (Atwood, 2004: 364). Therefore, they want to initiate their ritual for intercourse by "singing their unusual music.. blue penises waving in unison, both hands outstretched like extras in a zombie film" (365). This becomes a threat for

human females and also positions male Crakers as aggressive and rather foolish beings, as the description above shows. They are not given a voice. It is not possible in this book, especially when taking into consideration that they are still in the stage of acquiring vocabulary. There is no real complexity in them, and as a result, there is no subjectivity. As Lars Schmeink points out, "they remain other" (102). They fail to challenge any demarcation that separates humans and non-humans. They stay childlike figures who are in need of a guiding figure like Jimmy, who ironically is not a proper example to educate anyone as I will point out in the next section, he replicates old narratives in this post-apocalyptic setting. Nevertheless, the existing features of Crakers or the idea behind their creation is critical because they are instruments to criticise the destructive inclination of human beings along with cultural and political mechanisms that usurp nature and those classified as others. However, Atwood's suggestion to break away from the human race cannot really go beyond a satirical one for the reasons listed above.

2.5. The Power and The Function of Language and Literature

Language becomes a vital asset for Jimmy in order to survive in the post-apocalyptic world. It does not only prevent him from going mad but also his interest in words and literature and his education in social sciences, which he resented thinking that it cast him as an outcast, become ultimately useful for his survival. Language and literature are not only indispensable for this fictional character but for us readers as well. As a writer who observes past events and pandemics, Atwood's novel, in particular, foresees and imagines many aspects of what we have been going through the pandemic. By reflecting on them in the novel, she shows how literary texts can help readers in turbulent times. They give a sense of hope and play a significant role in survival. It also allows the reader to put themselves in someone else's shoes, and with the transformative power of literature, one can start to change. When interviewed by Lisa Allardice for the event called "Book Club with Margaret Atwood", Atwood tells why she has written the book. She states that there are an infinite number of possible futures. Writing a book like **Oryx and Crake** is like putting "a signpost that says this way is a bad future do not go there" ("Book Club with Margaret Atwood", 2021). In this book, she tried to say there could be a better future if people start thinking about other ways. She adds that she is more hopeful today than she was when writing the book in 2001. Even though twenty years later, we are in a much worse state now, she is hopeful because there is a big awareness about climate change and many young people work hard on this issue. Whereas when she was writing it, many people were not paying any attention at all ("Book Club with Margaret Atwood", 2021).

When the pandemic starts in the novel, it is at first taken as a minor epidemic or

bioterrorism. It starts in Brazil, and it is seen as "far enough away", so the notion that it will not come to us persists, and people are not alarmed (Atwood, 2004: 324). The same approach persists in **The Stone Gods**; people in England cannot believe that they are bombarded with nuclear weapons. They expect these sorts of wars in less developed countries situated far away from them. When the pandemic spreads everywhere, it is taken seriously. Isolation tents are built, ambulances become insufficient, and the virus is given a name "JUVE" (Jetspeed Ultra Virus Extraordinary) so that it can be seen as manageable (341). Supermarkets are raided, and religious crowds pack the places of worship to pray and repent, but then these places are closed down because they increase the risk of exposure (340). There comes an exodus to small towns and rural areas. "Pundits in suits" appear on the screens, medical experts comment on graphs about infection rates, and maps trace the extent of the epidemic (341). There is a dispute over the vaccine, and people are discussing whether it is a "species-jumping mutation or a deliberate fabrication" (341). Handshaking is discouraged, and people are advised not to travel, "[i]n the same week there [is] a run on latex gloves and nose-cone filters" (341). To conclude, Atwood anticipates a pandemic and delivers it in great detail, which becomes our reality in less than two decades after the publication of the novel.

Other than foreseeing the pandemic, she points to the dualistic and mechanistic worldview and discourse that lead to the ecological crisis. She both gives warnings about what is about to happen and also shows how the oppression systematically works throughout the book. As for the importance of literature and language for Jimmy, as mentioned in the first part of this chapter, the social sciences and rational science are separated from one another, and the latter is held superior to the former in the novel. Those who are not selected for rational sciences are seen as inferior and redundant. Even though he is a child of two scientists, Jimmy cannot escape being a words person. This fact both separates him from his friend Crake and also from the world he lives in, and he feels resentment for it. Like in Ray Bradbury's dystopian novel **Fahrenheit 451** (1953), in **Oryx and Crake,** the books are burned. Here they are not completely destroyed; the institutions with money like Watson-Crick burn the actual books and keep things on CD-ROM (195). For a summer job at Martha Graham library, Jimmy becomes responsible for going through old books and choosing the ones for "destruction while deciding which should remain on earth in digital form, but he [loses] this post halfway through its term because he [can't] bear to throw anything out" (238). This destruction and burning are indicators to show the value given to art and literature in society. It is no wonder that Jimmy feels resentment as "the system [files] him among the rejects" (196). However, literature and the wide range of vocabulary he has becomes a source of coping mechanism that keeps him

alive and sane.

Words have power and hold the potential to manipulate people, the marketing of "AnooYoo" products for which Jimmy worked as a promotional are examples of that. His first job after school is at "AnooYoo". The interviewers are impressed by "his senior dissertation on self-help" ironically enough, he later comes to a point where he is in need of self-help (245). His job is to promote the core products, "the improvement items – not books any more, of course, but the DVDs, the CD-ROMs, the Web sites, and so forth" (245). The criticism here is that this order does not offer much chance for books. No one quite enjoys reading anymore, they are rather focused on end products, **"**the equipment and the alternative medicines" in order to "get the optimum effect" (245). After the pandemic, when irritated by the blinding sunrise, he tells himself, "'[p]ut it behind you. Move forward. Make a new you.' Such positive slogans. Such bland inspirational promotions vomit" (260). While shallow and false promises of promotions get him nowhere, he finds comfort in literary works. When he wants to have a new beginning after the pandemic, he begins doing so by changing his name. He decides that he does not want to be Jimmy anymore and therefore calls himself Snowman. When he believes that he is the only human survivor, he holds on to the bits of literature and words for a long time, and when they start to erase in his memory, he feels horror.

Literature provides him with examples of different people from different time periods but with similar experiences. For instance, when he feels completely alone, he utters, "now I'm alone". Then, he quotes the lines from "The Rime of the Ancient Mariner" by Samuel Taylor Coleridge, "All, all alone. Alone on a wide, wide sea" (Coleridge 10). The British Romantic poem tells the story of a cursed sailor who kills an albatross by shooting it with his cross-bow (Coleridge 82). The sailing crew is disrupted by a strong storm (41), and the ship's course is changed to southward (50). After the extreme cold, mist and snow (51), through the fog, an albatross comes along one day (63-4). It comes to them "every day for food or play" (73), and it functions as a spiritual guide for them. However, soon after, the Mariner kills it for no reason (82). The sailors are furious with the Mariner as they think the albatross was a good omen. Nonetheless, after the death of the albatross, when the breeze continues and the fog dissolves, they believe it was the right thing to kill such birds "that bring the fog and mist" (101-2). Soon after, however, they realise that they were wrong to think so as they arrive at a point where they get stuck on the sea "As idle as a painted ship / Upon a painted ocean" (117-8). Gradually, they are all punished. As a punishment for his crime, the Mariner witnesses the death of his crew one by one (219). Two hundred men drop dead and curse him with their eyes at the last moment of their lives, but the mariner continues to live on. His punishment becomes even worse than

death because he has to endure the suffering of men dropping dead in front of him. Unable to die, he becomes a witness to their death for seven days and nights (261) and each time a man dies, he has to watch "the curse in a dead man's eye" one more time (260). The curse on him urges him to tell his tale wherever he goes. While at first, he is someone who sees sea creatures as "slimy things… upon the slimy sea" (125-6), after he starts to appreciate the beauty of water snakes (273), his curse is lifted (288). As the following lines show, "He prayeth best, who loveth best / All things both great and small; / For the dear God who loveth us / He made and loveth all" (614-7), the narrator eventually learns to appreciate all beings great or small.

The example of the Mariner bears an eerily resemblance to Jimmy. Like him, the narrator of this novel also repents his actions. He contributes to the spread of the disease by promoting the BlyssPluss pills with his writing and blames himself for not being able to see the real motives behind the Paradice Project of Crake. He is not able to see all the beauty around him. His notions and emotions are only saved for a few. He is also very alone and painfully witnesses the death of others, especially the death of Oryx and Crake. Like the Mariner, while he moves around the compounds, he comes across dead bodies along the way who died because of the pandemic. Although Jimmy is not sailing, he is in a place from which he cannot escape. The poet persona finds himself in a very hot place when the breeze stops "All in a hot and copper sky / The bloody Sun, at noon / Right up above the mast did stand / No bigger than the Moon / Thus he moves onward to find the next person who must hear his story" (111- 5). Similarly, in the post-apocalyptic setting, the weather is unbearably hot, and Jimmy feels obliged to tell his tale even though he speculates whether anyone is left to read it. Even if no one reads it, he continues to tell his tale because it is the only way he can survive. Although he stops writing about what happened in the novel, his message is conveyed to the readers, to us. After all, the lines he says out loud prove to him that others have gone through a similar experience if not exactly the same. He refers to the lines in the poem as "one more scrap from the burning scrapbook in his head" (Atwood, 2004: 10). This notion, the knowledge of others who have gone through similar events, creates a sort of endurance in him.

Another example of a literary work which functions as a "doorway of sorts" for Jimmy is Shakespeare's **Macbeth**. While watching "an assisted-suicide site", which Crake finds hilarious and Jimmy not, he encounters Shakespeare for the first time with the following lines: "Tomorrow, and tomorrow, and tomorrow /Creeps in this petty pace from day to day, / To the last syllable of recorded time; / And all our yesterdays have lighted fools / The way to dusty death" (qtd. in Atwood, 2004: 84). It is important to note that Shakespeare "lived his entire life in the shadow of bubonic plague", which is the first pandemic in history (Greenblatt, "What

Shakespeare Actually Wrote About the Plague"). Shakespeare did not need to imagine a pandemic as he was a living witness to one. Consequently, he easily conveys the chaotic notions of his character Macbeth. When he calls out the lines above, Macbeth is, in a way, judging what he has done so far. He is a character who betrays his friend Banquo just like Jimmy betrays Crake. One night in the woods, Jimmy questions himself to see whether he should continue to live on "[w]hy hoard the stuff? Why wait? What's his life worth anyway, and who cares?" and right after these sentences, he recites the line "[o]ut, out, brief candle" (Atwood, 2004: 107). By saving the Crakers, he thinks that he "served his evolutionary purpose" (107), yet he continues to live, like Macbeth. Like him, Jimmy uses soliloquies, and as he is alone, his speeches are not intended to be heard by anyone around him. They simply reflect his psyche. The guilt they feel causes both fictional characters to suffer. It arguably drives Macbeth to madness, and he sees the hallucinations of apparitions. Likewise, Jimmy sees the hallucinations of Oryx and Alex the bird. Once again, a fictional character helps him to express his agony, and he finds refuge from the dark corners of his memory and consciousness

Besides literary works, he tries to hold on to the power of the words and mantras. Mantra is "a sacred utterance (syllable, word, or verse) that is considered to possess mystical or spiritual efficacy" in Hinduism and Buddist tradition (Britannica, "Mantra"). "The syllable *man* comes from the Sanskrit word *Manana* (thinking)" (Hosak, 2006: 42). When Jimmy is troubled by his flashbacks, which he has no power to stop, he realises that "what he needs is more inner discipline, or a mystic syllable he could repeat over and over to tune himself out … Mantras" (Atwood, 2004:68). He inculcates himself by saying "[h]ang on to the words… The odd words, the old words, the rare ones. Valance. Norn. Serendipity. Pibroch. Lubricious. When they're gone out of his head, these words, they'll be gone, everywhere, forever. As if they had never been" (85). On a spiritual and metaphorical level, words form a temple for him in which he can take refuge and be in peace. As much as he yearns for someone, he yearns for something to read, "to read, to view, to hear, to study, to compile" (148). One of the reasons behind the comforting power of words for him is that they remind him of a time where humans were "ingenious" (99). In a post-apocalyptic setting, he has nostalgia for a time when "the namers of oil paints and high-class women's underwear" found names for colours such as "Rose-Petal Pink, Crimson Lake, Sheer Mist, Burnt Umber, Ripe Plum, Indigo, Ultramarine" (99). These names which are "fantasies in themselves" make him remember that "Homo sapiens sapiens was once so ingenious with language, and not only with language. Ingenious in every direction at once" (99). He lives in an almost post-human world, and he cannot integrate into it. His nostalgic tendency towards the past can be taken as a humanist approach. He has desire and

nostalgia for a time before the catastrophe, and he longs for a place where he belongs. He has a romanticised version of a past he actually has never experienced. It is also significant to note that he finds delight in possessing collections of "letters that other people had forgotten about" (261). Thus, he is not only yearning for a past before the pandemic but before the eco-catastrophe, at least to a time when people have not started to experience the consequences of their actions on earth. It is a time his generation heard from their parents when everyone was living in pleeblands and could drive or fly anywhere in the world and hamburgers were real beef (63). Thus, Jimmy is still unable to see that in order to achieve and build this kind of comfortable life, other voices are silenced and eliminated. It comes only at the expense of sacrificing others, be it people or nature.

In his article "The seductive power of lists", Robert McCrum states that there is a tradition of list-making in Anglo-American fiction (2011). He starts his examples with Daniel Defoe's **Robinson Crusoe**, who makes lists after the shipwreck. McCrum adds that some contemporary writers still follow this approach. Atwood's Jimmy is also quite a good example of that; apart from his never-ending word lists, he thinks of himself as "a castaway of sorts" (Atwood, 2004: 41). He thinks he can make lists and this way he can "give his life some structure" (41). On the worst nights, he goes over "his lists of obsolete words for the comfort that was in them … Dibble. Aphasia. Breast plough. Enigma. Gat" (261). As the word aphasia here also points out, Jimmy is afraid of losing his vocabulary and, consequently, the power of the words he clings onto. When his physical condition worsens and his loneliness intensifies, he thinks that all in his life is temporary, and even language has lost its solidity, "it [has] become thin, contingent, slippery, a viscid film on which he [is] sliding around like an eyeball on a plate" **(**260). There comes a time when a word appears to him out of nowhere, and while he can see and hear it, he cannot reach it (42). When this happens frequently, and he cannot attach anything to the word he tries to relate it to the heat. He gives solace to himself, saying that when it rains, he will be fine because he is afraid of "this dissolution of meaning, the entries on his cherished wordlists drifting off into space" (42).

The anxiety of meaning loss is quite heavy on Jimmy because if he cannot find the necessary words to express his stress and fears, it means that not only his words but also he is dying. It means that he is dying on a metaphorical level as well as literally and physically dying. Literature and words are like a compass for him; without them, he would completely be lost. In this setting, only words accompany him and keep his mind busy and, in this way, prevent him from going mad. Even though there are Crakers, he cannot form a relationship with them. He is constantly in search of human beings. When he is overwhelmed by the weather and pities

himself, he feels like “an object of general derision”, he is still thinking that if there were anybody left to tell legends, he would be legendary (307). Storytelling and being heard and understood by others constitute vital importance for him even in the end. Towards the end of the novel, he is finally about to meet the three other people who are still alive. He is both excited and afraid of them as he does not know who they are. He tries to think of something to trade with them and cannot come up with anything. On the last page of the novel, he decides that they have “nothing except themselves”, “they could listen to him, they could hear his tale, he could hear theirs” (374). This encounter with the others could be his end, but he continues to hold on to tales and turn to people for help.

As the examples above show, in a post-apocalyptic setting in which Jimmy struggles to fit in, he is able to survive with the help of literature and words he has obtained over the years. As he has nothing to read, he repeats the ones he already knows, and while doing so, he is writing his own story. Finding parallelism with the fictional character he has encountered over the years, he finds strength. However, it is disappointing to see that all the characters are white male figures, so he maintains to look at the world through a Eurocentric lens. Since he is still feeding on these narratives, there is still no room for a multiplicity of voices. He sides with the male tradition and history. In this sense, however, by being a bad role model, Jimmy provides us with a good example of how not to be. Living in a world very similar to that of **Oryx and Crake,** where science is supposedly on a mission to save the planet and social sciences are cast aside and rendered useless to a certain extent, we as the readers can explore ways of understanding and connect with others through literature. Only by doing so and having a multiplicity of voices and heterogeneity can we hope for a future.

CHAPTER THREE
THE STONE GODS

3.1 An Overview of the Novel

Jeanette Winterson's **The Stone Gods** (2007) revolves around very similar topics yet pushes them to even greater depths. The novel consists of four parts respectively; Planet Blue, Easter Island, Post-3 War and Wreck City. It takes place in three different time periods and on two different planets, which are inter-connected to one another. This kind of continuation and connection in the form coincides with the novel's message, which is the interconnectedness of all beings, times and ideas. The two main characters, Billie and Spike, are reincarnated in different genders. Spike's iterations are even more intense since, apart from being a human in the third part, she is a robot. As a robot, she looks fully human in the first part, and in the last two parts, she is physically reduced to a head, as a highly intelligent and evolving being. Just like **Oryx and Crake**, the text not only portrays a dystopian society but also reveals a transition from the Holocene to the Anthropocene. It deals with environmental issues and technological progress and criticizes the same reductionist, divisive and anthropocentric mentality encapsulated in the forms of capitalistic societies that bring war and destruction to the planet. It targets the humanist and dualist thinking patterns and binary oppositions, which lead to ontological divisions, such as nature/culture, human/non-human, and man/woman. Winterson's choice to divide her narration into four parts challenges the linear and progressive pattern of technoscience and so-called human civilisation. By using these divisions, she goes beyond the dualities by connecting the stories to one another and embracing the other while touching upon many different topics.On the other hand, by breaking the linear pattern, Winterson creates an estrangement and rebels against the restrictive patterns of narration with a posthumanist approach. So by not following a linear pattern, the novel rather draws a circle like the movements of the planets themselves. There is no definite end; hence the narrative is in a circular shape. While pointing to the repetitive destructive tendencies of humans, she also embraces the positive similarities between them, such as love and awareness and appreciation of the other as the most significant ones. In this way, she goes beyond the limitations of divisions. Furthermore, while narrating a dystopian novel and an end-time, she also writes a love story. Based on the Anthropocene, environmental crisis and historical events, she questions the possibility of change and hope. Similar to Atwood, Winterson has witty language and a sarcastic tone. At times, it helps to reveal the tension in the face of a demolishing world.

The novel starts on “Orbus”, a planet which is very similar to the Earth. As a result of climate change, Orbus has only fifty years left to support human life. Hence, there is a search for an alternative planet, which happens to be Planet Blue. However, this planet is inhabited by dinosaurs. Accordingly, scientists are after a solution to wipe them out to make Planet Blue habitable for *certain* human beings. A spaceship is sent to the planet with Billie and Spike in it. In this chapter, Billie is a female scientist, and Spike is a female robot. They fall in love with one another; however, both face death on the newfound planet. Due to a calculation mistake, a mini ice age is triggered, which leads to the destruction of all life on the planet and makes it uninhabitable for humans for 65 million years to come. In the next chapter, Billy is a white European sailor who sails to Easter Island, and Skippers is the son of a Dutch sailor and a native woman from the island. Both are incarnated as male; they fall in love and form another homosexual relationship. The chapter takes place in the 1770s and witnesses an ecocide. In order to build the stone god statues, people cut down once abundant trees one by one and the last remaining palm tree is uprooted.

The community is not only split into two and in conflict, but they also have a food shortage. There are supporters of The Bird Man and The White Man, known as Ariki Mau. At the end of this chapter, a competition takes place, and Skippers dies. Skippers’ love is a landing space for Billy, and the death of his lover signals the destruction of his new-found-land, his landing space. The third chapter takes place on Planet Blue 65 million years later, and it turns out that this planet is actually the Earth. Even though human beings are given a second chance with a new planet, it appears that they continue to face the same problems because of their destructive and selfish motives. After two world wars, a third one takes place. In this world, there are no governments but a big company, MORE, is in control. The war becomes an opportunity for MORE. This time Billie is again female and one of the programmers of Spike, the robo *Sapiens*. Billie is abandoned by his parents as a baby and longs for a landing space, longing for her mom. As for Spike, she is designed to be a talking head, a clever and objective machine for making planetary scale decisions; however, she goes beyond that and turns into a non-conformist, questioning being. As shown in the last part of the novel, after the war, many people live under the auspices of MORE. Those who do not submit to this order choose to live in a territory called No Zone, known as Wreck City. In many ways, it resembles the pre-war world, mostly those who could not live a comfortable life before the war choose to live there. There is a Playa in the zone, and where it ends, the Dark Forest, known as the Unknown, starts. It represents the other side of the coin, where a large number of mutants, including people and animals, who were affected by the nuclear weapons and radiation, are left to live and fed by

helicopters. The residents of MORE have no idea about them. The novel ends with the start of another war and the death of Billie.

As Billie points out in the novel, wars trivialise individual problems (Winterson, 2008: 206). However, when individual problems are overlooked, they lead to bigger problems on a larger scale. The novel is also self-referential. In the last part, a copy of the book is put on the Tube on purpose so that others can read it. It is a world where papers are rare and books are a pre-war thing. The literacy level is even worse in Orbus than in Planet Blue since people do not read or write anymore because "there is no need" (9). As Winterson repeats more than once, it is a message in a bottle asking to be found. Billie finds the book on the Tube, but later, when she wants to give it to Spike to read, she reveals that she was the one who put it there on purpose. Just like Billie, her protagonist and narrator, Winterson puts her message in a bottle in the form of a book and hopes that it will be passed on to others. There is a continuous search for a landing space in the novel in all parts. Besides, Spike questions where they are going; it is both a literal and metaphorical question addressed to Billie and the reader. Even though repetitive destructive patterns may seem disheartening, Winterson questions the fragile possibility of change and avoidance of an ultimate destruction of the planet. To explore such a possibility, her representation of nature, posthuman beings, in the form of Robo *sapiens*, and animals carry vital importance. In her narrative, an end of the world is not the only signifier to show that all beings are essentially the same (which becomes apparent in the face of climate change that means extinction for all beings), but her depiction of non-humans also blurs the supposed divisions between humans and androids, animals and humans.

Throughout the novel, there are many examples of encounters with humans and non-humans and references to literary texts. Wars, ecological destruction, usurping nature and others, technological advancements and estrangements from the self and the others are common themes and discussions in the novel. There is also a constant search for a landing space, be it a place or a person. While the novel can be taken as a cautionary tale, it does not imagine a new world; rather, it tells what has already happened and builds on that. Ecological destruction and the Anthropocene have already happened, there is no way to turn back. However, the text is neither a lament nor concentrated on the worst that can happen. Instead, it underscores the transformative power of literature, the present time and of recognition and inclusion of others. In the first section, I focus on how the author depicts the damaging Western mentality in three different time periods and what kind of destruction it brings with it. I elaborate on the use of language, the depiction of ecological destruction, social structures and dominions, space colonisation and wars. I will also point out how they are relatable to our present time and

discussions. In the following section, I will try to show how this man-made order is created, and while doing it and portraying themselves as right and superior, who and what they are otherising and also classifying as inferior by associating the others with one another. And based on this, I will try to show how the author tears down these oppositions and how she depicts different beings and handles the relationships between them. I will also point to the transforming and healing power of these relationships. At times, I will have a comparative approach with the first novel. Finally, I will show the effects of language and culture in producing this kind of world and how they can be manipulated in the wrong hands. I will also reveal that, consciously or unconsciously, authors contribute to this sort of oppressing and otherising structure. Last but not least, I will indicate that words and books at the same time hold power to save lives.

3.2 Capitalism, Space Colonisation, Ecological Destruction and Wars

As in Winterson's other novels, the tone and the language is quite important in this novel. The novel starts with the sentence "[t]his new world weighs a yatto-gram" (Winterson, 2008: 3). So it almost starts with a scientific sentence. I use the word "almost" since there is no such thing as "yatto-gram". Instead, there is "yottagram". Yotta, being the largest decimal unit prefix in the metric system, comes from the Latin word "octo", which means eight (Collins, "Octo") because yatto is equal to 1000^8 (Williams, Nasa). Winterson might be making a pun by using the Japanese word "yatto" (やっと), which translates to English as "at last, barely, finally, after great pains" (Tangorin, "yatto"). After ecological destruction, people *finally* find a new planet (Planet Blue) to destroy, and it is *barely*-gram. It weighs nothing. Within the larger context of the novel, it makes great sense. In a way, it foreshadows what will take place; that is, if opportunities are not wisely taken, finding new spaces, and new planets has no meaning. A mass extinction cannot be prevented, and the same discourses and destructions are bound to happen again and again. The definition of the new planet is striking since there are tiny things such as "birds that nest in cockleshells" and also enormous beings like "leaves that have grown as big as cities" (Winterson, 2008: 3). While it sounds almost fantastic, it also shows that this planet, yet untouched by a destructive species known as humans, embraces differences within its scope. The last sentence of this description summarises the core of Planet Blue, "[m]oss that is concentrating on being green" there is stillness and consciousness within this space. It is not spoiled, it is not distracted, and it is as it should be since it has not been touched by humans yet.

Winterson juxtaposes Orbus with the image of Planet Blue. As opposed to this newfound planet full of possibilities, there is Orbus, a dying planet. Orbus means "destitute of parents or children" in Latin (Jackson, 1828: 306). Like Winterson herself, the planet is also an orphan which has been overlooked and neglected; hence, it is in great pain. The same connotations are later reflected in the third section Post-3 War on Billie Crusoe, as a baby in her mother's womb, she is "curled up like a universe waiting to happen" (Winterson, 2008: 119). Orbus is very similar to the Earth as it suffers from anthropocentric climate change, high technology (in the wrong hands) and capitalist societies. Just like the Earth, Orbus has a limited lifespan due to human destruction on the planet. Greg Garrard states that "at the root of pastoral is the idea of nature as a stable, enduring counterpoint to the disruptive energy and change of human societies" (2004: 56). This is the situation Orbus is in. Even though its days are numbered, human beings are busy living a seemingly perfect life. While discussing the ethics of living in ecologically damaged environments, Marti Kheel states that humans developed "a culture in which death is seen as a medical failure, rather than as a natural part of life" and "the crisis scenario is designed to lead us to believe that only one life can be saved, and only at the other's expense" (1993: 260). Similarly, in the novel, people no longer age since they are genetically fixed and live in a time where "age is information failure" (Winterson, 2008: 9-10). Those living under the rule of Central Power are offered superficial enhancements and distractions so that they will not be aware of the dire situation on the planet. In Orbus, the world is divided between three powers; Western communities are ruled under Central Power, Eastern ones are under Eastern Caliphate (referred to as "backward sky-god worshippers"), while others ("stupid little slant-eyed clones") are governed under SinoMosco Pac (37). Governments do not hide their connections with large corporations, the Central Power is a "corporate country", and MORE is taking over it (71). Capitalist motives and desire for more are emphasised in the company name "MORE" in Central Power. MORE-Futures will be governed by "a Board of Directors" (73). The company owns basically everything in the state. The name MORE in capital letters encapsulates the greedy nature of mankind for not being content with what they have but constantly and restlessly seeking more. This restlessness comes from a void within but instead of looking inside, they are inclined to look outside. Consequently, there is no remedy, no cure but always a search, a yearning for more for their insatiable hunger. In the name of progress and economic growth, Western societies destabilise the planet and lead to global warming, increased emissions, rising sea levels, and forest depletion (37). Afterwards, they try to amend this by synthesizing food, ending centuries of harmful farming practices and no longer using oil or petroleum derivatives (38). As Billie says, "[b]io-tech has created as many problems

as it has fixed" (47). However, when people in other parts of Orbus want the same so-called progress and economic resource, they are called "out-of-control lunatics in the rest of the world," and what they do becomes "selfish" and suicidal (38). In a limited universe, there can be no infinite progress or infinite growth unless others are exploited (Mies and Vandana, 1993: 52), and while a comfortable lifestyle is gained at the expense of irreversible destruction in Central Power, the blame is put on the others to justify oneself.

Machine engineering, artificial intelligence, space explorations and security systems are a big part of this new system. As life is about to come to an end in fifty years, MORE imagines colonizing Planet Blue for only the rich (Winterson, 2008: 73) and leaving Orbus to Eastern Caliphate and SinoMosco Pac (7). MORE-Life promotes trips to Planet Blue and sponsors a promotional trip for celebrities (41). The idea of finding alternatives planets to inhabit and arranging trips to different planets is very similar to Elon Musk's SpaceX project; on the website of the project, he writes:

> You want to wake up in the morning and think the future is going to be great - and that's what being a spacefaring civilization is all about. It's about believing in the future and thinking that the future will be better than the past. And I can't think of anything more exciting than going out there and being among the stars. ("SpaceX Missions: Mars")

The billionaire Musk has a very similar discourse to that of the scientists and politicians in Central Power. They advertise the planet as "[y]ou dreamed all your life there was somewhere to land, a place to lie down and sleep, with the sound of water nearby. You set off to find it, buying old maps and listening to travellers' tales, because you believed that the treasure was really there" (Winterson, 2008: 30). Musk is focused on accomplishing colonising possibly inhabitable planets. Similar to the novel, Musk also made a three-day trip "in orbit around Earth before re-entering the atmosphere and splashing down in the Atlantic Ocean" in September 2021 (Chow, "SpaceX Makes History: First Civilian Spaceflight"). Winterson foresees the future of space colonisation in the same way that Atwood's idea of using genetically modified pigoons for organ transplant became real in March 2022, when a 57- year old patient received a "genetically modified pig heart in groundbreaking transplant" (Hassan and Dillinger, "Modified Pig Heart"). Even though the patient died, other attempts will take place soon. Long before that, Atwood brings the ethical aspects of it to her text. The two examples show how authors are able to imagine and reflect on future events and discussions in their novels very early on.

In the novel, MORE is building "a space-liner called the Mayflower", which will take wealthy people to Planet Blue, "where a high-tech, low-impact village will be built for them"

(Winterson, 2008: 73). Mayflower is a familiar name from American colonial history as it was the name of the English ship that transported the first English Puritans, from England to Massachusetts, "where they established the first permanent New England colony in 1620" (Britannica, "Mayflower"). So, with the name Mayflower, Winterson underscores that expansion to new-found-lands never seems to end. Furthermore, MORE recruits farmers "from the Caliphate to make a return to sustainable mixed farming to feed the new village" (Winterson 2008:73). It is very ironic since, on Orbus, real food and farming practices are propagated as dirty and destructive to the environment. While MORE blinds people with entertainment industries, the ecological reality of the situation reveals itself in the streets, where even neon lights are not enough to cover the death of ecosystems. There is a red storm in Orbus, and even though "no one has any idea where the red dust is coming from", everyone is obliged to have oxygen masks (30). The dust storm "clogs the air-filtering systems", which are supposed to clean already polluted air (30). Although everyone has a "good-looking look", which has become normal with the technology, they have to wear "pollution filters" (44). However, they are more concerned about how they look than the tragic situation of Orbus. During Covid-19, some countries have given out masks to their citizens and just like that in the novel, "the State gives out masks on demand, but the smart people have their own designer" (44). Again like on planet Earth, more privileged people can access designer masks.

Pink McMurphy, the winner of the promotional trip to Planet Blue, becomes the voice of the average citizen that MORE likes to have more. When she goes to Planet Blue, she says she cannot see the attraction as a "city-born, city-bred". Nature does not matter to her. She and many others like her "just do not want to live like this any more [sic]" (86). Garrard proposes that simulacrum may feed "a desire for the hyperreal as a satisfactory substitute for the real" (2004:170). Pink and her notions about the new and the old planet are a great example of that. She thinks that nobody she knows will be interested in a place like this where they will not be able to sit in a bar "overlooking an artificial lake — one where the fountain comes on every hour, and where the trees are all pollen-free, and where you can get a great steak and go dancing at midnight" (86). When Spike opposes her saying that Orbus is dying, Pink shows her belief in the system and science and states that "[t]he techies will fix it — they always do" (86). She is hopeful and thinks they are doing great, she also adds that "this morbid doomsday stuff is just to keep people in their place — not wanting too much" (86). Greg Garrard discusses that media outlets which use apocalyptic discourse and exaggerates normal climatic events as ecological catastrophes to make them more appealing to the target audience (2004: 107). Because of failed prophecies of this kind, when a real crisis occurs, it turns out to be

unconvincing for people because they are fed up with them. So, apocalyptic discourse comes with a risk, and it should be used wisely. Pink's sentences and perspective are examples of this, and they underline the importance of representation in these kinds of texts, be it fictional or nonfiction.

Not everyone complies with the norm of this society like Pink, and those who try to protest against MORE are referred to as "Unknowns" or as "X-Cits". Like in **Oryx and Crake**, rebelling against the system is punished. Here instead of "brainfrizz", people face "Identity Closure", which means that "you no longer exist" (Winterson, 2008: 30). Becoming an X-cit or ex-citizen means that "[t]here will be no record of you ever having existed", you cannot travel, buy or register for anything. You cannot use what your name was, and if you ever get out of jail, you are "micro-tagged for life as an Unknown" (31). Another similarity to Atwood's text is the highly restrictive and oppressive security force. Parallel to CorpSeCorps, in this novel, there is a unit called "Security and Support, officially known as Enforcement Services and Enhancement Services, but the SS has a better ring to it than the EE" (11). The abbreviation SS is an allusion to "political soldiers" of the Nazi Party, to "Schutzstaffel", meaning "Protective Echelon" in German (Britannica, "SS"). Those working for EE "explain to people that they really do want to live their lives in a way that is good for them and good for the Community. Enforcement steps in when it doesn't quite work out" (Winterson, 2008: 11). Although they cover it nicely, they basically force people to live in a certain kind of way, which is a common feature for dystopia.

Like in Atwood, in Winterson's text, the language used by officials is carefully chosen to make anything undesired look milder. Although Orbus is dying, using the word "dying" is undesirable even in other contexts (8). Instead of dying, they choose to say "evolving in a way that is hostile to human life" (8). Furthermore, when dinosaurs will be wiped out from the new plane for human occupation, MORE president says that they will be "humanely destroyed" as if they are not going to be killed (6). The language is mild so that it will not appear as gruesome as it is in reality. It is turned into a distant image rather than a mass murder. Likewise, he says the Eastern Caliphate will not be allowed near the planet, and they will shoot them. Then he corrects himself, "[n]o, we won't shoot them down, because the President of the Central Power has just announced a new world programme of No War. We will not shoot down the Eastern Caliphate, we will robustly repel them" (7). To quote Billie, "Isn't language wonderful?", corporations use language to manipulate people and mitigate their actions. Words are deliberately deprived of meaning. This is a synthetical world where people make donations for wild animals which do not any longer exist (29). They do it without knowing where the money

goes because charity shows they "care" (29). Being depressed is "pretty much illegal" in this state (27). If you show any sign of depression, you are supposed to see your doctor or be referred to somebody from Enhancement. Detachment from nature ends up with unhappiness. Regardless of technological advancements and "Genetic Reversal" (22), people are "fucked up and miserable" (59). Something that has been long desired (being young and not getting aged) finally becomes true, but it does not necessarily make people happy. On the contrary, it makes them miserable because it is against the laws of nature. If there is no death, there is no space for growth and change. Then, there is no potential for life to change for the better. What seems like technological progress turns out to be a regression in reality. People do not become happy just because they can continue to be young or turn themselves younger; on the contrary, they become sad. They become detached from their own selves, their reflection does not reflect them anymore. What Dorian Gray or the Evil Queen in "The Snow White" desire, an immortal beauty does not necessarily make anyone happy. The lack of communication or detachment from nature does not only affect the relationship between partners and communities, but it also holds a potential danger to alienation or estrangement from oneself. In order words, "the habits of dualistic thought that separate human society from nature" results in destructive and "perceptual distancing and isolation of different peoples from each other" (Lahar, 1993: 96).

The same restrictive and damaging mentality prevails in Planet Blue in the last two parts of the novel, which takes place 65 million years later. It turns out that this planet happens to be the Earth, and it is recovering from a third world war. Like in Orbus, humanity is on the verge of ecological collapse once again. Handsome, the captain of the spaceship going to Planet Blue in the first section of the novel, talks about a white planet and suggests that there was another planet like Orbus where life existed (Winterson, 2008: 67). So, in the novel people are given multiple chances in different time periods, million years away from each other, but they still repeat the same mistakes and face ecological collapse even though their ways to do that differ from one another. It points to the fact that as long as the mentality does not change, the course of history stays the same. This part seemingly begins on a more personal level with the life story of Billie Crusoe, a female scientist and one of the programmers of Spike. It starts on the Tube, where she finds a copy of The Stone Gods (143).

Like in Orbus, people do not really read, and Billie mentions that there are mostly "old instruction manuals translated into English from the Japanese" (143). This reference makes yottagram pun more apparent. Billie's narrative has traces of bildungsroman as she tells her life story and how she ends up where she is at that moment. Her surname is an obvious reference to Robinson Crusoe, and she refers to birth as a shipwreck (146). As I stated before, there is a

complaint regarding the wars making personal problems look trivial, and Billie voices this concern. While she will be telling a short story about the world, she does this alongside her own story and it strengthens the idea that personal is political. Besides, the way she refers to herself in her mother's womb as a baby "curled up like a universe waiting to happen" underlines the bridge between personal lives (on a very tiny scale) and planets (144). When her father wants to start a "new" life with her mother only if she gives the baby away, Billie protests this, saying, "[b]ut I was a new life" (146). Every new life comes with the potential to start again, it is a tabula rasa. However, as Billie's biological parents do not act responsibly while having sexual intercourse and think about its outcomes, on a larger scale, people have this kind of an approach to nature and non-humans as well. Blinded to the opportunities and new beginnings at their disposal, they look for other places to begin again. "Do not cut the cord" Billie says; this cord symbolises the nourishment and the bond with the mother (146). The cut becomes the very first scar which people have, and it has the potential of never recovering. Similarly, the cord between human beings and the non-human world is cut by the anthropocentric and logocentric world order. For each being to exist, subatomic particles need to become atoms, stars and galaxies, so it takes millions of years of evolution and interactions. But then, logocentric and anthropocentric structures disrupt their unity and interconnection. The existence of each thing consists of "contact zones" or "entanglements", as Donna Haraway calls it when she refers to the inseparability of human and nonhuman worlds (2008: 4).

In order to realise and understand how the anthropocentric and capitalist systems work hand in hand, a closer look is required. MORE is portrayed "as the world's most aggressive free-marketeers, regulation-wreckers, carbon-kings" before the third world war:

> Their expensive lawyers fought anti-pollution agreements, tariffs, subsidies, anything that looked like a brake on consumer spending. MORE stood for unlimited air travel, six cars per family, six hundred TV channels, no censorship, no trade unions, no government interference in trade. Pre-War, the 'MORE IS MORE' bumper stickers sold the high-living lifestyle to the world. And we bought it. (160-1)

As someone born in the third quarter of the twentieth century, Billie describes the world as "hardly imaginable", "a world of modest personal aspirations and very little materialism" (162). With the end of WWII, Billie describes the 1950s as a time of optimism with the beginning of the Welfare State (163). She mentions how people wanted very little and although "it reads like another life — too far away to imagine", in reality, in terms of years, how near it is (163). Winterson shows how materialism became the dominant value in the 1980s and how it paved the way for World War Three in the novel, "[i]f you couldn't buy it, spend it, trade it or develop it, it didn't exist". Billie reminds the reader how the war was justified as "another war to end all

wars" for "freedom" (156). The prime minister tries to justify the war to his people by referring to it as "a peaceful war" as it would be an air-strike war without the nuclear threat (157). This oxymoron itself reveals the absurdity of his speech.

There appears yet another miscalculation in the novel; however, this time, it is done by humans, and it turns out to be quite advantageous for MORE. While people are having discussions as to whether technology could solve all their problems, Iran launches a nuclear attack on the USA, and they get blown up (158). The war leaves its place to "The War on Terror", which brings out "the worst in everyone - fear the burka and the backpack, fear the mosque and the mezuzah, fear shoes, belts, water bottles, unscheduled stops, fear the unmarked white van. Fear the stranger" (161). The traces of 9/11 are most visible in those sentences. However, the real war is different, which is the fact that "very little left for anyone" on the planet, "[t]here [is] no Us and Them: there [are] the Living and the Dead" (161). The government is finished and taken by MORE, with their new slogan "No MORE War" (162). As the examples above show, Capitalism as a catalyst for MORE results in aggressive and controlling measurements, which are subtly advertised as comfortable lifestyles. "In Post-3 War economics, Capitalism has gone back to its roots in paternalism, and forward into its destiny — complete control of everything and everyone, and with our consent" (167). This becomes "the new world", "Tech City" (167).

Post-3 War, as people become sick of the word "money", MORE realizes that "a company's survival could no longer be about selling things, though it could be about supplying things" (164). In this way, by just changing the way people spend, they make a shift to transform late-market Capitalism, "[t]ake a Buy-me-Buy-me world and turn it into a Rent-me--Rent-me world". As consumerism looks ugly, renting becomes a brilliant alternative; people still pay but do not own, "'[g]ood for cashflow, good for conscience' as we say at MORE" (164). With this method, people are blinded to the capitalist order and assume themselves as "eco-conscious members of a new world order" by honouring the terms of their rental agreements (165). High fashion brands like Prada makes workwear instead of luxury goods in the Post-3 War. These items are "not available on the standard rental", so they sustain to be luxury brands (166). Winterson shows how brands are after profit by either greenwashing or simply by adapting to the politics of their time. The consumerist practices are disguised under the "jeton scheme" (166). As the pioneers of this scheme, MORE bases their idea on the "nineteenth-century mill-workers' 'shillings', tradable only in the factory" (166). They replace wages and cash. By signing up to a company for a minimum term of five years, people receive "rent-jets, food-jets, clothing-jets, travel-jets and leisure-jets" in return. However, like 19th-century shillings, these jetons are only usable in MORE facilities. People joke about "travel- jets" because of "fuel

restrictions, sea-level rises and the War zone, nobody, can travel outside their own borders". For the reasons listed above, wars and ecological crises bring a huge opportunity for MORE (which wants to keep their citizens or rather customers under their supervision); however, the reasons are not limited to those. There is another side of the coin. After all, the war turns out to be "wonderful for the Western economy" because they have been:

> …developing non-fossil- fuel-dependent technologies but barely using them because they're more expensive than the old-fashioned heavy hitters of oil and coal. Pollution was still cheap. How could the West mend its ways when the developing and industrializing world was going to compete at any cost? We couldn't afford to be the good guys. Now, look, Post-3 War, all countries of the world must adopt best practice [sic]. All countries must phase out fossil-fuel dependency and oil economies. We've shaved our heads, repented of the damage done to the planet and its peoples, and become a generation sick of the words "economic growth" (196-7).

In this way, the West announces itself as "the new clean green machine", knowing that the developing world will stay the way they want them to stay as "raw materials and cheap labour" (197). "Industrialization, technological progress and the affluent lifestyle of the developed nations" precipitate "the acceleration of environmental degradation", but they do not want to share it with others on Earth as well as in Orbus (Mies and Vandana, 1993: 277). So, after the third world war, the same mentality continues, but it changes its appearance. To distract people from this reality, the entertainment industry is boomed (Winterson, 2008: 157). The government comes up with the plan of building huge casinos in every city, "license them for twenty-four-hour drinking, legalize prostitution and lower the Age of Consent to fourteen" (157). To conclude, the reader witnesses a war in each section, be it on a small or large scale. This emphasises the destructive inclination of mankind and the fact that they do not easily take lessons from the past. I have mentioned the wars in the first and third parts of the novel. As if these wars are not enough, the last chapter hosts a new one, between Tech City and No Zone. However, I will refer to it later in another context. Therefore before moving on to the next section, I would mention the war and the important details regarding the state of nature and people in Easter Island in the second part of the novel.

To begin with, this part of the novel is also based on historical events. "Rapa Nui", as its indigenous people call it or Easter Islands, have been long seen as a "cautionary example of societal collapse" (Garlinghouse, "Rethinking Easter Island"). According to geographer Jared Diamond's book, **Collapse** (2005), the Indigenous people of the island destroyed their environment around 1600. In "Rethinking Easter Island's Historic "Collapse"", Tom Garlinghouse shares a recent study to show that this may not have been the case. The

researchers working on the island have been suggesting a different hypothesis stating "that the Rapanui did not succumb to a downward spiral of self-destruction but instead practiced resiliency, cooperation, and perhaps even a degree of environmental stewardship". According to a recent study, which took place in May 2021, led by Robert DiNapoli, a doctoral student in anthropology at the University of Oregon, it is correct. Their findings "drawing on new statistical methods and excavation work" suggest that when the first Europeans arrived on the island, the Rapanui was still in good condition. The researchers suggest that possibly European colonists contributed to "the island's societal collapse in the years to come" because the search shows that ahu (stone gods) construction "continued even after European contact in 1722". Consequently, "this timeline argues against the hypothesized societal collapse occurring around 1600" (Garlinghouse). The researchers claim that the downturn of the islanders actually only began "after Europeans ushered in a period characterized by disease, murder, slave raiding, and other conflicts". However, this thesis has not been accepted by all Rapa Nui specialists yet. If they are right, it is another colonial example of the destruction of cultures and ecology. As "the last local specimen died in the 1950s" (Britannica, "Easter Island"), DiNapoli thinks that the resilience of "the people has been overlooked due to the collapse narrative and deserves recognition" (Garlinghouse). The ecocide on the island may have been caused by European colonists, as another example of "ecological imperialism", or by its indigenous people (Garrard, 2004: 123). The publication of the novel dates before these discussions and research, so Winterson sticks to the well-known story that the construction of the statues led to the collapse of the culture and nature of the island. For this reason, I will not dwell on these aspects of the story so as not to disrespect indigenous people, and I will elaborate on what happened rather than who did it.

When Billy arrives on the island as a British sailor, he is surprised by the barren state because he has only heard of "abundance" from Dutch and Spanish sailors who have been on the island before the British (Winterson, 2008: 118). Puzzled by the lack of trees, he looks at the stump of the remaining palm tree and thinks to himself, "[w]hy would a man destroy the very thing he most needs" (123). The palm tree becomes the symbol of larger deforestation and destruction. The question of Billy applies to all the planets and places the novel talks about. Just like on Orbus, there is red dust on this island; the lack of rain crumbles and burns the soil, which leads to red dust (133). Thus, they cannot grow anything. Like people living in MORE who are trapped in their own countries and cannot travel outside of their borders because of ecological restrictions, the islanders cannot travel to other places because they do not have "even a piece of wood remaining with which to fashion a deep-sea canoe" (134). This little

island becomes almost a miniature to embody all the problems the novel touches upon. Spikkers informs Billy that birds, trees and water were once abundant on the island and "their departure is the anger of the gods" (134). What he and those on the island interpret as the wrath of gods is actually just reaping what you sow. There is no such divine intervention but just the outcomes of reckless behaviours and actions. A bitter war takes place between two leaders on the island, the Bird Man and the White Man (130). The Bird Man controls the island with his mob, while the White Man or the Ariki Mau is sort of a spiritual figure. An egg race, a competition, takes place in order to decide the next leader of the Bird Man cult (134). Spikkers joins this race only because he wants to restore peace with Ariki Mau. Upon seeing twenty-three people racing "for the honour of the prize" and not thinking of failure, Billy thinks that:

> This may be a wasteland but here, as in every place the world can shew, men will gamble and plot and fight and fall, all for the winning of a trophy. A woman's heart, a piece of land, a kingdom, a lordship, a contract, a ship, an egg — it hardly matters the which or the what, as soon as it is seen to be desired by one, another will make a prize of it. (137)

This passage summarises the motives for fights, competitions and war. It is a part of old narratives, passed onto new generations without question. It is not the question of what they are fighting for but rather why they are. They are fighting because they are brought up so and because they cannot move away from the realm that is governed by the collective constructs. In order to prevent or predict wars, companies are looking after machines that can be both objective in their decisions and precise in calculations. Hence, they come up with the idea of Spike. In the next section, I will focus on the positions of the "other", including machines, women, and animals and how Winterson represents them in the text.

3.3 The Representation of the Other in a *Shrinking World*

In "Frontiers of a Shrinking World", Sarah Dimick writes that there is a shrinkage of the world in the real sense, both physically and metaphorically (Dimick, 2021: 257). She refers to Bill McKibben, who argues that "in addition to geographic shrinkages caused by desertification, sea level rise, and unbearable heat", "anthropogenic climate change will shrink the scale of imagined worlds" (McKibben qtd. in Dimick, 257). While accepting the negative effects of climate change, such as intensifying "ongoing struggles of race and economic injustice" (2021: 266), Dimick also points to its positive aspects. She suggests that shrinkage "strains the ideological heritage of westward expansion" and "expansive power" (258), and climate fiction works that were written at the turn of this century have the potential to depict that. However, she reminds us that climatic imaginary is not inherently egalitarian or progressive, "climate fiction can run retrograde, envisioning shrinking rights and reiterated

oppressions" (261). Winterson takes this challenge and reflects the shrinkage of the world for humans, which has begun "under our feet and in our minds", as an opportunity to reflect a different structure that crosses boundaries and encourages fluidity and interconnection (257).

In the first part, Billie informs the reader that humans are "regressing", "[o]h, yes, it's true - we have no need for brains, so our brains are shrinking. Not all brains, just most people's brains — it's an inevitable part of progress. Meanwhile, the Robo *sapiens* is evolving" (Winterson, 2008: 17). As Billie points out, shrinkage of the world means shrinkage of brains but only for humans. It becomes an opportunity for the Robo *sapiens*, "the first artificial creature that looks and acts human, and that can evolve like a human — within limits, of course" (17). However, as I will further explain in detail, Spike goes beyond limitations. Another reference to metaphorical shrinkage of the brains can be found in the third part of the novel, where Billie refers to people as beings whose minds are "shrunk to the limits of the job" (173). In this world, it is not the Robo *sapiens* that does not evolve beyond limits but rather Homo sapiens. The fact is they live their lives no different than conventional "robots"; they have a job to do, they stick to it, and they do not question it. When they are going to work in the morning, "the smart-sign on the smart building says "Welcome to Another Day'" (174), which sounds like hyperreality. In his essay "Simulacra and Simulation", Jean Baudrillard states that "[i]t is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real" (1994). They are living in a simulation, and the majority of the population does not question it. However, Billie challenges this submission in many ways.

Winterson takes language, a tool that has been used to disguise or cover things up, as shown so far, and turns it into something revealing. First of all, she does not give the gender of Billie, and the immediate reaction is that Billie, as indicated by her name and profession, is a male. However, she turns out to be a female. Winterson plays with the idea of gender constantly by reincarnating her main characters in different genders and body forms. She constantly tries to unravel what is hidden or disguised. As opposed to the unsatisfiable desire of her contemporaries, Billie chooses to live an analogue life. She uses notebooks and pencils instead of SpeechPad and lives on a farm, to which his boss refers as a "bio-bubble thing" (Winterson, 2008: 8). Billie summarises her farm as "the last of its line —like an ancient ancestor everyone forgot. It's a bio-dome world, secret and sealed: a message in a bottle from another time" (12). The vivid description of the farm consists of a vocabulary that is out of this text. Cattle, frogs, birds, dragonflies, swans, poppies and violets are all otherworldly beings within this system (13-4). Like the novel itself, this farm is a message in a bottle. It represents something bigger

than itself. It represents a possibility, a place, a path that can be taken but not taken by many. She is a part of nature as opposed to the anthropocentric lifestyles of Orbus residents.

Conventionally, the place of man is safe and superior to other beings like animals and plants, and it is justified thanks to The Great Chain of Being (Manes, 1996: 21). Its justification comes from Christianity. James Manes suggests that "man" is a created, a fictionalized or, more accurately put, fraudulent version of the species Homo sapiens" and "has become the sole subject, speaker, and rational sovereign of the natural order in the story told by humanism since the Renaissance" (21). This humanistic approach and unnatural and superficial order, which is created by upper class white males, and accepted as normal or natural by society, becomes the major reason for detachment from nature and leads to a materialistic worldview and an inevitably ecological crisis. While farm life is discouraged and Billie is almost treated like an "alien" for living the life she chooses, it is later revealed that for life on Planet Blue, MORE plans to hire Caliphate refugees to farm the land as Orbus citizens no longer have those skills. Even though Orbus residents live in a world that clones its meat in the lab and engineers its crops underground, and propagates that natural food is dirty and diseased, growing natural plants is actually desired and needed (Winterson, 2008: 8-9). Our ancestors were survival specialists with detailed mental maps about their territory and senses tuned to the environment; they knew and memorised a great deal of information about plants and animals and had rich social lives within their tribes (Kurzgesagt, "Human Origins"). With the agricultural age, survival relied on the other, and civilisation began. Winterson depicts the ultimate point of that, where people do not only rely on others and do not know how to farm but even do not know the taste of real food.

Billie is a scientist, but she does not automatically side with the other scientists or winning parties but questions the changes in society. She does not get genetically "fixed"; she chooses to get older and campaigns against Genetic Reversal (70). She points out that "[t]here was never any debate about the ethics of Genetic Reversal — it just started to happen because MORE figured out how to do it" (71). She takes it with a grain of salt and questions the ethics of scientific progress. Winterson provides the reader with the example of a scientist with moral and ethical considerations. Billie's reaction is not limited to her ideas, but she rebels against the system and shelters the bombers of MORE-Futures. The bombers want to destroy the plant "as a way of getting attention" against Genetic Reversal, and no one gets injured (71). Similar to this Billie, in the last two parts of the novel, the other Billie also challenges the common values of her society. She feels lost "like a message in a bottle, a page here, a page there" and expresses that she has been like this her entire life because her mother "set the numbers that way, coded"

and “programmed” her (153). This approach to her existence with the awareness that, in a way, she is programmed in her DNA brings her closer to posthumans, which are coded in other ways. Besides, she says, “[l]ife has never been All or Nothing - it's All and Nothing. Forget the binaries”. She has a vital role in the text in blurring those binaries. As her last request, Spike wants to be interviewed by Billie for television (32). Before they start recording, Billie has to change her clothes, and when she feels Spike's gaze at her underwear, she is embarrassed (33). Billie thinks, “[w]hy am I embarrassed about taking off my clothes in front of a robot?”. This encounter is an allusion to Derrida and his cat. However, unlike Derrida, Billie’s notions do not exceed the presence in front of her. Instead, she tries to understand Spike rather than focusing on her thoughts and feelings and understanding why she feels embarrassed. Even though, at times, she cannot escape having humanist ideas, as this example hints and I will point out in the following pages in more detail, her encounter and interaction with Spike change her.

As for machines, although Spike can be taken as gender-neutral and denies gender definitions, she is initially designed as a female by human beings. The long-desired dream of creating life from scratch becomes finally real, and unlike the “monster” of Frankenstein, Spike has incredible beauty. Nevertheless, it does not have any effect on saving her life as the company thinks of dismantling her after they draw all her data (88). Billie thinks “[i]t's a kind of suicide, a kind of bleeding to death” (7). However, as they show no emotion “nobody feels sorry for them” because “[t]hey are only machines” (6). Emotions are out of their programming, but Spike goes beyond that limitation. Machines, including the very advanced ones like the Robo *sapiens*, which also look exactly like humans, create no pity in humans as they are classified according to their capacity to have feelings and show pain. According to this categorisation, Spike must be listed after animals which at least show pain. Spike is not the only robot that looks like a human, the boyfriend of Billie’s boss Manfred, designs a robot that looks like him and Billie says that she will not be able to tell the difference (11). The gap between machines and humans is not only disappearing in appearance but also developing on other levels as well. Apart from making her highly intelligent, Spike’s designers also do not neglect to imagine her as a female with an “incredibly sexy” look. Even though she is a robot in their eyes, she is still a woman. Spike is designed as a female so that her body can be used for sexual purposes in favour of the male. She is sent on a space mission with three astranouts, who are satirically referred to as “the silver-suited saviours”, and used as a sex slave (6). As the following dialogue between Billie and Spike shows, she has no say over her body, not only because she is a robot but also because she is a female:

Billie: Spike, you're a robot, but why are you such a drop-dead gorgeous robot? I mean, is it necessary to be the most sophisticated machine ever built and to look like a movie star?

She answers simply: 'They thought I would be good for the boys on the mission.'

I am pondering the implications of this. Like a wartime pin-up? Like a live anti-depressant? Like truth is beauty, beauty truth? 'How good? I mean, I'm assuming you're not talking sexual services here.'

'What else is there to do in space for three years?'

'But inter-species sex is illegal.'

'Not on another planet it isn't. Not in space it isn't.'

'But you were also the most advanced member of the

crew.'

'I'm still a woman.' (33-4).

Even though she is the most advanced being, she is still a woman in their eyes, and the laws can be easily manipulated in favour of those who are in power. As a result, she has to have sex with spacemen for three years and use up "three silicon-lined vaginas" (34). This confuses Billie. On the one hand, she wants to be outraged on behalf of the woman in front of her, but because she is a robot, she thinks isn't it better that they used a robot instead of dispatching a couple of sex-slaves?" (34). Even though Robo *sapiens* is not yet human, she thinks, they are becoming a "nearer relative than the ape" (34). Reading her mind, Spike says that even though humans share ninety-seven per cent of their genetic material with apes, they feel no kinship. Spike asserts to Billie that humans will feel a kinship with robots as the differences between them are decreasing. So people do not feel a kinship with a species they share almost all their genetic material with, but rather with machines that look and act like them. After all, it may not be essentially about genetics but about looks. As long as it looks and feels real, it can create kinship. This discussion is one of the many examples in the novel about the question of what is human or what makes one human. Besides, Spike's suggestion about the kinship between humans and robots looks quite accurate as people are living in a superficial world but do not question but embrace it. The most blatant differences between them, which are used to render them less worthy, are gradually decreasing. It is a "womb-free" world, where no one can breed anymore (unless they have refused intervention), which brings robots one step closer to humans, or humans to robots (71).

Billie asks Spike when it costs too much to build her, why she needs to be dismantled, especially if her data can be transferred. She answers it is because she can never forget (35). Even though they take away the data, she can recall it. Billie thinks Spike cannot do that because she cannot grasp the idea. In theory, once the stored data is downloaded, as the host or the

carrier, Spike should be wiped clean. Billie asks, "[w]hy aren't you a machine for re-use?", Spike answers, "[b]ecause I am not a machine" (35). She adds that "[r]obo *sapiens* were programmed to evolve", Billie says, "within limits". Spike says they have broken those limits (35). As this verbal exchange exemplifies, Spike complicates and blurs the lines between humans and robots and makes Billie question herself. Right after, Spike shows her free will and asks Billie to help her escape because she does not wish to die. She does it without actually speaking and once again breaks limitations. She manages to create communication with Billie without talking in the sense that we know. Afterwards, they restart the interview, and she speaks as if nothing has happened (36). When Billie asks her how she feels about being dismantled, Spike answers that she thinks of it as "recycling, which is what Nature does all the time. The natural world is abundant and extravagant, but nothing is wasted. The only waste in the Cosmos comes from human beings" (37). It is important to note that after Billie's dialogues with Spike, her perspective starts to shift. She does not take her for granted as a machine anymore. In this instance, instead of asking what she thinks about being dismantled, she asks how she feels. Spike's clever answers and her ability to disguise her thoughts about her escape also show that she is like a human. She can be deceiving as well; whilst saying one thing, she actually wants to do the opposite. Hence, Winterson complicates the divisions between the two entities. Spike is evolving and becoming human-like every second while humans are becoming robot-like, thus simultaneously eradicating the differences between them.

Spike does not only show existentialist traits, but she also believes in a quantum universe. When Billie complains that as humans, we make plans and try to control things, but everything is random, Spike states that this is "a quantum universe…neither random nor determined. It is potential at every second. All you can do is intervene" (75). So what is the quantum universe? "Since Einstein, physicists have sought a unified theory to explain all the fundamental forces and particles in the universe" yet "[s]ome fundamental piece is missing; gravity, dark matter and dark energy must have quantum explanations" (Orbach et. al, 2003: 5). Physicists' observations have confirmed that "95 percent of the universe is made of dark energy and dark matter" unlike any they have seen or touched in their most advanced experiments (40). It reveals that, in fact, they do not know "what most of the universe is made of" (1)."Quantum physics has revealed a stunning truth about "nothing": even the emptiest vacuum is filled with elementary particles, continually created and destroyed" (30). In accordance with the physicists, Billie repeats more than once that it was never All or Nothing but All and Nothing at the same time. What Spike suggests to Billie to intervene in the universe is to "bend the light", and then she kisses her (75). In response, Billie says:

> You’re a robot,’ I said, realizing that I sounded like Pink McMurphy.
>
> **Spike** And you are a human being — but I don't hold that against you.
>
> **Billie** Your systems are neural, not limbic. You can't feel emotion.
>
> Spike said, Human beings often display emotion they do not feel. And they often feel emotion they do not display. (75-6)

Billie questions whether Spike wants to kiss her to add it to her database (76). Spike states that “gender is a human concept”, in which she is not interested; she just wants to kiss her and does so. Spike furthers the argument and says, “'is human life biology or consciousness? If I were to lop off your arms, your legs, your ears, your nose, put out your eyes, roll up your tongue, would you still be you?” (76). She says that people locate themselves in consciousness, and she, too, is “a conscious being”. She removes the barrier that divides them into two categories. Both are conscious beings, so according to this human logic, they are practically the same. Pink gets involved in the argument and suggests that the differences between Robo *sapiens* and *Homo sapiens* are obvious; if you cut her, she bleeds (77). She also suggests robots are different because they have to be built in a factory. Spike opposes her view, saying that “[e]very human being in the Central Power has been enhanced, genetically modified and DNA-screened. Some have been cloned. Most were born outside the womb. A human being now is not what a human being was even a hundred years ago”. Consequently, she asks “[s]o what is a human being?” (77). She is positioned as a posthumanist and questioning a humanist. The two represent two different views. Spike underlines that “[e]ven without any bio-engineering, the human body is in a constantly changing state” because human cells and skeletons renew themselves on a regular time basis, what one is at that moment will not be the same person even in a day (78). She does not talk like a machine but like Deepak Chopra. This time Pink opposes her by saying that Spike has no emotion. Again the humanist approach tries to find ways to differentiate oneself from the other by its capacity to experience emotions. “How much emotion?” Spike asks. She poses a very complex question as most of the people in the novel have no emotion including Pink. For instance, she cannot have empathy for victims of child abuse. Love is an emotion and only a few show this emotion in the novel. Yet, does love or the capacity to feel emotion make one human? Animals, as well as Spike, can feel love in a more sincere way than humans. Spike also deconstructs this idea in a way because it does not mean

that “the more sensitive a person is, the more human they are”. In reality, the more sensitive one is, the more others will try to take advantage of them in such an order.

Spike becomes critical of humans and states that as a Robo *sapiens*, she might be the future of the world, not humans, since “[h]umans are rendering themselves obsolete”. She points out that humans rely on robots and technicians as a result of “successive generations of de-skilling”, and humans will not be able to survive unassisted on the new planet (78-9). As Pink renews her trust in the system and says “they will all have figured it out” for them, Spike criticises humans for giving away all their power to a “they”. As a consequence, they cannot oppose the system because, without it, they cannot survive. Pink makes fun of her as an “activist robot”, and Spike says it is just one more thing they have to be on behalf of humans (79). While this delighting and enlightening dialogue continues, Spike underlines again that while Robo *sapiens* is evolving, *Homo sapiens* is an endangered species. When Pink states that robots cannot survive without humans, Spike says this is not true anymore as they are “solar-powered and self-repairing” as well as being non-aggressive and intelligent. Pink says despite all her features, Spike does not know anything about life, and Spike states that there are many kinds of life, but humans always assume theirs is the only one; this is why they destroyed their planet (79). Spike turns out to be right about survival on the new planet because when they land on Planet Blue, she becomes the one who teaches Pink surviving skills (81).

Spike does not wish to be defined by or limited to what she can do physically or think rationally. She reads poetry and wants to understand it. She cannot achieve it at first, even though she can read several languages (80). Then, she asks Handsome to show her the book; he explains the lines to her one by one, and when he leaves, she feels different. She thinks she was experiencing a system failure but then realises she was feeling something entirely new; for the first time, she is able to feel (81). Thanks to Handsome, she understands what it feels like to be loved, and she wants to be the one who loves. She does not want to be an object but a subject of an action, a feeling. After sleeping with Billie, even though she has “no limbic systems because she is not designed to feel emotion”, she learns how to cry (83). As a result of her encounters with others, she learns to feel. Even though she is not built this way, she evolves beyond her limitations. This learning is on mutual grounds as Billie’s perspective changes regarding posthumans. She thinks she forgets that Spike is a robot, and then she questions herself, thinking about what is a robot (99), “[a] moving lump of metal” while humans are “a moving lump of flesh”. So, she thinks it should not be a question of metal or flesh because, in most cases, humans are not even as intelligent or sensitive as robots. Then while she lies beside her, she refers to Spike as “a living thing that did not breathe” (99). Even though there is no

movement or need for air, she is “alive, reinterpreting the meaning of what life is”, which, Billie thinks, is what humans have done since life began (99). This realisation brings them even closer as humans and posthumans.

Spike’s interaction is not limited to humans; on Planet Blue, she encounters animals after the mini ice age is triggered. The spaceship manages to leave the planet while Spike voluntarily stays behind, and Billie joins her with the knowledge that they will eventually die. They come across a dog-like animal with three horns (99). Seeing that the animal is struggling on the road, Spike carries him even if she needs to use extra power for that (101). Because it gets darker, Spike is not able to charge her solar power battery, but she wants to help the Three Horn without thinking (101). She carries him to give him air without any consideration, at the expense of sharing her limited energy.

The fact that all feel the cold and slowly start to die dissolves the binaries that separate humans, robots and animals. Spike feels it “as a depletion of cell-energy”, and she uses her stored solar life till it lasts; Billie starts to build a fire for herself and the Three Horn, which will finally die out (103). Even though the way they feel the cold differs, they share the same experience. Gradually reaching closer to their death, Billie asks Spike if humans remember things after their death. Spike tells her that she cannot forget not simply because of circuits and numbers but because “[e]verything is imprinted for ever [sic] with what it once was”. While humans call it “consciousness”, “programmers call it memory” (105). She has a transcendent approach and states that “the universe is an imprint. You are part of the imprint — it imprints you, you imprint it. You cannot separate yourself from the imprint, and you can never forget it. It isn't a “something”, it is you” (105). She suggests something beyond human or posthuman, something beyond physical limitations and explanations. She is a transcendent being, and she will exist even after her death with her consciousness and with the knowledge that she is imprinted and interconnected to everything. She does not only introduce fluidity but also embodies interconnection with others. When she takes off her legs to conserve energy (107), she tells Billie, “[d]idn't I ask you what was really you? If I lopped off your legs would you be less than you” (108). Her question brings Descartes into mind. According to him, consciousness has no shape. He is very critical of the medieval (Aristotelian) idea of qualitative physics (Jacquette, 2018: 37). “The ontological difference between mind and matter in Descartes is what makes consciousness (ontologically) not reducible to (neuro-) biology and physics” (37). However, Descartes’ humanist approach to the body as inferior has devalued all kinds of other life and led to violence and cruelty towards others. So, while Spike does not locate consciousness in the body like Descartes, her stance is also different from him as she does not

favour one over the other or sees the body as inferior but represents a fluidity. So if being human has nothing to do with the body but actually depends on consciousness, then is Spike not a human because she has consciousness? This question is even furthered in the last two parts of the novel, where Spike is reduced to a head physically. Before she dies in this chapter, her head is detached from her torso, which foreshadows her physical state in 65 million years. Before she dies, she repeats the notion that everything is in constant change by saying, "nothing is solid … nothings is fixed" (Winterson, 2008: 111). Billie says that "unfixing her has freed her", which is very accurate because she is there to unfix and connect.

In the last two parts, as the world's first Robo *sapiens*, Spike looks amazing again, but this time she does not have a body since "she will not need one" (158). She is being developed as a "perfect head" to take "the planet-sized decision that human beings are so bad at" (159). Even if Spike has the ability to arrive at the best answers because "she isn't political or ideological" and it is "like having all the Nobel Prize winners working together for the good of mankind" (160), the final say belongs to the President, which turns her into a passive position. The President of MORE says that they will hear Spike's answer, but they may not act on them (136). Ultimately they will be the ones in control (136). Billie thinks that Spike is "like a prophet, she's like a thing out of Dante, she's Oz, she's Medusa, she's Winnie, she's God" (159). This notion is furthered on television, where the implications of Artificial Intelligence are discussed:

> "'I don't like the thought of a computer telling me what to do.'
> 'Don't you have Sat Nav in the car?' (Laughter.)'
> 'We might as well bring back the Delphic Oracle.'
> 'Isn't this just a new way of inventing God? We invented God the first time round, and now we're doing it again — only this time we're letting everyone see the working drawings. (171)

The reference to the Delphic Oracle is significant in different ways. First of all, it is believed that "traditionally, the oracle first belonged to Mother Earth (Gaea) but later was either given to or stolen by Apollo" (Britannica, "Oracle"). It symbolises divine communication and speech. Once what belonged to a woman is possibly stolen by the male or given to the male. Those who come to the Hellenic temple ask for advice from Apollo, the god of prophecy and truth. So, Spike, in a way, is like Apollo, a god or goddess; they ask her a question and wait for an answer. Hellenistic people consulted the oracle before going to war or colonising expeditions. Just like the men in Greek mythology, in technologically advanced societies, men

are still after wars and colonising new places or rather planets. Besides, no matter how sophisticated, engineered or scientifically excelled they are, actually the search for guidance, an affirmation, something greater than themselves, if not god but god-like, still prevails. In **A Short History of Myth** (2005), Karen Armstrong asserts that "by the end of the nineteenth century, the severance of logos and mythos seemed complete" and people "may be more sophisticated in material ways, but they have not advanced spiritually beyond the Axial Age" and because of the suppression of mythos humans may even have regressed (Armstrong, 2005: 50-1). After all, even if the belief in a divine being has faded away through time, the need for ultimate truth, science or something bigger than one's own entity still persists. The residents of Planet Blue are not all believers, but they need a substitute for that, and it is the Robo *sapiens*. They look up to her like a god or a prophet figure. They may not do what she says; nevertheless, they have this option, they can listen to her and then decide. It comforts their consciousness. Another importance of the oracle is the famous sentence "know thyself" written on its wall. In a place where mass illiteracy is encouraged, knowing oneself is even harder. Besides, what Socrates means by this statement is that unexamined life is not worth living; to become fully human means to use one's faculty of thought to raise human existence above that of mere beasts (Ahbel-Rappe and Kamtekar, 2009: 233). So, according to this view, Spike is more human than those in Planet Blue because she is the one who examines life and uses her faculty of thought. Thus with this implicit yet subtle reference, Winterson once again poses a criticism of humanist thought and blurs the divisive discourse between humans and non-humans.

Like Spike in the first part, this Spike also tries reading poetry and cannot understand it at first (168). Billie says, "that is why you are being made" (169). "The theory says" that the third world war "was a crisis of over-emotionalism", so Spike should not experience emotions in order to achieve the best answers (169). Billie says that since the Enlightenment, people have been trying to "get away from emotionalism, the mother of all isms and, like any other ism, packed with superstition and prejudice — all those so-called gut feelings that allow us to blame our aggression and intolerance on what comes naturally". Yet she adds "the evidence suggests that rational people are no better than irrational people at controlling their aggression — rather, they are more manipulative" (169). She criticises the idea of casting away emotions, she thinks the opposite way. According to her, people need more emotion, not less (170). In **A Cultural History of the Emotions in the Baroque and Enlightenment Age** (2021), it is stated that during the Baroque and Enlightenment period, emotion "emerged as a term in its own right, and evolved in English from meaning physical agitation to describe mental feeling" (Walker, 2021: 23). However, it meant "passions" and "affections" in the older terminology and this

continued as “the dominant discourse structuring thinking about feeling and its wider religious, political, social, economic, and moral imperatives” during that period (23).

Medieval theology saw passion as a feeling “which might lead to sin and indicated a fallen soul” (18), and it derived from Greek and Roman Stoic philosophy. They had an understanding that “pitted the passions against calm reason or the affections” (19). Billie criticises this long tradition of seeing emotions as trivial and secondary. According to her, as people have limbic systems, they need to learn how to feel their emotions and not repress them (Winterson, 2008: 170). She condemns the way “some people label the personal “trivial”, the idea that any emotion would be cast away as opposed to “practical good sense”, but, she adds, it does not help children stop crying; they just learn to repress (170). They learn “that they must not feel anything or that if they do feel anything, they must not show it”. While parents teach their kids how to think, it is children who teach them how to feel (170). The child holds the capacity to experience emotions, yet as they get older, they learn to repress them. Billie is still not able to get over the way her mother leaves her, she builds narratives around her even before she is born. She is looking for a landing space, a love, but actually, she is looking for her mother. She is a reminder that children do not give up building relationships. She does not alienate herself from her feelings or her bodily sensations. She is not only relying on her reasoning, her brain, that is how she can communicate with other beings, including Spike and the animals. That is also why she is warned for their “little chats” (as they call it) with Spike because she teaches her how to feel along with how to think (174). She is not alienated from herself or from others.

Just like Billie is once again a nonconformist person in this part, Spike once again shows free will and acts as an existential character. Billie acts impulsively and takes Spike to No Zone. They come across an alternative community there, including ‘Chic X’, dinosaur-friendly, lesbian vegans (207). After “performing cunnilingus on Nebraska”, a Chic X, Spike states that she is “defected” (208). While Nebraska is the one who comes with the suggestion, Spike is able to accept this “new experience” without consulting her Mainframe (209). She says that she has disabled her Mainframe connection and “chosen to live as an outlaw” (209). Our bodily experiences affect “the formation of the connections (synapses) among neurons to establish pathways for the different hierarchies of brain function” (Mustard, “Experience-based brain development”). “These pathways govern or control our intellectual, emotional, psychological, physiological and physical responses to what we do every day” (Mustard). Just like in humans, Spike’s bodily experience and emotions are related to one another. Consequently, her sexual encounter changes her and after that experience, she shows free will. As she is programmed to

evolve, this experience enriches her circuitry (210). She is not actually defecting. Just like in the first part, where Spike thinks she is malfunctioning when she starts to feel, here Spike severes her own connection and names this disconnection as defecting. She does this to work with this alternative community to make a better world, rather than working for MORE (214). Her existential inclination is further emphasised by her answers to Billie. She says that she has read Sartre and Camus and that "the world is an intolerable place" (214). Besides, she refers to life as "all samsara" (214). "Buddhists conceive of the world as a suffering-laden cycle of life, death, and rebirth, without beginning or end, known as samsara" (Oxford, "Samsara"). Billie scolds her saying that "[t]here is no such thing as a Buddhist robot" (214) because she wants Spike to be objective. She does not want her to have an opinion or spiritual understanding, but Spike insists that her observations show her that it is a "quantum Universe" (215). According to her, in this quantum universe, humans are just a factor that affects the outcome, and free will is one's capacity to influence that outcome (215). Later Spike does not want to leave No Zone with Billie, instead, she wants to stay with Nebraska and shows her free will one more time (229). She states that there is no real difference between a robot and a human being; it is just "a matter of circuitry" (229). According to her, robots and humans are compatible, and she does not need a soul. She and Nebraska are conscious of their actions and decisions, and it is what defines them as individuals

At the end of all previous chapters, there is a repeating question by Spike to Billie. She asks, "where are we going, Billie"; however, towards the end of this chapter and the novel, she asks, "where are you going, Billie" (244). The encounters and interventions the two have lead them to the point of departure, yet this departure has positive connotations as Spike displays her autonomousness. She says that she will miss Billie, and even though it is limbic, she cannot help it. This implies that in order to show emotions, she does not need to have a limbic system. Her evolution beyond set limits suggests the hybrid positions of humans and non-humans and underlines the fact that the quantum universe is full of potentialities "waiting for an intervention to affect the outcome" (244). The portrayal of Spike as a Buddhist or existentialist robot which is programmed to evolve within limits but one who exceeds those limits does not only validate her as an autonomous being but gives a glimpse of hope regarding a change in the course of history. "On a personal journey of self-discovery", Spike can "begin again", and that beginning can signal a positive change where others are not eliminated and subjugated (216).

While Atwood gives glimpses of a post-humanist future in **Oryx and Crake**, her novel does not actualise this potential. Even though at the end of the trilogy, a hybrid community becomes an alternative way to survive, it does not happen in the first novel. More importantly,

Crakers are devoid of one of the most important features that Atwood points out as essential, which is to be able to read and appreciate art in general. Crakers are childlike and non-autonomous; however, Winterson's Spike is a much more complex and evolving being. She defies the limitations set against her and bends them. Other than making planetary scale decisions, she becomes an autonomous and rebellious character who makes her own choices. She has the free will to choose one over the other. Furthermore, Winterson's description of the soldiers who kill Billie at the end of the novel once again shows the intertwinement of humans and robots. "Two humans dressed as androids, no faces, no soft skin, combat gear, helmets, guns" (244). Hence, towards the end, Winterson underlines once again that not only robots resemble humans in every way, but also humans are becoming androids.

3.4 A Friendship Across Time and Space

Just like robots, animals are given a considerable space within the narrative. Animals, especially dogs, and the relationship between humans and dogs are repetitive in different time zones. In "People and Dogs: A Genetic Love Story", Virginia Hughes discusses different points of view regarding the first interaction between wolves and human beings ten thousand years ago (National Geographic). According to a possibly true story called "scavenger hypothesis", a wolf, as the first friendly dog, approached a farming family around a campfire, and they gradually became friends. However, some suggest that people went into the woods and trapped wolves deliberately to train them to be hunters. Bob Wayne, professor of evolutionary biology at the University of California, states that it is such a long time ago, so the origins of this story are a matter of speculation, and there are numerous scenarios. No matter how this bond forms itself, "the co-evolution of wolves and humans was mutually beneficial" (Wayne qtd. in Hughes). In **Our Oldest Companions: The Story of the First Dogs** (2021), Pat Shipman evaluates the relationship between wolves, dogs and humans. She informs that as familiar animals, dogs are a part of human society, and they "form an integral part of human society" (2021: 22). She states that being in the same place, cohabiting, or simple familiarity was not enough for the wolf-dog hybrid to start having bonds with humans; "a shared morality—a belief in the other—and a common set of values would be necessary for the bond to be formed" (22). She underlines that an internal identification or goals, "shared morality, or belief in the other, is why the first- ever domestication happened" (22). Otherwise, she sees no reason for wolves as predators to respect and choose humans as an ally and companions simply "because they were there or provided food" (25). She denies the domestication claims regarding wolves by giving specific examples of animals domesticated. She states that zebras should be capable of being domesticated compared to horses but as photos from the late 1800s or early 1900s show,

zebras were not domesticated because they refused to co-operate under a saddle and kicked carriages regularly (x). Since they "bit and were hard to handle", they were seen as "the most dangerous and aggressive animals in the zoo" by some zookeepers (x). Unlike zebras, dogs find common ground and kinship with humans. She exemplifies this by the Bonn-Oberkassel fossil in Germany, where the fossil dog was "covered in ochre" and buried with two humans, one male and one female (73). She states that this "ritual treatment signals an intimate relationship between dog and human—a wild canid that served as food or was merely a defeated competitor is not likely to be carefully buried" (73). She takes burial as an "indicator of the status or importance of the buried individual, whether it is a human or an animal given humanlike status" (73). Pat Shipman states that humans live with other animals and are mutually dependent on one another (208). She suggests that:

> Dogs are people, in the sense that they have individual ideas, perceptions, emotions, and opinions. They have emotion-based moral standards for acceptable behavior and some, maybe all, have a sense of fairness. It should be said that people are animals, too, in that we are moved by physical and psychological needs not too dissimilar from those we recognize clearly in other species. By choosing to live with us and to communicate with us, dogs have given us a tremendous opportunity for learning how to survive and thrive together. (208)

This "deeply felt alliance" (208) is emphasised in Winterson's novel. Both species try to survive and thrive together, but unfortunately, this kind of relationship and awareness is not broadened to other species or felt by all humans. This can be taken as a lack or rather can be viewed as a realistic approach. I claim the latter. In the first part of the novel, Billie mentions many animals on her farm; however, the most outstanding member is Rufus, her dog. When The Enforcement officer comes to Billie's farm with a CanCop (robots with the power of arrest) and tries to kick Rufus, Billie throws the bucket of water to "his clanking can of a body", "without thinking" (Winterson, 2008: 50). Her reaction is very instinctive, and this is a person who calculates her actions in order not to be caught for her rebellious acts. Yet, the moment she feels that Rufus is threatened, she cannot help but act impulsively. When she has to leave her farm, the only thing she has with her is Rufus, she cannot leave him behind. However, this inclination and love towards animals are also manipulated by MORE. They design Smarties, "computer cats", to enhance the shopping experience at MORE. Smarties purr on shoppers when they cannot make up what is left of their minds (28). A marketing expert comes up with the idea, realizing that animals, "even fake ones make people feel smug, good and relaxed (28). Whether living in the conventional sense or not, their presence affects the emotions of humans.

As a dog and an important figure in space history, Laika is given reference in three parts of the novel. Handsome tells the story of Laika to Rufus on the spaceship (97). Laika was the

first animal to orbit the Earth in November 1957 (Caswell, 2018: 18). Although the USSR reported that she survived for about a week, returned with valuable data and died a painless death (18), it was revealed that Laika was dead only a few hours into her flight because the capsule had overheated (221). According to Sergei Khrushchev, Laika was seen as a sacrifice for science by the team; they celebrated the launch and were not interested in announcing her death (221). She was going to "die anyway", so it did not matter for them if it happened "sooner or later". As the nonfiction example of Laika shows, animals continue to be sacrificed in the name of scientific progress. Unsurprisingly, for this mission, a female dog is chosen. After Sputnik 2's success, Soviet chief designer Sergei Korolev announces in his speech that "[t]he time will come when a spacecraft carrying human beings will leave earth and set out on a voyage to distant planets—to remote worlds. The way to the stars is open" (18). The time indeed comes; however, what human beings bring is only destruction.

In the final part, an old man in the No Zone carries Laika's photo in his wallet (Winterson, 2008: 226). Taking out "a creased black-and-white photo of a creased-faced black-and-white dog," he says, "[s]he would have gone to the ends of the earth for her master. Instead, she went into space" (226). Instead of themselves, human beings sacrifice innocent lives, animals, and those who are "lesser" than themselves. Laika is a real example of that. Just because they cannot speak in the way that humans can understand, they are positioned as lesser beings. However, the old man still remembers her and carries her photograph with him as somebody would do for someone who s/he really loves. As opposed to the example of Laika, Winterson provides many examples of respecting and mutual relationships between humans and dogs or dog-like animals. The relationship between Billie, Spike and The Three Horn is an example of that (98). I referred to Spike's sacrifice to save him some time in the earlier section. Like Spike, Billie forms an intimate relationship with him. While she builds a fire, he brings her sticks and then picks up something too heavy for him to carry, which makes Billie think that "some things will never change" (103). She praises him, and he keeps bringing wood until he can hardly lift his head (104). He is not a dog but an evolving species, and they bond on mutual grounds. He brings warmth both physically (by providing wood) and metaphorically with his "animal happiness". In exchange, they provide food and shelter for him as much as they can. They play in the snow, and Billie gives him acorns which they have been using as kindling for the fire, and when he does not eat it, she soaks them in the snow to soften (102). Billie imagines taking him with her if she can ever leave Planet Blue and go to Orbus. She resembles her to shipmates who bring parrots and monkeys back. Pat Shipman underscores that "[h]umans are part of the same ecosystems as canids; that is why humans often bring along the

dogs and other animals with which they have negotiated a deeply felt alliance (2021: 208). Just like what Shipman suggests, Billie wants to take him with her. However, this does not involve notions of possession. To make it clear, Winterson provides an example where Billie watches The Three Horn sleep (Winterson, 2008: 104). She admires his ability to sleep "as completely as that" (104). Just like the moss concentrates on being green, he concentrates on the present moment. Unlike most humans, he does think about the past or the future but is present in the moment. He does not function to make Billie understand herself better but just exists as he is. Winterson creates alternative relationships and interactions between animals and robots in this part as well. For instance, a boy in the No Zone tries to give a dog in exchange for drugs, but the dealer refuses the offer (180). As a witness to this incident, Spike says that the dog suffers from rejection and she wants to observe him closely (181). "The dog lays down with his nose in the fibre-optics of her neck", Spike may not have a body or a limbic system, but this cannot prevent her from feeling a kinship and sympathy towards the dog (181). The text represents animals as they are and the reader understands that animals represent something lacking in many human beings, namely the ability for connection. This ability for connection comes from their being able to be in the present, in their bodies, as opposed to humans who have been alienated from their bodies and emotions.

As a result of nuclear weaponry used in a third world war, animals and nature suffer in the radiation zone as well as people. Just like they suffered before the war as a result of the ecological crisis. Nature gradually starts to revive itself after the war. In this radiation zone called "Unknown", Billie comes across beechwood, which began to disappear "even before the war because it needs a cool climate, so it was an early casualty of climate change in England" (201). Winterson directly addresses climate change, and Billie's attention to detail about beeches is worth noting:

> I love the way beeches keep their leaves so late, and the way the leaf buds open late to show bright green serrated edges and soft insides. Even in May the beech would still be showing last year's dried terracotta leaves, the new buds about to make a green against them, and the bark darker, like a piebald animal. (201)

She is amazed by the "secret world" of beech trees, which are recovering (201) and realises there is "a different world, lower, mysterious, the micro-tunnels of mice and weasels" (201). Again, this passage is not given to come to a realisation about oneself but to appreciate the beauty, uniqueness and wholeness of the transcendent presence of nature. However, it does not take much going from Tech City to Wreck City; anthropocentric worldview first results in the loss of species and ecological degradation and then the war throws a final blow. Amidst all the

destruction and decay, Winterson provides the last example of the friendship between a little boy and a dog in the Dead Forest (232). As "things", "wrong-sized, misshapen … dug up from the grave, but not dead, alive", people persist in existing on radioactive soil (232). In contrast to the dark and deadly description of survivors comes a small boy and a small dog:

> …the dog hairless and pink, tongue lolling, body worn thin like hope, the boy with a bad stomach wound sewn up at his home or his hole, subcutaneous fat pushed on the outside like a roll of tripe. He had the dog on a lead and he was still managing to be a boy with a dog and the dog was still managing to be a dog with a boy because not even a bomb gets to wipe out everything, and this little bit was missed in the blow-up, the fall-out, the death-toll, the regrettable acts of war. (233)

Despite the destruction and the mutation in the zone, where people are reduced to living dead, the boy and the dog manage to be a boy and a dog. The bond between the two creates a shelter for them. This plain yet one of the most powerful passages of the book summarises the gist of the novel. Despite the negative repetitions, there is a chance of hope. Furthermore, when Billie gives the boy milk, the only drink she has, he kneels down and pours half of the bottle into his cupped hand to feed the dog (237). Only then does he drink the other half himself. This incident takes place towards the end of the novel amid the new war between MORE and No Zone. Another war takes place, but this cannot put an end to justice the boy mainstains (by splitting his drink) or the bond and love the two have. While annihilation comes closer one more time, the duo are focused on their relationship. If there is a dog or love, then there is life; there is a possibility of survival, a chance for a change, no matter how weak the possibility is. This promise of life repeats itself in each part of the book, as well as destruction. After the bombing, wild animals manage to escape and come to No Zone, "like everything else that [do] not want to go back into a cage" (189). A resident of No Zone tells Billie that books came there like people and animals. "Certain people, certain animals, looking for a landing place" (193). Hence, Winterson tries to create a landing space for humans and non-humans as well as for books. This centre may not hold, but it does not prevent one from imagining and speculating on the possibilities.

3.5 Searches and Words on a Planetary Scale

The search for a landing space manifests itself in different forms for different people. It can be a physical space as well as love. For many people, it happens to be Planet Blue in the first part of the novel. Val Plumwood states that the anthropocentric culture and perspectives that make humans insensitive to their ecological place in the world are such systems that they conspire to conceal from people their dependency on nature and overestimate their autonomy and manipulative ability to claim invincibility, so they believe they do not have any limits

(2002: 35). By doing so, they "devise Promethean projects like growing indefinitely on earth, taming space and terraforming Mars" (35). This exact situation described by Plumwood takes place in the novel, and the representation of Planet Blue by MORE reveals how manipulative language can be in the wrong hands. It also shows how deep dualistic thinking can be embedded in literature and life.

When the anthropocentric view of Orbus residents, the inflection of their planet as a fixed, static image shutters in the undeniable reality of a dying planet, they change their focus to Planet Blue. When the first pictures of Planet Blue appear on the smart-skins of the buildings, it is as though people are driving straight towards it. From the very moment that Planet Blue appears on huge screens, which are personified as "smart-skins of the buildings", it is signalled that this new potential, new-found land will be violated and usurped. "There it is, pristine, diamond-cut, and the zooms show miles and miles of empty beauty" miles of empty beauty are like an invitation to destroy this peaceful new planet (Winterson, 2008: 36). It is also deceptive as it refrains from showing dinosaurs, with which humans cannot co-exist. The reference to diamond-cutting is significant. The planet is compared to a diamond, a stone that is acquired from the depths of the world and then sold to human beings at high prices. Something, which belongs to nature, is taken away from its right space, which is also a violation of the land. This attitude, like many others, dates back to old times, "in the Victorian period, mining operations became another way for the British to control and exploit the land for their own gains in which the land was disrupted and laid barren to excavate the rich minerals" (Barst, 2017: 104). Again, it bears colonialistic connotations behind it.

The image of this new planet in the novel reminds the reader of the Earth's photograph, "the 1969 view from the moon of a fragile, finite "Spaceship Earth"' (Garrad, 2004: 160). This image has been repeatedly used to "evoke the Earth's isolation in space, its fragility and wonder" (Yearley qtd. in Garrad 160) and "without commentary or design" it has communicated a powerful message that we share this "restricted living space" with earth others. Literature can create a similar message. The novel itself is like the famous image; it shows people that they are in the same boat with others on Earth (or with "earth others", as Plumwood calls it), and no being is independent of one another. Thus, the novel encapsulates hope as well as repeating destruction. More importantly than visuals, language is vital in regard to the description and representation of the planet. Captain Handsome claims that "only a poet could frame a language that could frame a world", and underneath the digital images of Planet Blue, he writes, "She is all States, all Princes I, Nothing else is" (Winterson, 2008: 80). This line is repeated by the president after he introduces the planet to the public. The reception of the

newfound planet and the way it is described is very similar to a woman. The planet is categorised as an "other" as well as women, robots and animals. Referring to it as a "pristine planet" (39) or as a "vast virgin country bounded by rivers" (58) supports this argument. The references to the new land as a virgin and a princess belong to a very ancient discourse even though this discovery is made on a technologically advanced planet. Captain Handsome, who is named ironically, puts what he desires to do into words "I will defeat the dragon and be offered the kingdom" (58). After destroying Orbus, apart from the need for a new planet to inhabit, the underlying reason to invade Planet Blue is that it is a "virgin" planet. Along with the dire need, there is a hunger for its purity, a desire to penetrate into this new land since land is always associated with females and referred to as "she" and never he. It is also a reflection of colonial desire. The same mentality exists in the second part of the novel, where sailors claim distant lands under the name of the Queen even though they do not need those places or have any right to them. So, after all, even though the incident takes place in an unknown futuristic past, it is nothing new. Just like in 18th- and 19th-century European expeditions, men discover a new abundant continent and want to conquer it even if they do not need it. This desire is something embedded within the colonialist mindset. It is not purely out of necessity, but it is a part of the discourse they have been brought up with.

In "For the Love of Nature: Ecology and the Cult of the Romantic", Chaia Heller points to the problem of idealising nature as a victimized woman and creating an ecological drama and "eco- knights" to protect and save helpless nature from "the big, bad dragon of human irresponsibility" (1993: 219). She calls this approach, which has peaked especially after the awareness of the ecological crisis, "the cult of the Romantic" as in "the twelfth-century poetry of the French troubadours of Languedoc" for contemporary depictions of woman and nature (219). She states that with the metaphors and myths of romantic literature written about women, this romantic tradition based on males has been extended and "recycled into metaphors used to idealize nature"(219). Unfortunately, this kind of approach and works of romantic ecology fail to "challenge the patriarchal, state, and capitalistic ideologies and institutions of domination that legitimize the denigration of women" (219-220). Through the character of Handsome, Winterson criticises this approach.

The romantic and colonialist attitude is embraced in the language and in the culture, as can be seen in John Donne's poem, "The Sun Rising", which is quoted repeatedly in the novel, especially the line "She's all states, and all princes, I" (Donne 21). It is a colonialist and individualist poem. While it is referred to as a "love" poem, in its essence, it is very problematic. It is evident that this attitude towards females and the land is not only present in a futuristic

past, but it is something almost ancient. It is supported via language. This androcentric attitude towards females positions her as a piece of land, not as an individual but as something to be conquered. As Heller suggests, "romantic love is a form of reductionism, reducing woman from her full range of human potential to a tiny list of male desires" (1993: 222). The poet persona positions himself as superior to the sun, calling it a "busy old fool" (Donne 1). According to him, he, as a man, is at the centre of the universe. Similarly, in his other poems, such as "No Man is an Island" and "A Valediction: Forbidding Mourning", Donne reveals similar notions through his poetry. In the former, he writes, "any man's death diminishes me, because I am involved in mankind" (Donne 6-7) while writing so, he excludes others except man. He has a humanist approach and excludes others; even if he may have meant women as well, it is still not a holistic approach.

In the latter, the poem follows as "[a]s stiff twin compasses are two / Thy soul, the fixed foot, makes no show" (Donne 26-7). In this poem, the female is immobilised, she is the fixed foot. Hence, she is not moving, whereas as the male, the poet persona has the liberty of mobility. Whether John Donne was conscious of it or not, this attitude towards nature and women is captivating. Back in "The Sun Rising", the poet persona is at the centre of the poem, all he talks about is his love for her. He wants to possess her. Her beauty is praised; there is nothing about her individuality or something about her as a person but rather her physical appearance only. Again Heller criticises this sort of romanticism towards nature and women, rendering them "the ultimate Platonic woman", where women or nature become pure symbols without any physical dimension (1993: 224). Donne uses the Sun too in order to praise his love and the beauty of his lover. He does not want to wake up from it, he wants to stay in the one bed with his lover (Donne 20), whose name the reader does not even know. The desire to be alone with her all the time also stresses the possessive nature of the poet persona. It is very problematic, and ages later, people are still not able to see that, hence they are in their current situation.

Furthermore, Donne refers to the spices of India in the poem (Donne 27), which also points to colonialist nature, "spices were imported into Europe from India and the East Indies, silver, mainly, from Peru and Mexico, included in the term 'Indias'" (Robbins, 2013: 248). Instead of reproducing the same problematic discourses, Winterson deliberately includes them into her narration to challenge these ideologies and institutions of domination within society in general. With intertextual references, she shows how intertwined culture and language are with the objectives of man. She challenges this and offers a post-romantic approach by attempting to create alternative relationships where no one has to be saved but collectively participates and cooperates, as shown with detailed examples in the earlier sections. Like Jimmy, Handsome

reads and thinks about the characters who have gone through similar experiences as himself. However, Winterson deliberately criticises Handsome's approach. He reads "Captain Cook's Journals" because he feels like he knows him as if Cook would understand what he is trying to do on the spaceship (59). It is no surprise then, that the first thing he does when he lands on the new planet is to clear his way by cutting down the trees (84). He starts destroying the ecosystems from the very moment he lands on the planet, as colonisers did on the far islands and continents.

As much as Winterson is critical of literature and certain discourses, she is also very conscious of what literature can achieve and how it can save lives both physically and metaphorically. Billy remembers that she was "in the British Library, researching the history of artificial intelligence" before the bomb, and it was the books that saved her life (194). When the building collapses, she falls onto a raft of books, and stacks of books fall onto her, knocking her unconscious but casing her from further damage (195). Other than physically saving the lives of people who were in libraries at that moment, books and literature save lives on metaphorical levels. Poetry is referred to as something that saves lives many times by providing meaning (95). This is why when everyone needs to leave the spaceship, Billie and Spike take only essential stuff from the ship, including books (100). It is also why before they die, Billie asks Spike to tell her a story because even in the face of death, stories provide comfort and relief (109). With this incident, apart from other things she is capable of, Spike also becomes a storyteller. This way, Winterson gives another feature to Spike to look up to. Another example regarding the power of words and stories is when Billie says the rarest thing on the planet is a story told, as opposed to Ralph Waldo Emerson, who said that it is a truly individual action (151). Billie says that it is:

> one way of defying chaos — the kind of Chaos, with a capital C, that can't be avoided; the exuberant, unfolding, unpredictable universe, expanding when it should be contracting, made largely of something that is not something but nothing — dark energy, anti-matter. A thing unconfined. What to say when the certainties fail? Words are the part of silence that can be spoken. (151)

In a quantum universe, an unbounded space, it is by telling or writing stories that one tries to defy chaos. That is why there is a constant mention of a landing space in the novel, it should not be a physical space, but rather it should be in the heart. For some, it is a metaphorical search for love; it is in the hearts of others, while for others, it is a physical space. The novel is written and thrown into a bottle, it is a love message regardless of all the destruction and damage it reminds or imagines. It is waiting to be read. It is a warning for those who are ready to listen.

As emphasised in Winterson's novel, "the Universe as a great mechanism designed by God [...] as a harmonious and stable machine" is not valid anymore (Garrard, 2004: 56). She criticises anthropocentric and androcentric worldviews, which exploit the land, the robots, animals and the female as something to be subdued and conquered. The same pattern occurs no matter what the time is or who the individuals are. Be it fully alive human beings or androids, male or female, it is inclined to repeat itself. Even if the repetition is pessimistic and never ends in a peaceful way, there is always death and there is always annihilation; it also reveals the attempt to secure one's love or bond with others. It can be taken as something positive, as the incidents draw a circle, one is able to foresee what can possibly happen, and one can learn from the past if one desires to. Actually, if one can come to this realisation, then one can make a change. Humankind is afraid of the unknown, the fear is always projected on the other. This is the reason why nature is called sublime, it inflicts fear within oneself because man sees that he is not able to penetrate into this untouched, magnificent power and beauty (Garrard, 2004: 43). Faced with his inability to overcome this immense power, man fears and in order to frame it verbally if not physically, finds a new name for it. Winterson reminds us that language and literature can be a double-edged sword. While some texts save lives, not all of them are considerate and conscious about others; instead, with their discourse, they can sustain oppressive and manipulative systems. On the other hand, she believes in the restorative and awakening power of literature. She creates a "liminal opening" by covering different time spans and asking her readers to embark on a journey to find their own landing space (Winterson, 2008: 176). This is also why Billie gives Spike a copy of the book and asks her to read it and leave it for someone else to find (242). As underlined one last time with the ending sentence of the novel, "[e]verything is imprinted for ever [sic] with what it once was." (246). This holistic approach reminds us that we are part of a bigger whole, and we are actually one.

CONCLUSION

It is apt to conclude this thesis by repeating Hubert Zapf's ideas about literature. He states that "the function of literature as an ecological force within culture is both deconstructive and reconstructive" (2016: 95). As cultural ecology, it is "a reintegrative interdiscourse" and "contributes to the constant renewal of the cultural center from its margins" (95). This is why literary representation is critically important in order to create a change in the minds and lives of individuals. Contemporary post-apocalyptic fiction brings together various disciplines, including history, technoscience, economics and philosophy. Therefore, I tried to discuss Margaret Atwood's **Oryx and Crake** (2003) and Jeanette Winterson's **The Stone Gods** (2007) from an interdisciplinary perspective. While discussing these texts, I took into consideration their differences and similarities. These texts are based on the understanding that man has a devastating effect on all other forms of life as they become a geological force to start an epoch, The Anthropocene. It affects humans and non-humans as well as the planet itself. The novels seek to transform dominant human practices and build their narratives on the discourse of ecological disaster. However, they do not create the perception of a world destroyed and could only be saved by humans.

Both texts are ecologically concerned and offer glimpses of posthumanist futures. They recognise and represent many interactions and relations which blur the ontological divisions and binaries regarding humans and non-humans. In both novels, the dualistic approach leads to divisions such as culture/nature, rationality/emotions, and humans/non-humans. Both writers challenge the humanist idea of human exceptionalism and question what it means to be a human. Winterson does it by creating dialogues with the machine, while Atwood does it through genetically engineered species. They try to explore what it means to be a human not only biologically or physically but also spiritually and psychologically. They reveal the interconnection of all beings and try to build a non-anthropocentric alternative. As Ynestra King states, there is no natural hierarchy on earth, life is an "interconnected web"; it is a human hierarchy which is projected onto nature to justify social domination (qtd. in Gruen, 1993: 80). As long as interconnectedness is undermined by the ruling elite and divisions are normalised, oppression and its outcomes do not change for good but actually worsen. Through the representation of others, the authors criticise dynamics of domination, binary oppositions, anthropocentric worldviews and human exceptionalism. As intertextual references reveal, they are much embedded in cultures.

Regardless of their differences, the two novels share a common ground in terms of their representation of a planetary-scale social and ecological collapse. They speak about planetary outcomes of ecological crises rather than concentrating on a "global", " singularly human story" (Chakrabarty, 2021: 58). Both Atwood and Winterson look back to history to show the repetitive mistakes of mankind and by depicting different worlds which resemble much to ours, they speculate the ecological and political crises we are having in different dimensions. These novels can be taken as cautionary tales as they are imagining destructive near-futures which are very probable. They revolve around instances "that really could happen but just hadn't completely happened" (Atwood, 2011: 21). While imagining these future scenarios, they do not offer a solution as to how to survive at the expense of others; on the contrary, they reveal the root cause of these problems. The reasons happen to be the anthropocentric logic, which has been "mistaken for rationality since the Enlightenment", which in return leads to blindspots and "general lack of awareness in the dominant culture of ecological embeddedness" and dynamics of dominations, which are indifferent to others and void of ethics (Plumwood, 2002: 28). Ecocriticism and posthumanism embrace the idea that ecological problems mostly stem from the domination practices of the humanist mentality. Hence, the ecological issues are related to scientific knowledge and cultural structures. For this reason, both writers try to create landscapes and explore relationships that can reverse the domination practices.

Both texts portray pre- and post-pandemic worlds and reveal a transition from the Holocene to the Anthropocene. In both of them, as a result of ecological degradation, living conditions are worsened, and the injustice between social groups is intensified. They both exemplify how weather conditions and climate are interrelated to the daily lives of humans and non-humans on different grounds. Those who contribute less to ecological and political problems suffer the most. As a result of climate change, their suffering is intensified. While hyper-capitalist societies create ecological problems in the first place, they are not as much affected and continue to oppress and benefit from disadvantaged groups and regions. With an ongoing global pandemic, technoscientific innovations, wars and space colonisation attempts today, **Oryx and Crake** and **The Stone Gods** prove how both writers are able to foresee such events and contribute to the current political and social discussion. Both writers distance themselves from today and write about future dystopias, which allow the reader to see through the faulty thinking patterns that lead to social and ecological destruction in both worlds.

Atwood and Winterson are very critical of technoscience which promises to bring a solution to our problems if given adequate amounts of resources. However, as the novels show, this promise cannot go beyond being a utopia as long as technoscience is not controlled and

ethical views are not preserved. Also, while both novels are located in futuristic settings, there is a yearning for a nostalgic past. Atwood's protagonist Jimmy dreams of a time where he might have belonged, while Winteron's Billie, in the third part of the novel, thinks about the welfare state and optimism of the time, which she has never experienced. Although it is not possible to change the course of history, by exposing the faulty patterns and mistakes, the writers open a window to make a change for those of us who still can. In **Oryx and Crake**, Crake sees humans as the source of the problems and annihilates almost the entire human race, but his plan fails to provide a solution to ecological issues. Similarly, in **The Stone Gods,** scientists try to wipe out dinosaurs to inhabit the new planet they found. Both attempts bring about undesired outcomes. Creating a livable or ethical place is not achieved by wiping out species or finding new planets but by educating people, recognising the problems, and taking action against them. The fact that Winterson portrays two different planets millions of years apart with the same problems underlines this view. Getting a second chance does not mean things will turn out different.

Apart from giving detailed accounts of the Anthropocene, they give great importance to the narration style and the use of language. One of the common features of these two post-apocalyptic novels is that they challenge the progressive, linear and human-centred Western worldview. As a reaction to it, both writers prefer a non-linear narrative technique, which Rosi Braidotti calls "zigzagging" (2013: 164). Both novels employ this feature of posthumanism and, by the use of this technique, create an estrangement. Through this "dramatization of processes of becoming", they defy "the established modes of theoretical representation" (164). As another aspect of posthumanism, they offer fluidity in the genre. To borrow the term of Atwood, they are "ustopias", both depict dystopian futures but include utopian dreams in them. This genre fluidity can be extended to the way both narrations combine historical and geographical elements with dystopian fiction. They reveal how the capitalist system works. In both hyper-capitalist worlds, countries do not conceal their ties with corporate companies, they are even replaced by them. As Giorgia Agamben states, "[t]here is politics because man is the living being who, in language, separates and opposes himself to his own bare life and, at the same time, maintains himself in relation to that bare life in an inclusive exclusion" (Agamben, 1998: 8). Both writers target this logo-centric aspect of language and reveal the manipulative power of it and how dangerous it can get in the wrong hands. They point out that at the expense of short-term profits of a very limited privileged group, the lives of others, including the planet, are disregarded. While the capitalist system classifies everyone and everything according to their instrumental value and commodifies them, the writers try to foreground the intrinsic value of beings. As opposed to the anthropocentric view, philosopher Isabelle Stengers offers

“reciprocal capture”, which is **“**an event, the production of new, immanent modes of existence” in which neither entity transcends the other or forces the other to bow down” (Stengers qtd. In Rose 51). “It is a process of encounter and transformation, not absorption” (Rose, 2017: 51). To attain this sort of a state, writers should not only include others in their narration but build interactions and relationships with them. However, achieving a complete non-anthropocentric attitude is not possible.

In **Oryx and Crake**, the system renders humans and non-humans as commodities. They are commodified, whether dead or alive. The leftover parts of genetically engineered pigoons are used in food, as well as the suicide of people is streamed online. The novel questions the validity of categories such as humans and non-humans with genetically engineered species and humanoids. The depiction of the pre-pandemic world reveals the impacts of environmental change on a planetary scale. Sea levels, seasons, agriculture, and the lives of disadvantaged groups of people are increasingly worsening. However, the elites and scientists living inside high-security compounds persist in their consumerist lifestyles. While depicting a contrast between compounds and pleeblands, Atwood reveals the dualistic thinking at hand. In this order, ontological categories are visible in every stage of life. Even children are classified as numbers people and words people and sent to different institutions. . In this dystopian setting, the post-apocalyptic landscape is not a wasteland. Even though nature is full of reminiscents of human violations, given a break from humans, it starts to recover itself.

Atwood provides many examples about animals to show how far people can go without any ethical considerations, concerns and restrictions. She also includes various relationships with animals, especially through the example of Jimmy. Some animals, real or genetically altered, are companions of human beings. For instance, Jimmy has a profound level of connection with some animals in a way that he does not have with human beings. However, this approach cannot be broadened to all species but is rather limited to domestic species. While Jimmy observes some animals as they are without attaching any meaning to them or benefiting from them in any way, in many examples, he identifies himself with animals. According to the posthumanist approach, animals are no longer just a system of signs or symbols that support people's self-reflections and moral aspirations. From this perspective, Atwood’s many examples fail to create a posthumanist approach toward animals. Nevertheless, they become a great part of the narrative, and their depiction is not limited to the ways in which the capitalist system makes use of them or the ways how humans identify themselves in relation to them.

The politics of eating meat is still present in this setting. The elites continue to eat meat, which becomes a signifier of their privilege and power. Atwood questions the ethics of eating

practices, animal captivity, and scientific interventions with the example of genetically engineered animals for food. The issue of cannibalism is also referred to in an instance where Jimmy refrains from eating pigoons because he believes that they are very similar to him. Furthermore, to draw attention to uncontrolled and unethical practices of technoscience, Atwood gives examples of genetically engineered species which evolve beyond their initial reason for existing. The most subversive of these species is pigoons. They are designed in a way to enable them to grow multiple human organs simultaneously. As hosts to human organs, their importance also lies in the fact that human neocortex tissue is growing in them. Scientists individualise these "products", but by doing so, they make vague the demarcation between animals and humans as the neocortex enables abstract thinking. Therefore, pigoons pose a challenge to human identity by representing an opportunity to blur the boundaries of species. It is further emphasised with the instance where pigoons plan a trap to catch Jimmy and turn him into a potential food source, which reverses the food chain. However, Atwood fails to deliver a similar challenging status to Crakers.

Genetically engineered humanoids, referred to as Crakers or the Children of Crake, are quite childlike as their name denotes. This point gets hard to miss as they are constantly asking questions to make sense of the world. Even though they are engineered in such a way that they will not need any destructive industries or agriculture or be affected by their hormones, they are not autonomous and consequently cannot show free will. They are portrayed as beings who are still incomplete. Also, while Crake believes he excluded abstract ideas about art and belief systems, with the example of chanting and creating an effigy to bring Jimmy back, the novel reveals that Crakers start to practice art and ritualistic patterns. So, after all, they are turning into humans with the potential to repeat the same mistakes. Although Crakers are very naive, they still have the potential to challenge humans as potential species to populate the earth. As Braidotti points out, becoming posthuman is not easy because humans, as "a planetary presence and a cultural formation, spell out specific modes of belonging" (Braidotti, 2013: 186). While creating Crakers, Atwood seems to be under the difficulty of imagining posthumans as radically different. Lars Schmeink suggests that at the end of the trilogy, there is a positive outlook toward the future, and "utopia lies in the posthuman" but it is simply because the posthuman is "seen to be human in essence" (2017: 96). Finally, another problem with their representation is that while Atwood attaches great importance to language and literature and criticises a system which undervalues social sciences, Crakers are portrayed as lacking those faculties and in the process of acquiring them. They are in need of education and are not able to read. They do not

even have enough vocabulary. This does not change until the end of the trilogy, where they eventually learn to read and write.

The power of words and literature is a major issue in the novel. As stated before, while the capitalist order casts away humanities as trivial, Jimmy, as a student of social sciences, accomplishes to stay alive and sane thanks to his quite diverse range of vocabulary and interest in literature. As supposedly the sole human survivor of the plague, he feels estrangement in the post-apocalyptic world and holds on to life by repeating his lists of words and literary quotes, mostly from poems and plays. However, while they play a vital role in his survival, the intertextual references reveal that literature can also be an instrument for oppression, whether the authors are conscious of it or not. All the fictional figures Jimmy finds comfort in are male figures who are a part of Eurocentric tradition. Therefore, in a post-apocalyptic setting which is an ideal environment to start new discourses and language practices, by repeating these texts, he repeats the same discourse and consequently fails to bring a new way of thinking. He cannot go beyond echoing the same old discourses.

Greg Garrard affirms that environmental problems are related to politics, and apocalyptic narratives should emphasise "the provisionality of knowledge, free will, ongoing struggle and a plurality of social groups with differing responsibilities" (2004: 107). **The Stone Gods** offers such an approach in many ways. The novel criticises progressive Western mentality and politics, which bring an end to life on planet Orbus as a result of their capitalist systems. This leads to a search for new planets, and the attempts to invade the new planet they found reveal neo-colonialism. A wealthy minority will be re-located to this planet, and while agriculture is not allowed in Orbus, farmers from the Caliphate will be moved to the new planet. This hypocrisy of Western ideology and using less developed countries and their knowledge is an example of eco-colonialism. Winterson criticises this approach, which Vandana Shiva comments as "the second coming of Columbus" (qtd. In Garrard 165). As the mentality does not change, the same problems are inflicted upon Planet Blue, which is 65 million years away from Orbus. With historical references to wars, colonialism and ecocides, Winterson criticises the anthropocentric progressive approach.

Like Atwood, she shows how manipulative language can be in political discourses. Winterson also has a critical approach to oppressive and humanist tendencies in literary texts. She criticises the way Planet Blue is described as it is likened to being a virgin or a princess to obtain. Thus, the colonialist and androcentric approach is not only present in political language but also reveals itself in intertextual references. This approach is not limited to lands or literature but also oppresses all the others, including animals and machines. However, to reverse this

order, Winterson provides the examples of Spike, a Robo *sapiens*, which evolves beyond limitations, and Billie, a female scientist and rebellious figure with an ethical concern. As a political statement, Billie is not genetically fixed, unlike many people in Orbus. In contrast to artificial life on Orbus, she lives on a farm with real animals. Her farm becomes a symbol of an alternative way of living and connecting with nature. By depicting Billie as a scientist who does not side with power and is sceptical of unlimited and unethical practices of technoscience, Winterson provides an alternative to typical scientist figures who are devoid of ethical concerns. Even though she is a part of a world of binary oppositions and has traits of a humanist attitude, her encounters and dialogues with the others change her. While at first she has mixed feelings regarding Spike's being used as a sex slave in space, and she questions herself whether it is not better to use her rather than humans, she later realises that the demarcations between them are all arbitrary and artificially created by man.

As a parallel to the shrinkage of the livable space on the planet, Winterson points to the shrinkage of human brains and imagination. Most people on Orbus are way content in an artificial setting and do not question its political and ecological dimensions. However, unlike people and the exhausted and the usurped planet, machines are evolving and expanding in their capabilities. As a machine, Spike is not interested in gender forms and is highly intelligent. However, this does not prevent her engineers from creating her as a sexy female to be used by the three astronauts on their space mission. Winterson criticises the idea that even though Spike is built for her intelligence, she is still regarded as a woman who can satisfy the sexual desires of men. As a posthuman Spike becomes a predicament to "force a displacement of the lines of demarcation between structural differences, or ontological categories, for instance between the organic and the inorganic, the born and the manufactured, flesh and metal, electronic circuits and organic nervous systems" (Braidotti, 2012: 89). For example, the moment when Spike's data is drawn before dismantling her is resembled to suicide, with her bleeding to death. Similarly, Billie questions herself, thinking about what is a robot or a human, as either a moving lump of meat or flesh. The discussions with Pink are another example of this, where Spike states that humans, genetically fixed and babies emerged in a womb-free world, are not very different from manufactured robots. Spike reads poetry and starts to understand it. Furthermore, even though she is neural, she starts to feel after being explained poetry. Bodily sensations and experiences make her think about her body. She also states that as a conscious being, she is no different from humans because people locate themselves in consciousness. She has free will and does not want to simply exist but wants to live. In both reincarnations, she makes her own decisions by either escaping and not wanting to die or wanting to stay in No Zone and choosing

to live as an outlaw and work with an alternative community to make a better world. She constantly challenges the humanist ideas that make use of binary oppositions and eradicates them.

Even though the novel portrays worlds destroyed by humans, animals, especially dogs, become a source of hope. The relationship between humans and dogs is emphasised as an example of love and mutual understanding. Winterson does not neglect to mention how animals are also used for anthropocentric aims of men with the real example of space dog Laika which was sent to space and died. In the name of scientific progress, animals are used as well as nature, machines and most humans. However, the relationships between the Three Horn, Spike and Billie, and also the mutant boy and the dog reveal that even in the face of death, this interspecies bond is not something that can be eradicated.

To conclude, contemporary apocalyptic fiction makes us recognise oppressive and delusional discourses of the anthropocentric view. They show the writers' ability to foresee events and open up space for ethical discussions before they even take place. They reveal that the utopian dreams of technoscience cannot bring solutions to ecological and political problems or prevent the world from crumbling. To challenge anthropocentric worldview and human exceptionalism and also to reveal how the systematic oppressions and ecological denial work, both writers give a large space for non-humans. Both emphasise the interconnection of all lives and beings.They both criticise their positions in these worlds and also try to offer them a new standing. However, there are limitations to the revaluations of the non-anthropocentric because "all writing and discourse, namely that literary representation remains, even in its most radical acts of transgression, deconstruction, and fragmentation, inescapably dependent on an anthropocentric perspective in a broad sense" (Zapf, 2016: 263). Novels are shaped by humans and human culture, and because they have to use language, they cannot fully escape from being anthropocentric and logo-centric. Therefore, this paradox exists in both novels. While **Oryx and Crake** is rather more concentrated on the urgency of the situation we are experiencing and do not quite offer a posthumanist future, **The Stone Gods** is much more able to do that even though Winterson does not provide a hopeful end and repeats death and destruction at the end of each part. Garrard states that "the Earth is perhaps better seen as a process rather than an object" (2004: 178), with the emphasis on a quantum universe and the fact that everything is imprinted forever with what it once was, Winterson is able to reflect that. Just as Val Plumwood suggests, "our capacity to gain insight from understanding our social context, to learn from self-critical perspectives on the past and to allow for our own limitations of vision, is still one of our best hopes for creative change and survival" (2002: 10). Only by realising our social, political

and ecological blindspots and “anthropocentric perspectives and culture that make us insensitive to our ecological place in the world” can we talk about a future or change, and literature is a vital tool to achieve that.

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